COST SUMMARY WORK

Task description:	Cresson Project - Reclamation Cost Estimate 2023

Permit Action: Permit/Job#: M1980244

PROJECT IDENTIFICATION

Site: Cresson Project

Task #:000State:ColoradoAbbreviation:NoneDate:12/1/2023County:TellerFilename:M244-000

User: ERR

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Task Hours	Cost
A0001	Ironclad Mine Area - Pile Leveling - Mass Grading	DOZER	1.50	\$1,138
A0002	Ironclad Mine Area - Pile Leveling - Fine Grading	DOZER	2.74	\$680
A0003	Ironclad Mine Area - 40 ft Lift - Mass Grading	DOZER	8.30	\$6,310
A0004	Ironclad Mine Area - 40 ft Lift - Fine Grading	DOZER	7.74	\$1,920
A0005	Ironclad Mine Area - Topsoil - Transport	TRUCK1	20.54	\$50,509
A0006	Ironclad Mine Area - Topsoil - Ripping	RIPPER	42.85	\$11,233
A0007	Ironclad Mine Area -Topsoil - Dozer Spreading	DOZER	30.39	\$7,537
A0100	SGOSA Mine Area - Pile Leveling - Mass Grading	DOZER	1.05	\$801
A0101	SGOSA Mine Area - Pile Leveling - Fine Grading	DOZER	0.97	\$239
A0102	SGOSA Mine Area - 100 - 300 ft Lift - Mass Grading	DOZER	1,062.20	\$807,722
A0103	SGOSA Mine Area - 100 - 300 ft Lift - Fine Grading	DOZER	857.41	\$212,674
A0104	SGOSA Mine Area - Topsoil - Lift 1 - Transport	TRUCK1	16.97	\$41,738
A0105	SGOSA Mine Area - Topsoil - Lift 2 - Transport	TRUCK1	14.29	\$40,867
A0106	SGOSA Mine Area - Topsoil - Lift 3 - Transport	TRUCK1	22.20	\$63,467
A0107	SGOSA Mine Area - Topsoil - Lift 4 - Transport	TRUCK1	42.24	\$103,866
A0108	SGOSA Mine Area - Topsoil - Lift 5 - Transport	TRUCK1	43.82	\$90,223
A0109	SGOSA Mine Area -Topsoil - Lift1 - 5 - Dozer Spreading	DOZER	630.01	\$156,268
A0110	SGOSA Mine Area - Topsoil - Lift 1 - 5 - Ripping	RIPPER	287.00	\$75,230
A0200	N. Cresson Mine Area - Pile Leveling - Mass Grading	DOZER	13.80	\$10,491
A0201	N. Cresson Mine Area - Pile Leveling - Fine Grading	DOZER	12.64	\$3,136
A0202	N. Cresson Mine Area - 200 - 250 ft Lift - Mass Grading	DOZER	2,012.21	\$1,530,132
A0203	N. Cresson Mine Area - 200 - 250 ft Lift - Fine Grading	DOZER	1,479.15	\$366,892
A0204	N. Cresson Mine Area - Topsoil - Transport	TRUCK1	40.79	\$132,955
A0205	N. Cresson Mine Area -Topsoil - Dozer Spreading	DOZER	64.52	\$16,004
A0206	N. Cresson Mine Area - Topsoil - Ripping	RIPPER	90.99	\$23,852
A0207	N. Cresson Mine Area - Topsoil - Lift 1 - Transport	TRUCK1	3.43	\$8,431
A0208	N. Cresson Mine Area - Topsoil - Lift 2 - Transport	TRUCK1	13.80	\$39,450
A0209	N. Cresson Mine Area - Topsoil - Lift 3 - Transport	TRUCK1	25.05	\$71,630
A0210	N. Cresson Mine Area - Topsoil - Lift 4 - Transport	TRUCK1	11.43	\$28,116
A0211	N. Cresson Mine Area - Topsoil - Lift 5 - Transport	TRUCK1	1.31	\$2,701
A0212	N. Cresson Mine Area -Topsoil - Lift1 - 5 - Dozer Spreading	DOZER	300.71	\$74,590
A0213	N. Cresson Mine Area - Topsoi - Lift 1-5 - Ripping	RIPPER	122.12	\$32,011
A0214	N. Cresson Mine Area - Topsoil - GlobeHillHR - Transport	TRUCK1	29.55	\$84,505
A0215	N. Cresson Mine Area -Topsoil - GlobeHillHR -Dozer Spreading	DOZER	164.84	\$40,888
A0216	N. Cresson Mine Area - Topsoil - GlobeHillHR - Ripping	RIPPER	65.93	\$17,282
A0300	ECOSA Mine Area - 50 - 150 ft Lift - Mass Grading	DOZER	1,147.29	\$872,424
A0301	ECOSA Mine Area - 50 - 150 ft Lift - Fine Grading	DOZER	1,025.65	\$254,405
A0302	ECOSA Mine Area - Topsoil - Lift 1 - Transport	TRUCK1	54.48	\$133,971
A0303	ECOSA Mine Area - Topsoil - Lift 2 - Transport	TRUCK1	57.80	\$119,002
A0304	ECOSA Mine Area - Topsoil - Lift 3 - Transport	TRUCK1	52.28	\$128,577
A0305	ECOSA Mine Area - Topsoil - Lift 4 - Transport	TRUCK1	39.49	\$112,925

A0306	ECOSA Mine Area - Topsoil - Lift 5 - Transport	TRUCK1	49.18	\$160,318
A0307	ECOSA Mine Area - Topsoil - Lift 6 - Transport	TRUCK1	19.11	\$69,954
A0308	ECOSA Mine Area -Topsoil - Lift1 - 6 - Dozer Spreading	DOZER	938.23	\$232,720
A0309	ECOSA Mine Area - Topsoil - Ripping	RIPPER	560.07	\$146,807
A0400	E. Cresson Mine Area - Pile Leveling - Mass Grading	DOZER	0.24	\$181
A0401	E. Cresson Mine Area - Pile Leveling - Fine Grading	DOZER	0.22	\$55
A0402	E. Cresson Mine Area - 40 - 400 ft Lift - Mass Grading	DOZER	2,500.76	\$1,901,641
A0403	E. Cresson Mine Area - 40 - 400 ft Lift - Fine Grading	DOZER	2,437.07	\$604,497
A0404	E. Cresson Mine Area - Topsoil - Lift 2 - Transport	TRUCK1	9.11	\$22,406
A0405	E. Cresson Mine Area - Topsoil - Lift 3 - Transport	TRUCK1	7.64	\$18,784
A0406	E. Cresson Mine Area - Topsoil - Lift 4 - Transport	TRUCK1	46.30	\$113,868
A0407	E. Cresson Mine Area - Topsoil - Lift 5 - Transport	TRUCK1	93.94	\$231,007
A0408	E. Cresson Mine Area - Topsoil - Lift 6 - Transport	TRUCK1	85.18	\$243,581
A0409	E. Cresson Mine Area -Topsoil - Lift 2 - 6 - Dozer Spreading	DOZER	827.70	\$205,304
A0410	E. Cresson Mine Area - Topsoil - Ripping	RIPPER	492.67	\$129,139
A0411	E. Cresson Mine Area - Topsoil - WHEX - Transport	TRUCK1	146.89	\$361,221
A0412	E. Cresson Mine Area -Topsoil - WHEX - Dozer Spreading	DOZER	533.92	\$132,434
A0413	E. Cresson Mine Area - Topsoil - WHEX - Ripping	RIPPER	327.70	\$85,899
A0414	E. Cresson Mine Area - Topsoil - Ironclad - Transport	TRUCK1	11.74	\$28,880
A0415	E. Cresson Mine Area -Topsoil - Ironclad - Dozer Spreading	DOZER	39.92	\$9,903
A0416	E. Cresson Mine Area - Topsoil - Ironclad - Ripping	RIPPER	24.50	\$6,423
A0417	E. Cresson Mine Area - 100 ft Lift - Mass Grading	DOZER	288.48	\$219,367
A0418	E. Cresson Mine Area - 100 ft Lift - Fine Grading	DOZER	265.26	\$65,795
A0500	M. Cresson Mine Area - Pile Leveling - Mass Grading	DOZER	29.39	\$22,349
A0501	M. Cresson Mine Area - Pile Leveling - Fine Grading	DOZER	53.86	\$13,359
A0502	M. Cresson Mine Area - 50 - 650 ft Lift - Mass Grading	DOZER	3,561.56	\$2,708,298
A0503	M. Cresson Mine Area - 50 - 650 ft Lift - Fine Grading	DOZER	3,197.52	\$793,120
A0504	M. Cresson Mine Area - Topsoil -10185 - Transport	TRUCK1	61.21	\$150,525
A0505	M. Cresson Mine Area -Topsoil - 10185 - Dozer Spreading	DOZER	328.56	\$81,496
A0506	M. Cresson Mine Area - Topsoil - 10185 - Ripping	RIPPER	134.22	\$35,183
A0507	M. Cresson Mine Area - Topsoil - Ruby Rd - Transport	TRUCK1	74.31	\$182,745
A0508	M. Cresson Mine Area -Topsoil - Ruby Rd - Dozer Spreading	DOZER	270.11	\$67,000
A0509	M. Cresson Mine Area - Topsoil - Ruby Rd - Ripping	RIPPER	120.30	\$31,536
A0510	M. Cresson Mine Area - Topsoil - AJAX - Transport	TRUCK1	44.59	\$109,654
A0511	M. Cresson Mine Area -Topsoil - AJAX - Dozer Spreading	DOZER	53.97	\$13,387
A0512	M. Cresson Mine Area - Topsoil - AJAX - Ripping	RIPPER	62.14	\$16,289
A0513	M. Cresson Mine Area - Topsoil - Crusher - Transport	TRUCK1	46.64	\$96,033
A0514	M. Cresson Mine Area -Topsoil - Crusher - Dozer Spreading	DOZER	72.62	\$18,012
A0515	M. Cresson Mine Area - Topsoil - Crusher - Ripping	RIPPER	113.07	\$29,639
A0516	M. Cresson Mine Area - Topsoil - Pit Bottom - Transport	TRUCK1	53.23	\$237,449
A0517	M. Cresson Mine Area -Topsoil - Pit Bottom - Dozer Spreading	DOZER	104.87	\$26,012
A0518	M. Cresson Mine Area - Topsoil - Pit Bottom - Ripping	RIPPER	113.41	\$29,729
A0519	M. Cresson Mine Area - Topsoil - S. Cresson HR - Transport	TRUCK1	22.84	\$65,300
A0520	M. Cresson Mine Area -Topsoil - S. CressHR - Dozer Spreading	DOZER	32.97	\$8,177
A0521	M. Cresson Mine Area - Topsoil - S. Cresson HR - Ripping	RIPPER	49.40	\$12,950
A0522	M. Cresson Mine Area - Topsoil - Cresson HR - Transport	TRUCK1	22.13	\$89,855
A0523	M. Cresson Mine Area -Topsoil - Cresson HR - Dozer Spreading	DOZER	32.97	\$8,177
A0524	M. Cresson Mine Area - Topsoil - Cresson HR - Ripping	RIPPER	49.40	\$12,950
A0600	Crusher Mine Area - Pile Leveling - Mass Grading	DOZER	70.36	\$53,507
A0601	Crusher Mine Area - Pile Leveling - Fine Grading	DOZER	62.31	\$15,456
A0602	Crusher Mine Area Topsoil - Transport	TRUCK1	32.80	\$93,782
A0603	Crusher Mine Area - Topsoil - Dozer Spreading	DOZER	38.37	\$9,518
A0604	Crusher Mine Area - Topsoil - Ripping	RIPPER	80.38	\$21,072
A0605	Crusher Mine Area - Delivery Rd - Mass Grading	DOZER	8.24	\$6,264
A0606	Crusher Mine Area - Delivery Rd - Fine Grading	DOZER	7.29	\$1,809
A0607	Crusher Mine Area - Topsoil - Delivery Rd - Transport	TRUCK1	7.52	\$15,480

A0608	Crusher Mine Area -Topsoil - Delivery Road - Dozer Spreading	DOZER	9.10	\$2,257
A0609	Crusher Mine Area - Topsoil - Delivery Rd - Ripping	RIPPER	16.77	\$4,397
A0700	Chicago Mine Area - Topsoil - Transport	TRUCK1	2.94	\$6,061
A0701	Chicago Mine Area -Topsoil - Dozer Spreading	DOZER	3.56	\$884
A0702	Chicago Mine Area - Topsoil - Ripping	RIPPER	7.18	\$1,884
A0703	TR133 WHEX Clay Borrow Area - Topsoil - Transport	TRUCK1	6.08	\$10,745
A0704	TR133 WHEX Clay Borrow Area - Topsoil - Ripping	RIPPER	7.83	\$2,053
A0705	TR133 WHEX Clay Borrow Area - Topsoil - Dozer Spreading	DOZER	11.62	\$2,883
A0706	TR137 WHEX Clay Borrow Area Exp Fine Grading EMP18	DOZER	5.75	\$1,427
A0707	TR137 WHEX Clay Borrow Area Exp Topsoil - Transport	TRUCK1	10.50	\$18,558
A0708	TR137 WHEX Clay Borrow Area Expansion - Topsoil - Ripping	RIPPER	13.66	\$3,582
A0709	TR137 WHEX Clay Borrow Area Exp Topsoil - Dzr Spread	DOZER	20.07	\$4,978
A1000	AGVLF - Pile Leveling - Mass Grading	DOZER	8.01	\$6,092
A1001	AGVLF - Pile Leveling - Fine Grading	DOZER	7.34	\$1,821
A1002	AGVLF - 20 - 200 ft face - Mass Grading	DOZER	1,335.48	\$1,015,535
A1003	AGVLF - 20 - 200 ft face - Fine Grading	DOZER	1,182.46	\$293,301
A1004	AGVLF - Topsoil - Transport	TRUCK1	28.92	\$59,534
A1005	AGVLF -Topsoil - Dozer Spreading	DOZER	105.41	\$26,145
A1006	AGVLF - Topsoil - Ripping	RIPPER	53.52	\$14,029
A1007	AGVLF - Topsoil - Lift 1 - Transport	TRUCK1	21.18	\$52,084
A1008	AGVLF - Topsoil - Lift 2 - Transport	TRUCK1	27.56	\$67,786
A1009	AGVLF - Topsoil - Lift 3 - Transport	TRUCK1	36.57	\$89,925
A1010	AGVLF - Topsoil - Lift 4 - Transport	TRUCK1	60.10	\$147,790
A1011	AGVLF - Topsoil - Lift 5 - Transport	TRUCK1	55.28	\$158,078
A1012	AGVLF - Topsoil - Lift 6 - Transport	TRUCK1	70.60	\$230,137
A1013	AGVLF - Topsoil - Lift 7 - Transport	TRUCK1	102.79	\$335,075
A1014	AGVLF - Topsoil - Lift 8 - Transport	TRUCK1	54.61	\$134,296
A1015	AGVLF - Topsoil - Lift 9 - Transport	TRUCK1	44.74	\$92,104
A1016	AGVLF -Topsoil - Lift 1 - 9 - Dozer Spreading	DOZER	1,581.35	\$392,242
A1017	AGVLF - Topsoil - Lift 1 - 9 - Ripping	RIPPER	989.92	\$259,480
A1100	SGVLF - 100 ft face - Mass Grading	DOZER	890.60	\$677,231
A1101	SGVLF - 100 ft face - Fine Grading	DOZER	799.89	\$198,407
A1102	SGVLF - Topsoil - Lift 1 - Transport	TRUCK1	12.74	\$41,513
A1103	SGVLF - Topsoil - Lift 2 - Transport	TRUCK1	11.57	\$33,083
A1104	SGVLF - Topsoil - Lift 3 - Transport	TRUCK1	16.00	\$39,353
A1105	SGVLF - Topsoil - Lift 4 - Transport	TRUCK1	23.49	\$57,756
A1106	SGVLF - Topsoil - Lift 5 - Transport	TRUCK1	45.86	\$94,421
A1107	SGVLF - Topsoil - Lift 6 - Transport	TRUCK1	64.57	\$158,789
A1108	SGVLF - Topsoil - Lift 7 - Transport	TRUCK1	50.18	\$123,405
A1109	SGVLF - Topsoil - Lift 8 - Transport	TRUCK1	48.68	\$119,711
A1110	SGVLF - Topsoil - Lift 9 - Transport	TRUCK1	39.49	\$112,912
A1111	SGVLF - Topsoil - Lift 10 - Transport	TRUCK1	39.03	\$111,615
A1112	SGVLF - Topsoil - Lift 11 - Transport	TRUCK1	35.14	\$114,553
A1113	SGVLF - Topsoil - Lift 12 - Transport	TRUCK1	26.23	\$85,519
A1114	SGVLF - Topsoil - Lift 13 - Transport	TRUCK1	16.29	\$59,613
A1115	SGVLF -Topsoil - Lift 1 - 13 - Dozer Spreading	DOZER	1,041.17	\$258,253
A1116	SGVLF - Topsoil - Lift 1 - 13 - Ripping	RIPPER	928.89	\$243,482
A1117	TR113 AGVLF - Leach Cell Footprint - Ripping	RIPPER	2.04	\$852
A2000	AGVLF - 9400	TRUCK1	140.33	\$675,406
A2001	AGVLF - 9500	TRUCK1	193.95	\$831,372
A2002	AGVLF - 9600	TRUCK1	338.75	\$1,273,771
A2003	AGVLF - 9700	TRUCK1	382.51	\$1,438,321
A2004	AGVLF - 9800	TRUCK1	210.88	\$903,968
A2005	AGVLF - 9900	TRUCK1	120.27	\$578,848
A2006	AGVLF - 10000	TRUCK1	37.67	\$181,308
A2007	AGVLF - 9920	TRUCK1	2,720.48	\$13,093,843

A2008	AGVLF - 10020	TRUCK1	1,665.81	\$7,140,720
A2008 A2009	AGVLF - 10020 AGVLF - 10100	TRUCK1	1,615.58	\$6,074,884
A2009 A2010	AGVLF - 10100 AGVLF - 10190	TRUCK1	2,022.51	\$7,605,040
A2010 A2011	AGVLF - 10190 AGVLF - 10280	TRUCK1	1,433.67	\$6,900,350
A2100	Remove ROM	TRUCK1	5.19	\$17,538
A2100 A2200	Remove DCF and Liner	TRUCK1	5.19	\$17,538
A2300	Cresson Underground Portal Backfill	TRUCK1	1.15	\$3,086
A3000	Foundations and Buildings - Ripping	RIPPER	16.93	\$4,438
A3000	Foundations and Buildings - Ripping Foundations and Buildings - B&G and Topsoil - 5.1k Haul	TRUCK1	69.75	\$174,308
A3001 A3002	Foundations and Buildings - B&G and Topsoil - 8.3k Haul	TRUCK1	5.75	\$18,495
A3002	Foundations and Buildings - B&G and Topsoil - 9.3k Haul	TRUCK1	16.47	\$56,970
A3003	Foundations and Buildings - B&G and Topsoil - 9.3k Haul	TRUCK1	95.67	\$330,955
A3004 A3005	Foundations and Buildings - B&G and Topsoil - 10.3k Haul	TRUCK1	0.86	\$2,769
A3005	Foundations and Buildings - B&G and Topsoil - 11.4k Haul	TRUCK1	3.12	\$4,798
A4000	EMP Ponds	TRUCK1	99.08	\$239,979
A4000 A4001	EMP Ponds - Topsoil	TRUCK1	6.90	\$16,722
A4001 A4002	Crusher Fuel Island Fresh Water Pond	TRUCK1	1.56	\$3,784
A4002 A4003	Crusher Fuel Island Fresh Water Pond - Topsoil	TRUCK1	0.28	\$680
A4003 A4004	Aregua External Ponds	TRUCK1	106.19	\$257,195
A4004 A4005	Arequa External Ponds - Topsoil	TRUCK1	7.00	\$16,960
A4006	TR124 Carlton Tunnel Pond Cleanout	TRUCK1	5.36	\$1,588
A5002	Ancillary Areas - Topsoil - Ripping	RIPPER	2,308.63	\$605,138
A5002	Growth Media Piles - Topsoil - Ripping	RIPPER	201.65	\$52,857
A5003	Monitoring Well Pads - Topsoil/Regrade - Dozer Spreading	DOZER	72.86	\$18,073
A6000	Monitoring Well Closure	BHOLE	167.88	\$88,821
A7000	Stormwater Construction	NA	1,000.00	\$19,485,641
B0001	Ironclad Mine Area - Revegetation	REVEGE	32.60	\$75,106
B0001	SGOSA Mine Area - Revegetation	REVEGE	215.30	\$495,394
B0002	N. Cresson Mine Area - Revegetation	REVEGE	160.90	\$370,266
B0004	N. Cresson Mine Area - Globe Hill HR - Revegetation	REVEGE	50.20	\$115,550
B0005	ECOSA Mine Area - Revegetation	REVEGE	438.60	\$1,009,227
B0006	E. Cresson Mine Area - Revegetation	REVEGE	386.90	\$890,340
B0007	E. Cresson Mine Area - WHEX - Revegetation	REVEGE	249.60	\$574,326
B0008	E. Cresson Mine Area - Ironclad - Revegetation	REVEGE	18.70	\$42,946
B0009	M. Cresson Mine Area - 10185 - Revegetation	REVEGE	104.00	\$239,326
B0010	M. Cresson Mine Area - Ruby Rd - Revegetation	REVEGE	91.60	\$210,849
B0011	M. Cresson Mine Area - AJAX - Revegetation	REVEGE	41.60	\$95,817
B0012	M. Cresson Mine Area - Crusher - Revegetation	REVEGE	75.80	\$174,346
B0013	M. Cresson Mine Area - Pit Bottom - Revegetation	REVEGE	86.40	\$198,768
B0014	M. Cresson Mine Area - S. Cresson HR - Revegetation	REVEGE	37.60	\$86,583
B0015	M. Cresson Mine Area - Cresson HR - Revegetation	REVEGE	37.60	\$86,583
B0016	Crusher Mine Area - Revegetation	REVEGE	53.90	\$123,949
B0017	Crusher Mine Area - Delivery Rd - Revegetation	REVEGE	12.80	\$29,398
B0018	Chicago Mine Area - Revegetation	REVEGE	5.10	\$11,794
B0019	TR133 WHEX Clay Borrow Area - Revegetation	REVEGE	5.90	\$13,520
B0020	TR 137 WHEX Clay Borrow Area Expansion	REVEGE	10.30	\$23,587
B1000	AGVLF - Revegetation	REVEGE	812.00	\$1,868,559
B1001	SGVLF - Revegetation	REVEGE	696.70	\$1,603,343
B2000	Foundations and Buildings - Revegetation	REVEGE	17.10	\$39,408
B3000	EMP Ponds - Revegetation	REVEGE	7.10	\$16,396
B3001	Crusher Fuel Island Fresh Water Pond - Revegetation	REVEGE	0.30	\$575
B3002	Arequa External Ponds - Revegetation	REVEGE	7.10	\$16,396
B4000	Ancillary Areas - Revegetation	REVEGE	1,789.00	\$4,116,300
B4001	Growth Media Piles - Revegetation	REVEGE	149.00	\$341,731
B4002	Monitoring Well Pads - Revegetation	REVEGE	20.00	\$46,887
B5000	E. Cresson Wildhorse - Tree Planting	REVEGE	111.25	\$40,606
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B5001	N. Cresson - Tree Planting	REVEGE	28.75	\$10,494
B5001	M. Cresson - Tree Planting	REVEGE	73.75	\$26,919
B5002	E. Cresson - Tree Planting	REVEGE	286.25	\$104,481
B5003	Squaw OSA - Tree Planting	REVEGE	52.50	\$19,162
B5004 B5005	Arequa - Tree Planting	REVEGE	143.75	\$52,469
B5005 B5006	Squaw - Tree Planting	REVEGE	106.25	\$38,781
B5000	Mill Platform - Tree Planting		43.75	
B5007 B5008	Victor & Ironclad - Tree Planting	REVEGE	52.50	\$15,969
B5008 B5009	Building Footprint - Tree Planting	REVEGE	108.75	\$19,162
B5010	<u> </u>	REVEGE		\$39,694 \$387,812
B5010	Ancillary - Tree Planting N. Cresson Viewshed	REVEGE	1,062.50	
C0001	VLF1 Rinse 1	NA NA	1,000.00	\$1,494,461
C0001	VLF1 Rinse 1 VLF1 Rinse 2	NA NA	6,749.00	\$24,956,515
C0002			6,749.00	\$26,002,884
	VLF1 Rinse 3	NA	6,749.00	\$25,438,813
C1001	VLF2 Rinse 1	NA	3,879.00	\$11,643,483
C1002	VLF2 Rinse 2	NA	3,879.00	\$12,009,621
C1003	VLF2 Rinse 3	NA DEMO	3,879.00	\$12,125,245
D0001	Foundations and Building Area	DEMO	7,726.00	\$7,812,206
D1000	Conveyors and LOB, Septic System, Tire Demo	DEMO	200.00	\$706,851
D2000	Waste and Tank Disposal	DEMO	160.00	\$3,203,830
D3000	Fence and Culvert Demo	DEMO	60.00	\$38,781
D4000	Fence Installation (RS Means 32 31 13.20 0920)	DEMO	320.00	\$1,951,133
D5000	Pipe Demo	DEMO	80.00	\$545,062
D6000	Power Line Demo	DEMO	80.00	\$453,431
E0001	Erosion Maintenance	DOZER	649.21	\$161,031
E0002	Vegetation Survey	SITEMAINT	760.00	\$114,231
E0003	Site-wide Weed Control	REVEGE	160.00	\$606,466
E1000	Water Quality Monitoring (14 years)	NA	1,680.00	\$1,735,134
E2000	Perforate VLF Liner (6,000 LF)	DRILL	690.00	\$601,266
E2001	Perforate VLF Liner (casing)	NA	0.00	\$90,483
E3000	Chicago Tunnel	NA	40.00	\$113,770
F0001	Initial Mobilization	MOB	6.62	\$236,068
F0002	Site Maintenance Yr 1	MOB	2.31	\$2,853
F0003	Site Maintenance Yr 2	MOB	6.62	\$8,589
F0004	Site Maintenance Yr 3	MOB	2.31	\$2,853
F0005	Site Maintenance Yr 4	MOB	2.31	\$2,853
F0006	Site Maintenance Yr 5	MOB	6.62	\$8,864
F0007	Site Maintenance Yr 6	MOB	2.31	\$2,853
F0008	Site Maintenance Yr 7	MOB	2.31	\$2,853
F0009	Site Maintenance Yr 8	MOB	2.31	\$2,853
F0010	Site Maintenance Yr 9	MOB	2.31	\$2,853
F0011	Site Maintenance Yr 10	MOB	2.31	\$2,853
F0012	Site Maintenance Yr 11	MOB	2.31	\$2,296
F0013	Site Maintenance Yr 12	MOB	2.31	\$2,296
F0014	Site Maintenance Yr 13	MOB	2.31	\$2,296
F0015	Site Maintenance Yr 14	MOB	2.31	\$2,296
F0016	TR124 Carlton Tunnel Pond Cleanout - Mob	MOB	10.13	\$9,135
G0001	Prorated VLF2 Rinses: 59% Built at End of 2024	NA	0.00	(\$14,669,123)
	(Tasks C1001-C1003)			
G0002	Prorated ECOSA Civil & Reveg: 88% Built at End of 2024 (Tasks A0300 - A0309, B0005)	NA	0.00	(\$388,840)
			106923.13	\$220,639,100

INDIRECT COSTS

OVERHEAD AND PROFIT:

 Liability insurance:
 2.02 Total =
 \$4,456,910

 Performance bond:
 1.05 Total =
 \$2,316,711

 Job superintendent:
 55,963.53 Total =
 \$3,642,107

Profit: 10.00 Total = 22,063,910

TOTAL O & P = \$32,479,637 CONTRACT AMOUNT (direct + O & P) = \$253,118,737

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500 Total = \$500

Engineering work and/or contract/bid preparation: 7.39 Total = \$18,705,475

Reclamation management and/or administration: 5.00 \$12,655,937

CONTINGENCY: 3.00 Total = \$6,619,173

TOTAL INDIRECT COST = \$70,460,721

TOTAL AMOUNT (direct + indirect) = \$291,099,821

TOTAL BOND AMOUNT (rounded) = \$291,100,000

Task description:	Ironclad Mine A	rea - Pile L	eveling - Mass Grading		
: Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENT	<u>IFICATION</u>				
Task #: A0001	State:	Colorado		Abbreviation:	None
Date: 11/20/20		Teller		Filename:	A0001
9:17:29	3	Tener		i ilciiailic.	A0001
User: \overline{ZTT}	11/1			-	
	 rganization name: DF	RMS			
HOURLY EQUIP					
	Cat D10T - 10SU				
	574				
<u> </u>	Semi-Universal				
	NA		<u> </u>		
	1 per day				
	(CRG)				
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hou		\$178.69	NA		
Operating Cost/Hou		\$160.22	100		
Ripper own. Cost/Hou		\$0.00	NA		
Ripper op. Cost/Hou		\$0.00	0		
Operator Cost/Hou	ır:	\$41.30	NA		
MATERIAL QUA	<u>NTITIES</u>				
	,933				
	.000				
Loose volume: 5	,933 LCY				
Source of estimated vo	olume: 2022 CC	&V Provide	d Estimate		
Source of estimated sv					
HOURLY PRODU	<u>ICTION</u>				
Average push distance	e: 50 feet				
Unadjusted hourly pro	2,748.7 LC	Y/hr			
Materials consistency	description: Loose	stockpile 1.2			
Average push gradien					
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY			_	
Weight description:	Granite - Broken				
Job Condition Correct Operat	•	750	Source (AVG.)		
Material cons		200	(CAT HB)		
	-	200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 1,982.36 LCY/hr
Adjusted fleet production: 3964.72 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.192/LCY

Total job time: 1.50 Hours
Total job cost: \$1,138

Task description:	Ironclad Mine A	rea - Pile L	eveling - Fine Grading		
: Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTII	FICATION				
Task #: A0002	State:	Colorado		Abbreviation:	None
Date: 11/20/202		Teller		Filename:	M244-A0002
9:21:35 P	•				
User: ZTT					
Agency or orga	anization name:DF	RMS			
HOURLY EQUIPM	ENT COST				
Basic Machine: Ca	at D7R DS Series II L	GP			
Horsepower: 24	10		<u> </u>		
	raight				
Attachment: N			<u> </u>		
	per day		<u>—</u>		
Data Source: (C	CRG)				
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$114.76	NA		
Operating Cost/Hour:		\$91.98	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:	-	\$41.30	NA		
Total unit Cost/Hour:	\$248.04				
Total Fleet Cost/Hour:	\$248.04				
MATEDIAL OHAN	TITIEC				
MATERIAL QUAN	<u> </u>				
Initial Volume: 659 Swell factor: 1.0					
	OU LCY				
Loose volume: 059					
Source of estimated volu		&V Provided	l Estimate		
Source of estimated swe	ell factor: Cat Hand	lbook			
HOURLY PRODUC	<u>'TION</u>				
Average push distance:	50 feet				
Unadjusted hourly produ		/hr			
Materials consistency de	escription: Rock, J	poorly ripped	l or blasted 0.6		
	10.64				
Average push gradient:	-10 %				
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY			_	
Weight description:	Granite - Broken				
Job Condition Correctio	n Factor		Source		
Operator		.750	(AVG.)		
Material consis		.600	(CAT HB)		
Dozing m		.000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 240.40 LCY/hr
Adjusted fleet production: 240.4 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.032/LCY

Total job time: 2.74 Hours
Total job cost: \$680

Task description:	Ironclad Mi	ne Area - 40 It L	ant - Mass Graunig		
Cresson Project		Permit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENT	FIFICATION				
Task #: A0003	St	ate: Colorado		Abbreviation:	None
Date: 11/20/2				Filename:	M244-A0003
9:22:51		ary. Teller		i iionamo.	1,12 1 1 110003
User: ZTT			 -	-	
Agency or o	organization name:	DRMS			
HOURLY EQUIP	MENT COST				
Basic Machine:	Cat D10T - 10SU				
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	NA NA		<u>—</u>		
Shift Basis:	1 per day				
Data Source:	(CRG)		<u>—</u>		
_	()				
Cost Breakdown:			I Itilization 0/		
Overarchin Cost/Ho	3344	\$178.69	<u>Utilization %</u> NA		
Ownership Cost/Ho Operating Cost/Ho		\$178.09	100		
Ripper own. Cost/Ho		\$100.22	NA		
MIDDELOWII. COSULIO	ui.				
	1117	20.00	Λ		
Ripper op. Cost/Ho		\$0.00	0		
	sur: \$380.21	\$0.00 \$41.30	NA NA		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA	\$380.21 r: \$760.42				
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume:	\$380.21 r: \$760.42 ANTITIES 21,753				
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: Swell factor:	\$380.21 r: \$760.42 ANTITIES 21,753 1.000				
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: Swell factor:	\$380.21 r: \$760.42 ANTITIES 21,753				
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: Swell factor: Loose volume:	\$380.21 r: \$760.42 ANTITIES 21,753 1.000 21,753 LCY	\$41.30	NA		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: Swell factor:	\$380.21 r: \$760.42 \$760.42 \$21,753 1.000 21,753 LCY \$70lume: 2022		NA		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v	\$380.21 \$760.42 \$760.42 ANTITIES 21,753 1.000 21,753 LCY Volume: 2022 Exwell factor: Cat 1	\$41.30	NA		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODU	\$380.21 \$760.42 \$760.42 ANTITIES 21,753 1.000 21,753 LCY Volume: 2022 Ewell factor: Cat I	\$41.30	NA		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s	\$380.21 \$760.42 \$760.42 ANTITIES 21,753 1.000 21,753 LCY Folume: 2022 Cat I	\$41.30	NA		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODU	\$380.21 r: \$760.42 ANTITIES 21,753 1.000 21,753 LCY volume: 2022 Cat I UCTION re: 90 feet roduction: 1,873.5	\$41.30	l Estimate		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODU Average push distance Unadjusted hourly pr Materials consistency	\$380.21 \$760.42 \$760.42 \$1.753 1.000 21,753 LCY volume: 2022 Cat 1 UCTION See: 90 feet 1,873.5 v description: Co	\$41.30 2 CC&V Provided Handbook	l Estimate		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODI Average push distance Unadjusted hourly pr	\$380.21 \$760.42 \$760.42 \$1.753 1.000 21,753 LCY Foolume: 2022 Cat 1 Swell factor: 90 feet poduction: 1,873.5 Foolume: 2022 Cat 1 Control 200 Control	\$41.30 2 CC&V Provided Handbook	l Estimate		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODI Average push distance Unadjusted hourly pr Materials consistency Average push gradier	\$380.21 \$760.42 \$760.42 \$1.753 1.000 21,753 LCY Foolume: 2022 Cat 1 Swell factor: 90 feet poduction: 1,873.5 Foolume: 2022 Cat 1 Control 200 Control	\$41.30 2 CC&V Provided Handbook 5 LCY/hr consolidated stocky	l Estimate		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODI Average push distance Unadjusted hourly pr Materials consistency Average push gradier Average site altitude:	\$380.21 \$760.42 \$760.42 \$760.42 \$1.753 1.000 21,753 LCY **Volume: 2022 Cat 1 **UCTION** **ee: 90 feet 1,873.5 **y description: Country 200 feet 1 **et: -20 % 9,500 feet 1	\$41.30 2 CC&V Provided Handbook 5 LCY/hr consolidated stock	l Estimate		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODI Average push distance Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight: Weight description: Job Condition Correct	\$380.21 \$760.42 \$760.42 \$760.42 \$760.42 \$21,753 1.000 21,753 LCY **Volume: 2022 Cat Interpretation: 2022 **Volume: 2	\$41.30 2 CC&V Provided Handbook 5 LCY/hr consolidated stock Y ken	l Estimate pile 1.0		
Ripper op. Cost/Ho Operator Cost/Ho Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODI Average push distance Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight: Weight description: Job Condition Correct	### \$380.21 ####################################	\$41.30 2 CC&V Provided Handbook 5 LCY/hr consolidated stock	l Estimate pile 1.0		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 1,310.70 LCY/hr
Adjusted fleet production: 2621.4 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.290/LCY

Total job time: 8.30 Hours
Total job cost: \$6,310

Task description:	Ironclad Mine A	rea - 40 ft L	ift - Fine Grading		
: Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIF	<u>ICATION</u>				
Task #: A0004	State:	Colorado		Abbreviation:	None
Date: $\frac{11/20/2023}{11/20/2023}$		Teller		Filename:	M244-A0004
9:23:51 PN	•				
User: ZTT				-	
Agency or orga	nization name: DI	RMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	t D7R DS Series II L	GP			
Horsepower: 240		GI .			
	aight				
Attachment: NA	_				
	er day				
	RG)				
Cost Breakdown:			<u> </u>		
			Utilization %		
Ownership Cost/Hour:		\$114.76	NA		
Operating Cost/Hour:		\$91.98	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT Initial Volume: 2,41					
Swell factor: $\frac{2,41}{1.00}$					
	7 LCY				
		_			
Source of estimated volu Source of estimated swel		&V Provided book	l Estimate		
HOURLY PRODUC	<u>TION</u>				
Average push distance:	90 feet				
Unadjusted hourly produ	ction: 535.7 LCY	/hr			
Materials consistency des	scription: Consol	idated stock	pile 1.0		
Average push gradient:	-20 %				
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY			_	
Weight description:	Granite - Broken				
Job Condition Correction			Source		
Operator		750	(AVG.)		
Material consist		000	(CAT HB)		
Dozing me	ethod: 1	.000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 312.31 LCY/hr
Adjusted fleet production: 312.31 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.794/LCY

Total job time: 7.74 Hours
Total job cost: \$1,920

TRUCK/LOADER TEAM WORK

Site: Cresson Project		Permit Action	on: 2023		Permit/Job#:	M1980244
PROJECT IDEN	<u>TIFICATION</u>					
Task #: A0005	5	State: Colora	ado	Ab	breviation:	None
Date: 11/21/		County: Teller			Filename:	M244-A0005
2:22:4	7 PM					
User: <u>ZTT</u> Agency or	organization nam	ne: DRMS				
<i>8.</i> .						
HOURLY EQUI	PMENT COST	<u> </u>		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
Т	ruck Loader Tear		777F			
Supp	ort Equipment -L		T 992K D10T - 10SU			
Suppo		imp Area: NA				
Road Ma	aintenance – Moto		T 16M			
	-Wai	ter Truck: Wa	ter Tanker, 7,000	Gal.		
	TD 1.07	1 m	G	.	3.6.1.	.
Cost Breakdown:	Truck/Loa Truck	Loader	Load Area	Equipment Dump Area	Mainter Motor Grade	nance Equipment Water Truck
				-		
%Utilization-machine:	100	100	100	NA		25 25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.2	
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.2	
%Utilization-riper:	NA	0	NA co oo	NA NA	N.	
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.0	
Ripper op. cost/hour:	NA \$22.71	\$0.00	\$0.00	NA NA	\$0.0	
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA NA	\$28.5	
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA 0	\$271.9	
Number of Units:	3	1	1	0	N/ city	1 1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Main	t: \$407.85
Total work team cos	st/hour: \$2,459.1	17				
MATERIAL QU	<u>ANTITIES</u>					
Initial volume:		CCY		factor: 1.215		
Loose volume:	25,590	0 LCY	•			
Sou	urce of estimated	volume: 2022	CC&V Provided	Estimate		
Source	of estimated swe		Handbook			
	Material Purcha					
	10	tal Cost: \$0.00	U			
HOURLY PRO	DUCTION					
·	DUCTION					
Truck Capacity: Truck Payload (weight	-1-4) D1					
Material w			Pounds/LCY	-		

Pounds

Description:

Rated Payload:

Top Soil 200,000

Payload Capacity	7: 125.00	LCY	•			
Truck Bed (volume) Basi						
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	78.80	LCY				
F	inal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity	7: 16.000	LCY (heaped)		ket Size Class:	NA	<u>—</u>
Bucket Fill Factor		Other - rock/di		-120%) 1.100		
Adjusted Capacity		LCY	ir mixtures (100	-120/0) 1.100		_
Job Condition Correction	ons:	S	Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tir		-	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh	ne: Numb	0.813 per of Loading Tool P	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin	ne: Numb	per of Loading Tool P	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numb ovels: ne vs. Job Conditi lue within this Ba	oer of Loading Tool P ion Rating: NA usic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numbovels: ne vs. Job Condition lue within this Bacters – Material Description	oer of Loading Tool P ion Rating: NA usic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader	ne: Numbovels: ne vs. Job Condition lue within this Ba rs – Material Description.):	oer of Loading Tool P ion Rating: NA usic Rating: NA	asses Required to		100	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mi	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Dese in.):	oer of Loading Tool Point Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.	100	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA	ne: Numbovels: ne vs. Job Condition lue within this Bases – Material Description.): ers - Unadjusted I	oer of Loading Tool Point Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.	100 0.625 min	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader	ne: Numbovels: ne vs. Job Condition lue within this Bases – Material Description.): ers - Unadjusted I	oer of Loading Tool Prion Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Telephone	· 	Dump: 0.	100 0.625 min	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor	ne: Numb	oer of Loading Tool Prion Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Telephone	ime (load, dump, r	Dump: 0. maneuver): Factor (min.)	100 0.625 min) Source	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Terrial 0.02	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020	100 0.625 min Source (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Dese in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm p: Common or	per of Loading Tool Parising Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Terrial 0.02 Bent - factor not applice	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000	100 0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm p: Common or on: Constant op	per of Loading Tool Prior Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Translation: Perial 0.02 Perial 0.02 Perial 0.02 Perial of trucks and peration -0.04	ime (load, dump, 1	Dump: _0. maneuver): Factor (min.)	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm p: Common or on: Constant op	per of Loading Tool Parisic Rating: NA Sic Rating: Maneuver: Maneuver: Maneuver: Prial 0.02 Serial 0.02 Serial 0.04 Serial 0.04 Serial 0.00 Net Cycle Ti	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment:	Dump: 0. maneuver):	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm p: Common or on: Constant op	oer of Loading Tool Parisic Rating: NA Sic Rating: Maneuver: Maneuver: Maneuver: NA Basic Loader Cycle Table Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm p: Common or on: Constant op	oer of Loading Tool Parisic Rating: NA Sic Rating: Maneuver: Maneuver: Maneuver: NA Basic Loader Cycle Table Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment:	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm p: Common or on: Constant op	oer of Loading Tool Parisic Rating: NA Sic Rating: Maneuver: Maneuver: Maneuver: NA Basic Loader Cycle Table Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio Dump Targe	ne: Numbrovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted In Mixed materials: Mixed materials: No adjustment of Common of Constant of	oer of Loading Tool Parisic Rating: NA Sic Rating: Maneuver: Maneuver: Maneuver: NA Basic Loader Cycle Table Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpill Truck Ownershi Operatior Dump Targer	ne: Numbrovels: ne vs. Job Condition lue within this Bases – Material Description: ers - Unadjusted In Mixed materials: No adjustment of Constant opers: Nominal target: Nominal target: ime: 0.80	per of Loading Tool Parisic Rating: Sic Rating: Maneuver: Maneuver: Maneuver: Maneuver: Prial 0.02 Serial 0.02 Serial 0.04 Serial 0.04 Serial 0.00 Serial 0.00 Serial 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3892.00	-7.70	3.00	-4.70	1870	2.233

Haul Time: 2.233 minutes

Return Route:

11010111111								
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time		
	,		` '	` /	\1 /	(min)		
1	3892.00	7.70	3.00	10.70	1734	2.377		

Return Time: 2.377 minutes
Total Truck Cycle Time: 8.442 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

500.38 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 415.31 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,245.94 LCY/Hour Adjusted single truck/loader team production: 1,245.94 LCY/Hour Adjusted multiple truck/loader team production: 1,245.94 LCY/Hour LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 20.54
 Hours

 Unit cost:
 \$1.974
 /LCY
 Total job cost:
 \$50,509

BULLDOZER RIPPING WORK

	Task description:	Iron	clad Mine A	rea - Topsoi	l - Ripping				<u></u>
Site	: Cresson Projec	et	Peri	mit Action:	2023	Per	mit/Job#:	M19802	244
	PROJECT IDE	NTIFICATI	<u>ON</u>						
	Task #: A00	006	State:	Colorado		Abbre	viation:	None	
		21/2023	County:	Teller			lename:	M244-A	0006
		3:01 PM	J						
	User: ZT7	Γ					•		
	Agency	or organization	name: DR	RMS					
	HOURLY EQU	JIPMENT CO	<u>OST</u>						
	Basic N	Machine: Car	t D7R DS Ser	ies II LGP		Horsepower:	,	240	
	Ripper Atta		Shank Ripper		<u></u>	Shift Basis:		er day	
	11		1.1			Data Source:		CRG)	
	Cost Breakdown:								
	Cost Dicardown.					Utilization %			
		Ownership C	ost/Hour:		\$114.76	NA			
		Operating C			\$91.98	100			
	* *	r Ownership C			\$9.06	NA			
	Ripp	er Operating C			\$5.02	100			
		Operator C			\$41.30	NA			
		Total Unit C	ost/Hour:		\$262.12				
		Total Fleet C	ost/Hour:	\$262	2.12				
	MATERIAL Q	UANTITIES	<u>.</u>	Sele	ected estimating	method: Area			
	Alternate Method	<u>s:</u>							
mic:	NA		Banl	k Volume:	NA	BCY		NA	
Area:	26.11	acres		Depth (ft):	2.50)5,310	- 1	BCY or
		Cormon of activ	_	_	C %V Duovidad	Estimata			
			mateu quantit	y. <u>2022 C</u>	C&V Provided	Estillate			
	HOURLY PRO	<u>DUCTION</u>							
	Seismic:								
			Seismic Velo	city:	NA	feet/seco	nd		
	A ====								
	Area:	Averag	ge Ripping De	enth:	2.45	feet/pass			
			ge Ripping W		6.50	feet/pass			
			e Ripping Ler		300.00	feet/pass			
			age Dozer Sp		88.00	feet/minu	ite		
			Maneuver T		0.25	minutes/p	oass		
		Produc	tion per unit a	area:	0.734	acres/hou	ır		
	Job Condition Con	rrection Factors	<u>s</u>						
	Una	djusted Hourly	Unit Produc	tion:	0.734	Acres/hr			
			Site Altit	ude:	9,500	feet			
			Altitude		1.00	(CAT HE			
			Job Efficie		0.83	(1 shift/d	•		
			Net Correc	tion:	0.83	multiplie	r		
		Adjusted	Hourly Unit	Production:	0.61	Acres/hr			
			Hourly Fleet		0.61	Acres/hr			
	JOB TIME AN	D COST							
	Fleet size:	1	Grader(s)		Total job tim	ne: 42	.86	Но	ours
	Unit cost:	\$430.227	Per acre		Total job cos	et. 011	,233		
	Omi cost.	ツエンひ・ムム /	1 1 1 1 1 1 1		TOTAL TODICOS		-4-1-1		

Task description:	Ironclad M	me me ropson	2 DOLLI SPITALING		
Cresson Project		Permit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENT	TIFICATION				
Task #: A0007	Si	tate: Colorado		Abbreviation:	None
Date: $\frac{11/20/2}{11/20/2}$			-	Filename:	M244-A0007
9:25:15		,			
User: ZTT				-	
Agency or o	organization name:	DRMS			
HOURLY EQUIP	MENT COST				
	Cat D7R DS Series	s II LGP			
Horsepower:	240				
Blade Type:	Straight				
Attachment:	NA		<u> </u>		
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hor	ur:	\$114.76	NA		
Operating Cost/Hor		\$91.98	100		
Ripper own. Cost/Hor	ur:	\$0.00	NA		
Dinner on Cost/He	1144	\$0.00	25		
Ripper op. Cost/Ho	uı.	Ψ0.00	23		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour	\$248.04 \$248.04	\$41.30	NA NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA	\$248.04 \$248.04 \$248.04				
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2	\$248.04 \$248.04 \$248.04 \$NTITIES 21,062				
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1	\$248.04 \$248.04 \$248.04 \$NTITIES 21,062 1.215				
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1 Loose volume: 2	\$248.04 \$248.04 \$248.04 \$NTITIES 21,062 1.215 25,590 LCY	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1 Loose volume: 2 Source of estimated v	\$248.04 \$248.04 \$248.04 \$NTITIES 21,062 1.215 25,590 LCY rolume: 202	\$41.30 2 CC&V Provided	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1 Loose volume: 2	\$248.04 \$248.04 \$248.04 \$NTITIES 21,062 1.215 25,590 LCY rolume: 202	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1 Loose volume: 2 Source of estimated v	\$248.04 \$248.04 \$248.04 \$21,062 1.215 25,590 LCY rolume: 202 well factor:	\$41.30 2 CC&V Provided	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume:2 Swell factor:1 Loose volume:2 Source of estimated v Source of estimated s HOURLY PRODU	\$248.04 \$248.04 \$248.04 \$248.04 \$21,062 1.215 25,590 LCY rolume: 202 well factor: Cat	\$41.30 2 CC&V Provided Handbook	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume:2 Swell factor:1 Loose volume:2 Source of estimated v Source of estimated s	\$248.04 \$248.04 \$248.04 \$248.04 \$21,062 1.215 25,590 LCY rolume: 202 well factor: Cat	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume:2 Swell factor:1 Loose volume:2 Source of estimated v Source of estimated s HOURLY PRODU	\$248.04 \$248.04 \$248.04 \$248.04 \$21,062 1.215 25,590 LCY rolume: 202 well factor: Cat 202 Cat 202 Cat 203 204 205 205 205 205 205 205 205 205	\$41.30 2 CC&V Provided Handbook	l Estimate		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1 Loose volume: 2 Source of estimated v Source of estimated s HOURLY PRODU Average push distance Unadjusted hourly productions	\$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$21,062 \$1,215 \$25,590 LCY rolume:	\$41.30 2 CC&V Provided Handbook t LCY/hr	l Estimate		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1 Loose volume: 2 Source of estimated v Source of estimated s HOURLY PRODU Average push distance Unadjusted hourly pro	\$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$21,062 \$1.215 \$25,590 LCY rolume:	\$41.30 2 CC&V Provided Handbook t LCY/hr	l Estimate		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 2 Swell factor: 1 Loose volume: 2 Source of estimated v Source of estimated s HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien	\$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$21,062 \$1.215 \$25,590 LCY rolume:	\$41.30 2 CC&V Provided Handbook t LCY/hr oose stockpile 1.2	l Estimate		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume:2 Swell factor:1 Loose volume:2 Source of estimated v Source of estimated s HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien Average site altitude:	\$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$21,062 \$1,215 \$25,590 LCY rolume:	\$41.30 2 CC&V Provided Handbook t LCY/hr oose stockpile 1.2	l Estimate		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume:2 Swell factor:1 Loose volume:2 Source of estimated v Source of estimated s HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien Average site altitude: Material weight: Weight description: Job Condition Correce	\$248.04 \$248.04 \$248.04 \$248.04 \$21,062 \$1,215 \$25,590 LCY rolume:	\$41.30 2 CC&V Provided Handbook t LCY/hr oose stockpile 1.2	l Estimate Source		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume:2 Swell factor:1 Loose volume:2 Source of estimated v Source of estimated s HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien Average site altitude: Material weight: Weight description: Job Condition Correce	### \$248.04 ### \$2	\$41.30 2 CC&V Provided Handbook t LCY/hr oose stockpile 1.2	l Estimate		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 842.16 LCY/hr
Adjusted fleet production: 842.16 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.295/LCY

Total job time: 30.39 Hours
Total job cost: \$7,537

Task description:	SGOSA Mine A	Area - Pile Le	veling - Mass Grading		
: Cresson Project	Pe	ermit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION				
Task #: A0100) State:	Colorado		Abbreviation:	None
Date: 11/20/		-		Filename:	M244-A0100
9:26:2	•	Tener		i memanie.	1,12 1 1 110100
User: ZTT				-	
Agency or	organization name:	ORMS			
HOURLY EQUI	PMENT COST				
Basic Machine:	Cat D10T - 10SU				
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	NA		<u></u>		
Shift Basis:	1 per day				
Data Source:	(CRG)		<u> </u>		
Cost Breakdown:					
·			Utilization %		
Ownership Cost/He	our:	\$178.69	NA		
Operating Cost/He		\$160.22	100		
Ripper own. Cost/He		\$0.00	NA		
Ripper op. Cost/H	· · · · · · · · · · · · · · · · · · ·	\$0.00	0		
Operator Cost/He	our:	\$41.30	NA		
MATERIAL QU. Initial Volume: Swell factor:	2,088 1.000				
Loose volume:	2,088 LCY				
Source of estimated	volume: 2022 Co	C&V Provided	l Estimate		
Source of estimated			2 20		
					
HOURLY PROD	UCTION				
Average push distan Unadjusted hourly p		CY/hr			
Materials consistence	y description: Rock	, poorly ripped	l or blasted 0.6		
Average push gradie	ent: -10 %				
Average site altitude					
Material weight:	2,800 lbs/LCY			<u>—</u>	
Weight description:	Granite - Broken	ı			
Job Condition Corre			Source		
		0.750	(AVG.)		
Material co		0.600	(CAT HB)		
Dozin	g method:	1.200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 991.18 LCY/hr
Adjusted fleet production: 1982.36 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.384/LCY

Total job time: 1.05 Hours
Total job cost: \$801

Task description:	SGOSA	Mine Ar	ea - Pile Le	veling - Fine Grading		
: Cresson Project		Pern	nit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION					
Task #: A0101		State:	Colorado		Abbreviation:	None
Date: 11/20/2	2023	County:	Teller		Filename:	M244-A0101
9:27:32		county.	TOHOI		i nename.	141244 710101
User: ZTT	211/1	-			-	
	organization nam	ne: DR	MS			
HOURLY EQUIP	MENT COST	1				
Basic Machine:	Cat D7R DS Se	_	5P			
Horsepower:	240					
Blade Type:	Straight			<u> </u>		
Attachment:	NA			<u> </u>		
Shift Basis:	1 per day			_		
Data Source:	(CRG)					
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/Ho	our:		\$114.76	NA		
Operating Cost/Ho	our:		\$91.98	100		
Ripper own. Cost/Ho	our:		\$0.00	NA		
Ripper op. Cost/Ho	our:		\$0.00	0		
Operator Cost/Ho	our:		\$41.30	NA		
MATERIAL QUA						
	232		_			
	1.000		_			
Loose volume:	232 LCY		_			
Source of estimated v	volume: 2	2022 CC&	V Provided	d Estimate		
Source of estimated s	swell factor:	Cat Handb	ook			
HOURLY PROD	<u>UCTION</u>					
Average push distance	ce: 50	feet				
Unadjusted hourly pr	oduction: 800	0.0 LCY/I	nr			
Materials consistency	y description:	Rock, p	oorly ripped	d or blasted 0.6		
Average push gradier						
Average site altitude:	: 9,500 feet	<u> </u>				
Material weight:	2,800 lbs/	LCY			_	
Weight description:	Granite - 1	Broken				
Job Condition Correct Opera	ction Factor ator Skill:	0.7	750	Source (AVG.)		
Material con			500	(CAT HB)		
	g method:		000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 240.40 LCY/hr
Adjusted fleet production: 240.4 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.032/LCY

Total job time: 0.97 Hours
Total job cost: \$239

Task description:	SGOSA Mine A	rea - 100 - 30	00 ft Lift - Mass Gradin	g	
: Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENT	<u>FICATION</u>				
Task #: A0102	State:	Colorado		Abbreviation:	None
Date: 11/20/20		Teller		Filename:	M244-A0102
9:39:24 1	PM			_	
User: ZTT					
Agency or or	ganization name:DF	RMS			
HOURLY EQUIPM	MENT COST				
	Cat D10T - 10SU				
Horsepower: 5	574				
Blade Type: S	Semi-Universal				
_	NA				
	per day				
Data Source: (CRG)		<u> </u>		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hour		\$178.69	NA		
Operating Cost/Hour		\$160.22	100		
Ripper own. Cost/Hour		\$0.00	NA		
Ripper op. Cost/Hour		\$0.00	0		
Operator Cost/Hour	r:	\$41.30	NA		
	NTITIES 74,912 000				
	74,912 LCY				
Source of estimated vo		— &V Provided	LEstimoto		
Source of estimated vo			i Estillate		
HOURLY PRODU	<u>CTION</u>				
Average push distance	375 feet				
Unadjusted hourly produced		'hr			
Materials consistency of	description: Consol	idated stock	pile 1.0		
Average push gradient	: -30 %				
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY			_	
Weight description:	Granite - Broken				
Job Condition Correcti			Source		
		750	(AVG.)		
Material cons		000	(CAT HB)		
Dozing 1	method: 1.	200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 411.84 LCY/hr
Adjusted fleet production: 823.68 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.923/LCY

Task description:	SGO	SA Mine A	rea - 100 - 30	00 ft Lift	- Fine Grading	5	
Cresson Project		Per	mit Action:	2023		Permit/Job#:	M1980244
PROJECT IDEN	TIFICATIO	<u>)N</u>					
Task #: _ A0103		State:	Colorado			Abbreviation:	None
Date: 11/20/2		County:	Teller			Filename:	M244-A0103
User: $\frac{9:40:23}{ZTT}$	3 PM					-	
Agency or o	organization i	name: DF	RMS				
HOURLY EQUIP	MENT CO	<u>ST</u>					
Basic Machine:	Cat D7R DS	Series II L	GP				
Horsepower:	240						
Blade Type:	Straight						
Attachment:	NA						
Shift Basis:	1 per day						
Data Source:	(CRG)						
Cost Breakdown:							
				<u>U</u>	tilization %		
Ownership Cost/Ho			\$114.76		NA		
Operating Cost/Ho			\$91.98		100		
Ripper own. Cost/Ho			\$0.00		NA		
Ripper op. Cost/Ho	ur:		\$0.00		0		
Operator Cost/Ho	ur:		\$41.30		NA		
	97,213 1.000						
	97,213 LCY		<u> </u>				
Source of estimated source of estimated s		2022 CC Cat Hand	&V Provided	l Estimate			
HOURLY PROD	<u>UCTION</u>						
Average push distand Unadjusted hourly pr		375 feet 173.2 LCY	/hr				
Materials consistency	description:	Consol	idated stock	oile 1.0			
Average push gradier	nt: -30 %						
Average site altitude:		feet					
Material weight:	2,800	lbs/LCY				<u> </u>	
Weight description:	Granit	e - Broken					
Job Condition Correct				1	Source		
	ntor Skill:		.750		(AVG.)		
Material con			.000		(CAT HB)		
Dozing	method:	1.	.000		(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production: 113.38 LCY/hr
Adjusted fleet production: 113.38 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$2.188/LCY

Total job time: 857.41 Hours
Total job cost: \$212,674

TRUCK/LOADER TEAM WORK

Task description:	SGOSA	Mine Area - Toj	osoil - Lift 1 - Tra	ansport		
Site: Cresson Project	<u>t</u>	Permit Action	on: 2023	1	Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	Ī				
Task #:A010 Date:11/2)4	State: Colora County: Teller	ado	Ab	breviation: No M2	one 244-A0104
User: ZTT						
Agency o	r organization nai	ne: DRMS				
HOURLY EQU	IPMENT COS	<u>r</u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
	Truck Loader Tea		777F Γ 992K			
Supp	port Equipment -I	Load Area: Cat	D10T - 10SU			
D 13		ump Area: NA	F 1 CM			
Road N	Iaintenance –Mot Wa-Wa		Γ 16M er Tanker, 7,000	Gal.		
		-1	, ,			
Cost Breakdown:	Truck/Lo Truck	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenar Motor Grader	water Truck
				•		
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA NA	\$212.21	\$86.29
Operating cost/hour: %Utilization-riper:	\$160.10 NA	\$200.29 0	\$160.22 NA	NA NA	\$31.22 NA	\$28.44 NA
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,459.	<u>17 </u>				
MATERIAL QU	IA NITITIES					
		COV	G 11	6 . 1015		
Initial volume Loose volume		CCY LCY		factor: 1.215		
	ource of estimated		CC&V Provided	Estimata		
	e of estimated swe		Handbook	Estillate		
	Material Purch					
	To	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (we						
Material		_ :1	Pounds/LCY			
Desc Rated P	ription: $\frac{\text{Top So}}{200,00}$		Pounds			

Payload Capacity:	125.00	LC'	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
	4 4 0 0 0	1 4		ket Size Class:	NA	_
Rated Capacity:	16.000	LCY (heaped				_
Bucket Fill Factor:	1.100	Other - rock/o	dirt mixtures (100	-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	ıs:		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:			Passas Paguirad to	Fill Truck	4	naccac
Loading Tool Cycle Time	e: Numbe		Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Show	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	er of Loading Tool I	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool I	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool I	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc .):	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to		100	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Bas Material Desc):	on Rating: NA Sic Rating: NA Wription: Maneuver: NA		Dump:0.		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Base Material Desc i): S - Unadjusted B	on Rating: NA Sic Rating: NA Wription: Maneuver: NA		Dump:0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Bas — Material Desc :): S - Unadjusted B	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle 7		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors	vels: vs. Job Condition within this Bas — Material Desc a): y s - Unadjusted B Mixed material	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle 7	Time (load, dump, 1	Dump: 0. maneuver): Factor (min.)	100 0.625 min) Source	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow	on Rating: NA Sic Rating: NA Pription: NA Sasic Loader Cycle Carial 0.02 Ent - factor not applied whership of trucks at	Time (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Time (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump: _0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Trial 0.02 Sent - factor not applied where the property of trucks at the property of trucks a	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.)	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.)	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc a.): Material Desc b. S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04 Fime Adjustment: lader Cycle Time: I Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo Net Load	Time (load, dump, ricable 0.00 and loaders -0.04 crime Adjustment: rader Cycle Time: di Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	utes

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4897.00	-6.10	3.00	-3.10	3450	1.494

Haul Time: 1.494 minutes

Return Route:

ictuiii ic	rate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time
					_	(mın)
1	4897.00	6.10	3.00	9.10	2134	2.515

Return Time: 2.515 minutes
Total Truck Cycle Time: 7.841 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

538.73 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 447.15 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,341.44 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 16.97
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$41,738

TRUCK/LOADER TEAM WORK

Task description:	SGOSA	Mine Area - T	Topsoil - Lift 2 - Tr	ansport		
Site: Cresson Project		Permit Ac	etion: 2023		Permit/Job#: N	M1980244
PROJECT IDEN	NTIFICATION	Ī				
Task #: A010		_	orado	Ab	breviation: N	one
		County: Tell	er		Filename: M	I244-A0105
User: $\frac{2:27:}{ZTT}$	49 PM					
Agency or	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COST	<u>r</u>		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
	Truck Loader Tea		at 777F			
Supr	oort Equipment -I		AT 992K at D10T - 10SU			
		ump Area: N	Ā			
Road M	Iaintenance – Mot		AT 16M	G 1		
	-W 2	iter Truck: V	Vater Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintena	ance Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	() NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	· ·	NA	\$0.00	· · · · · · · · · · · · · · · · · · ·
Ripper op. cost/hour:	NA	\$0.00	,	NA	\$0.00	
Operator cost/hour:	\$33.71	\$40.71		NA	\$28.56	
Unit Subtotals:	\$400.29	\$470.24		NA	\$271.99	,
Number of Units:	4	Φ2 071 40		0	1	1
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,859.	46				
MATERIAL QU	JANTITIES					
Initial volume	e: 14,415	CC	CY Swell	factor: 1.215		
Loose volume				11210		
So	ource of estimated	volume: 20	22 CC&V Provided	Estimate		
Source	e of estimated swe	ell factor: Ca	t Handbook			
	Material Purch		.00			
	10	otal Cost: \$0	.00			
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (we						
Material		.'1	Pounds/LCY	•		
Rated Pa	ription: $\frac{\text{Top So}}{200,00}$		Pounds			

Payload Capacity:	125.00	LC'	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity:	16.000	LCY (heaped		ket Size Class:	NA	_
Bucket Fill Factor:	1.100	Other - rock/o		0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY	unt mixtures (100	7-120%) 1.100		_
Job Condition Correction			Site Altitude (ft.): 9	9500 feet		
A 1424 1 A . 12 .	Truck	Loader	Source	1)		
Altitude Adj:	1.000	0.980	(CAT HE	/		
Job Efficiency:	0.830	0.830	(CAT HE	5)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Time			Passes Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Time	e: Numbe	0.813	Passes Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time	e: Number vels: vs. Job Condition	er of Loading Tool l	Passes Required to	Fill Truck:	4I	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	er of Loading Tool loon Rating: NA Sic Rating: NA	Passes Required to	Fill Truck:	<u>4</u> 1	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool loon Rating: NA Sic Rating: NA	Passes Required to	Fill Truck:	<u>4</u> 1	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc .):	er of Loading Tool loon Rating: NA Sic Rating: NA	Passes Required to		<u>4</u> 1	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Bas Material Desc):	on Rating: NA NA Pription: Maneuver: NA		Dump:0.		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Base Material Desc i): S - Unadjusted B	on Rating: NA NA Pription: Maneuver: NA		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors	vels: vs. Job Condition within this Bas Material Desc :): S - Unadjusted B	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Pasic Loader Cycle		Dump:0.	100 0.625 min Source	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Bas — Material Desc a): y s - Unadjusted B Mixed material	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Pasic Loader Cycle	Γime (load, dump, r	Dump: 0. maneuver): Factor (min.)	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed material No adjustme	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prial 0.02	Fime (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020	100 0.625 minus Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Fime (load, dump, r	Dump: 0. maneuver):	100 Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Γime (load, dump, r icable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 minum Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Trial 0.02 Sent - factor not applied where the property of trucks at the property of trucks a	Γime (load, dump, r icable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Los	Fime (load, dump, ricable 0.00 nd loaders -0.04 cime Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Los	Γime (load, dump, r icable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Los	Fime (load, dump, ricable 0.00 nd loaders -0.04 cime Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a.): Material Desc b. S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Los	Fime (load, dump, recable 0.00 and loaders -0.04 cime Adjustment: ader Cycle Time: 1 Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Port - factor not application -0.04 get 0.00 Net Cycle T Adjusted Load Net Load	Fime (load, dump, recable 0.00 nd loaders -0.04 cime Adjustment: ader Cycle Time: 1 Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	0.625 minutes minutes 0.800	utes

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4250.00	8.70	3.00	11.70	675	6.342

Haul Time: **6.342** minutes

Return Route:

Return Route.										
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)				
1	4250.00	-8.70	3.00	-5.70	3450	1.270				

Return Time: 1.270 minutes
Total Truck Cycle Time: 11.444 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

369.11 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 306.36 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,225.46 LCY/Hour Adjusted single truck/loader team production: 1,225.46 LCY/Hour Adjusted multiple truck/loader team production: 1,225.46 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 14.29
 Hours

 Unit cost:
 \$2.333
 /LCY
 Total job cost:
 \$40,867

TRUCK/LOADER TEAM WORK

		1110 011 20							
Task description:	SGOSA	Mine Area - T	opsoil - Lift 3 - Tr	ansport					
Site: Cresson Project	et	Permit Action: 2023			Permit/Job#: M	M1980244			
PROJECT IDE	NTIFICATION	<u>1</u>							
Task #: A01			orado	Ab		None			
	1/2023 2:03 PM	County: Telle	er		Filename: M2	M244-A0106			
User: ZTT									
Agency or organization name: DRMS									
HOURLY EQUIPMENT COST Shift basis: 1 per day									
Equipment Description									
	Truck Loader Tea		at 777F	_					
-Loader: CAT 992K									
Support Equipment -Load Area: Cat D10T - 10SU -Dump Area: NA									
Road Maintenance – Motor Grader: CAT 16M									
-Water Truck: Water Tanker, 7,000 Gal.									
Cost Breakdown: Truck/Loader Team Support Equipment Maintenance									
Cost Di cardo Wil	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck			
%Utilization-machine:	100	100	100	NA	25	25			
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29			
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44			
%Utilization-riper:	NA	0	NA	NA	NA	NA			
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00			
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00			
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12			
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86			
Number of Units:	4	1	1	0	1	1			
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85			
Total work team c	ost/hour: \$2,859.	46							
MATERIAL Q	<u>UANTITIES</u>								
Initial volum	e: 24,337	CC	Y Swell	factor: 1.215					
Loose volum		69 LC	Y						

Source of estimated volume:

2022 CC&V Provided Estimate

Source of estimated swell factor:

Cat Handbook

Material Purchase Cost: Total Cost:

\$0.00 \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 1,600 Pounds/LCY

Description: Top Soil

Rated Payload: 200,000 Pounds

Payload Capacity:	125.00	LC	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Part 1 Carrain	16,000	LCV (bases)		ket Size Class:	NA	_
Rated Capacity:	16.000	LCY (heaped		1200() 1 100		_
Bucket Fill Factor:	1.100	Other - rock/o	dirt mixtures (100	0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	<u>us:</u>		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	,		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:			Passes Required to	Fill Truck:	4	nasses
Loading Tool Cycle Time	e: Numbe		Passes Required to 1	Fill Truck:	41	passes
	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4 I	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Base Material Desc .):	on Rating: NA sic Rating: NA ription:	Passes Required to			passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc .):	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to		100	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Bas Material Desc):	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump:0.		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Base Material Desc i): S - Unadjusted B	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump:0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Bas Material Desc :): S - Unadjusted B	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle Tasks		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors	vels: vs. Job Condition within this Bas — Material Desc a): y s - Unadjusted B Mixed material	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle Tasks	Time (load, dump, r	Dump: 0. maneuver): Factor (min.)	100 0.625 min) Source	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow	on Rating: NA	Time (load, dump, r	Dump: _0. maneuver): Factor (min.)	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Time (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	100 0.625 minum Source (Cat HB) (
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Fime (load, dump, r	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 minumon Source	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Trial 0.02 Sent - factor not appliance of trucks a seration -0.04 Section On Net Cycle Teacher Trial O.00 Section Net Cycle Trial O.00 Sectio	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04 Fime Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04 Fime Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a.): Material Desc b. S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04 rime Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: Maneuver: NA Station: Maneuver: NA Station: Maneuver: NA Station: Maneuver: NA Station: NA Station: NA	Fime (load, dump, residue) icable 0.00 Ind loaders -0.04 Fime Adjustment: ader Cycle Time: I Time per Truck: Adjusted	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3125.00	8.60	3.00	11.60	675	4.674

Haul Time: 4.674 minutes

Return Route:

return re	rute.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3125.00	-8.60	3.00	-5.60	3450	0.942

Return Time: 0.942 minutes
Total Truck Cycle Time: 9.448 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

447.10 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 371.09 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,484.36 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 22.20
 Hours

 Unit cost:
 \$2.146
 /LCY
 Total job cost:
 \$63,467

TRUCK/LOADER TEAM WORK

Task description:		Mine Area - Top		_	D 1/7 1 11 N	F1000044		
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: N	11980244		
PROJECT IDEN	NTIFICATION	<u> </u>						
Task #: A010	7	State: Colora	ado	Ab	breviation: No	one		
		County: Teller				244-A0107		
	15 PM							
User: ZTT								
Agency or	organization nar	ne: DRMS						
HOURLY EQUI	PMENT COST	Γ		Shift bas	is: <u>1 per day</u>			
	Equipment Description							
	Fruck Loader Tea	m -Truck: Cat	777F	Priori				
	To instant I		T 992K					
Supp	ort Equipment -I D:-	ump Area: Cat NA	D10T - 10SU					
Road M	laintenance –Mot		Т 16М					
	-Wa	ter Truck: Wat	ter Tanker, 7,000	Gal.				
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintana	nce Equipment		
Cost Dreakdown.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck		
%Utilization-machine:	100	100	100	NA	25	25		
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29		
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44		
%Utilization-riper:	NA	0	NA	NA	NA	NA		
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00		
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00		
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12		
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86		
Number of Units:	3	1	1	0	1	1		
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85		
Total work team co	st/hour: \$2,459.	<u> 17 </u>						
MATERIAL OF								
MATERIAL QU								
Initial volume		CCY 58 LCY		factor: 1.215				
Loose volume								
	ource of estimated sweet		CC&V Provided Handbook	Estimate				
Source	Material Purch							
		otal Cost: \$0.00						
1101101111	DICOTA							
HOURLY PRO	<u>DUCTION</u>							
Truck Capacity:								
<u>Truck Payload (wei</u> Material v			Pounds/LCY					
	ription: 1,000 Top So	oil	FOURIUS/LC Y					
Rated Pa			Pounds					

Payload Capacity	7: 125.00	LCY				
Truck Bed (volume) Basi						
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	78.80	LCY				
F	inal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity	7: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor		Other - rock/di		-120%) 1.100		_
Adjusted Capacity		LCY	it illixtures (100	-120%) 1.100		_
			Lita Altituda (ft.). (0500 foot		
Job Condition Correction			Site Altitude (ft.): 9	9300 leet		
Altitude Adj:	1.000	Loader 0.980	Source (CAT HE	2)		
Job Efficiency:	0.830	0.830	(CAT HE	·		
Job Efficiency.	0.830	0.830	(CAI III	· ·		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tin		0.813 er of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
_	ne: Numb		asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin	ne: Numb	er of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val	me: Numbovels: ne vs. Job Conditiue within this Bas	on Rating: NA NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numbovels: ne vs. Job Condition lue within this Basers — Material Description	on Rating: NA NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader	ne: Numbovels: ne vs. Job Conditi lue within this Basers – Material Description):	on Rating: NA NA	asses Required to		.100	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m.	ne: Numbovels: ne vs. Job Condition lue within this Bases rs – Material Description.):	on Rating: Sic Rating: NA Cription: Maneuver: NA		Dump: _0.	.100	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader	ne: Numbovels: ne vs. Job Conditique within this Basers – Material Descin.): ers - Unadjusted E	on Rating: Sic Rating: NA Cription: Maneuver: NA		Dump: 0.	.100 0.625 min	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor	ne: Numbovels: ne vs. Job Condition ne within this Bases rs – Material Description.): ers - Unadjusted E	er of Loading Tool Parting: On Rating: NA Cription: Maneuver: NA Basic Loader Cycle Ti		Dump: 0. maneuver): Factor (min.	.100 0.625 min) Source	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numbovels: ne vs. Job Condition ne vs.	on Rating: NA Sic Rating: NA Sasic Loader Cycle Tierial 0.02	ime (load, dump, r	Dump: 0. maneuver): Factor (min. 0.020	.100 0.625 min Source (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numbovels: ne vs. Job Condition ne vs.	on Rating: NA	ime (load, dump, 1	Dump: 0. maneuver): Factor (min. 0.020 0.000	.100 0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.): ers - Unadjusted Entry and Mixed materials: Mixed materials: No adjustments: Common overlands:	on Rating: NA Sic Rating: NA Shaription: NA Shaription: NA Shaription: NA Shaription: NA Shaription	ime (load, dump, 1	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040	.100 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.): ers - Unadjusted Entry of Mixed material in Mixed material in No adjustments of Constant opens.	on Rating: NA sic Rating: NA oription: NA original 0.02 original 0.02 original 0.02 original o	ime (load, dump, 1	Dump: 0. maneuver):	.100	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.): ers - Unadjusted Entry of Mixed material in Mixed material in No adjustments of Constant opens.	on Rating: NA sic Rating: NA oription: Maneuver: NA o	ime (load, dump, rable 0.00 d loaders -0.04	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 min Source (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.): ers - Unadjusted Entry of Mixed material in Mixed material in No adjustments of Constant opens.	on Rating: NA sic Rating: NA oription: Maneuver: NA oription: Maneuver: NA oription: Maneuver: NA oription: Prial 0.02 original 0.02 original 0.02 original 0.04 original 0.04 original 0.04 original 0.00 origi	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment:	Dump: _0. maneuver): Factor (min.	.100 0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.): ers - Unadjusted Entry of Mixed material in Mixed material in No adjustments of Constant opens.	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti crial 0.02 ent - factor not applic wnership of trucks and ceration -0.04 rget 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 min Source (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.): ers - Unadjusted Entry of Mixed material in Mixed material in No adjustments of Constant opens.	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti crial 0.02 ent - factor not applic wnership of trucks and ceration -0.04 rget 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio Dump Targe	ne: Numbrovels: ne vs. Job Conditique within this Basers – Material Description.): ers - Unadjusted Expressions Mixed material: Mixed material: No adjustment of Common own: Constant opet: Nominal tar	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti crial 0.02 ent - factor not applic wnership of trucks and ceration -0.04 rget 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operation Dump Targer	me: Number ovels: ne vs. Job Condition within this Basers – Material Description.): ers - Unadjusted Eners – Unadjusted Eners	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti crial 0.02 ent - factor not applic wnership of trucks and ceration -0.04 rget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minu	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

2000.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	8.50	3.00	11.50	675	3.006

Haul Time: **3.006** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min)

3.00

-8.50

Return Time: 0.623 minutes
Total Truck Cycle Time: 7.461 minutes

3450

0.623

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

566.17 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 469.92 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,409.77 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

-5.50

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 42.24
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$103,866

TRUCK/LOADER TEAM WORK

Task description:		Mine Area - Top		_	D 1/T 1 !! 3.5	1000244	
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244	
PROJECT IDEN	NTIFICATION	1					
Task #: A010	18	State: Colora	ndo	Ab	breviation: No	ne	
Date: 11/21	/2023	County: Teller			Filename: M244-A0108		
	24 PM						
		DD146					
Agency of	r organization nai	me: DRMS					
HOURLY EQUI	PMENT COS	<u>T</u>		Shift bas	is: <u>1 per day</u>		
		I	Equipment Descri	ption			
	Fruck Loader Tea	am -Truck: Cat	777F	•			
Supr	oort Equipment -I		Γ 992K D10T - 10SU				
Տաբլ		ump Area: NA	D101 - 1030				
Road M	Iaintenance –Mot	or Grader: CA	Г 16М				
	-Wa	ater Truck: Wat	ter Tanker, 7,000	Gal.			
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment	
Cost Di candown.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck	
%Utilization-machine:	100	100	100	NA	25	25	
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29	
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44	
%Utilization-riper:	NA	0	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00	
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12	
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86	
Number of Units:	2	1	1	0	1	1	
Group Subtotals:	Work:	\$1,270.82	Support:	\$380.21	Maint:	\$407.85	
Total work team co	st/hour: \$2,058.	88					
MATERIAL OL							
MATERIAL QU	<u>ANIIIIES</u>						
Initial volume		CCY		factor: 1.215			
Loose volume	58,27						
	ource of estimated		CC&V Provided	Estimate			
Source	e of estimated swe Material Purch		Handbook				
		otal Cost: $\frac{$0.00}{$0.00}$					
HOURLY PRO	<u>DDUCTION</u>						
Truck Capacity:							
Truck Payload (we			D 1 7 CY				
Material v	weight: $\frac{1,600}{\text{Top So}}$	nil	Pounds/LCY				
Rated Pa			Pounds				

Payload Capacity:	125.00	LC	YY			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	r of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buch	ket Size Class:	NA	_
Rated Capacity:	16.000	LCY (heaped	d)			
Bucket Fill Factor:	1.100	Other - rock/	dirt mixtures (100	-120%) 1.100		-
Adjusted Capacity:	17.600	LCY				_
Job Condition Correction	<u>s:</u>		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:		1	Passas Paguirad to	Eill Tenake	4	200000
Loading Tool Cycle Time	:: Numbe	1	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Show	els: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Numberels: vs. Job Condition within this Bas	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Numbered	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Numbered	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc):	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to		100	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min.	vels: vs. Job Condition within this Base Material Desc):	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA		Dump: 0.1		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Base Material Desc): 4 5 - Unadjusted B	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA		Dump: 0.1	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min.) Load: NA	vels: vs. Job Condition within this Base Material Desc): S - Unadjusted B	er of Loading Tool on Rating: NA sic Rating: NA ription: Maneuver: NA sasic Loader Cycle		Dump: 0.1	100 0.625 min Source	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors	vels: vs. Job Condition within this Bas Material Desc : - Material Desc : - Unadjusted B Mixed material	er of Loading Tool on Rating: NA sic Rating: NA ription: Maneuver: NA sasic Loader Cycle	Time (load, dump, 1	Dump: 0.1 maneuver): Factor (min.)	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minimal Load: NA Wheel and Track Loaders Cycle Time Factors Material:	vels: vs. Job Condition within this Base Material Desc : - Material Desc : - Unadjusted B Mixed material No adjustme	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA rasic Loader Cycle rial 0.02	Time (load, dump, r	Dump: 0.1 maneuver): Factor (min.) 0.020	100 0.625 min Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA sasic Loader Cycle rial 0.02 ent - factor not appl wnership of trucks a eration -0.04	Time (load, dump, r	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Stasic Loader Cycle rial 0.02 ent - factor not apple whership of trucks a eration -0.04 get 0.00	Time (load, dump, r	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Stasic Loader Cycle rial 0.02 ent - factor not appl wnership of trucks a geration -0.04 get 0.00 Net Cycle	Time (load, dump, relicable 0.00 and loaders -0.04	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA State Loader Cycle Strial 0.02 Sent - factor not apple whership of trucks a seration -0.04 Set 0.00 Set Cycle National Adjusted Loader Loading Net Cycle National Rational Research NA Stription Net Cycle National Research NA Stription National Research NA Stription N	Time (load, dump, relicable 0.00 and loaders -0.04 Time Adjustment: loader Cycle Time:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA State Loader Cycle Strial 0.02 Sent - factor not apple whership of trucks a seration -0.04 Set 0.00 Set Cycle National Adjusted Loader Loading Net Cycle National Rational Research NA Stription Net Cycle National Research NA Stription National Research NA Stription N	Time (load, dump, relicable 0.00 and loaders -0.04	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minimals) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA State Loader Cycle Strial 0.02 Sent - factor not apple whership of trucks a seration -0.04 Set 0.00 Set Cycle National Adjusted Loader Loading Net Cycle National Rational Research NA Stription Net Cycle National Research NA Stription National Research NA Stription N	Time (load, dump, relicable 0.00 and loaders -0.04 Time Adjustment: loader Cycle Time:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Base Material Desc The Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA State Loader Cycle Strial 0.02 Sent - factor not apple whership of trucks a seration -0.04 Set 0.00 Set Cycle National Adjusted Loader Loading Net Cycle National Rational Research NA Stription Net Cycle National Research NA Stription National Research NA Stription N	Time (load, dump, relicable 0.00 and loaders -0.04 Time Adjustment: bader Cycle Time: d Time per Truck:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base Material Desc :	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA State Loader Cycle Strial 0.02 Sent - factor not apple whership of trucks a seration -0.04 Set 0.00 Set Cycle Net Loader Loader Loader Loader Loader Loader Loader Loader Net Loader	Time (load, dump, relicable 0.00 and loaders -0.04 Time Adjustment: bader Cycle Time: d Time per Truck:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	9.30	3.00	12.30	675	1.169

Haul Time: **1.169** minutes

Return Route:

Retain Route.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	-9.30	3.00	-6.30	3450	0.272

Return Time: 0.272 minutes
Total Truck Cycle Time: 5.273 minutes

Loading Tool unit

Production Truck Unit Production

801.12 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 664.93 LCY/Hour Optimal No. of Trucks: 2 Truck(s)

Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 1,329.86 LCY/Hour Adjusted single truck/loader team production: 1,329.86 LCY/Hour Adjusted multiple truck/loader team production: 1,329.86 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 43.82
 Hours

 Unit cost:
 \$1.548
 /LCY
 Total job cost:
 \$90,223

BULLDOZER WORK

Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
DDAIEAT INENTIEI	CATION	-			
PROJECT IDENTIFI		<i>a</i> : :			N
Task #: A0109 Date: 11/20/2023	State: County:	Colorado Teller		Abbreviation: Filename:	None M244-A0109
9:41:23 PM		Tellel		rnename.	W1244-A0109
User: ZTT	<u> </u>				
Agency or organ	ization name: DI	RMS			
HOURLY EQUIPME	NT COST				
	D7R DS Series II L	GP			
Horsepower: 240		<u> </u>	<u> </u>		
Blade Type: Stra					
Attachment: NA					
	er day				
Data Source: (CR	.G)		<u>—</u>		
Cost Breakdown:					
		0111 7 6	<u>Utilization %</u>		
Ownership Cost/Hour:		\$114.76 \$91.98	NA 100		
Operating Cost/Hour: Ripper own. Cost/Hour:		\$91.98	NA		
Ripper op. Cost/Hour:		\$0.00	25		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT Initial Volume: 151,6 Swell factor: 1.215	537				
	239 LCY				
Source of estimated volum	ne: 2022 CC	— &V Provided	l Estimate		
		æ i Troilace	- Dournace		
Source of estimated swell	factor: Cat Hand	book			
Source of estimated swell HOURLY PRODUCT		book			
HOURLY PRODUCT Average push distance:	TION 210 feet				
HOURLY PRODUCT	TION 210 feet				
HOURLY PRODUCT Average push distance:	210 feet 277.8 LCY				
HOURLY PRODUCT Average push distance: Unadjusted hourly produc	210 feet 277.8 LCY	/hr			
HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency description	tion: 210 feet 277.8 LCY.	/hr			
HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency description Average push gradient:	210 feet 277.8 LCY cription: Loose -10 %	/hr			
HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency desc Average push gradient: Average site altitude:	210 feet 277.8 LCY cription: Loose -10 % 9,500 feet	/hr			
HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency deso Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	210 feet 277.8 LCY 277.8	/hr stockpile 1.2	Source		
HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency deso Average push gradient: Average site altitude: Material weight: Weight description:	210 feet 277.8 LCY 277.8	/hr			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.0527

Adjusted unit production: 292.44 LCY/hr
Adjusted fleet production: 292.44 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.848/LCY

Total job time: 630.01 Hours
Total job cost: \$156,268

BULLDOZER RIPPING WORK

Tasl	k description:	SGOSA	Mine Area - Topsoil	l - Lift 1 - 5 - R	ipping			
Site: C	Cresson Project		Permit Action:	2023	Pe	rmit/Job#:	M198024	14
PR	OJECT IDENT	IFICATIO	<u>v</u>					
7	Γask #: A0110		State: Colorado		Abbr	eviation:	None	
	Date: 11/21/20 1:49:04		County: Teller			ilename:	M244-A0	110
	User: ZTT		55140					
***	•	ganization na						
<u>HO</u>	OURLY EQUIP				••		2.40	
	Basic Mach		7R DS Series II LGP		Horsepower:		240	
	Ripper Attachm	ent: <u>3-8na</u>	nk Ripper	<u> </u>	Shift Basis: Data Source:		er day CRG)	
Cos	t Breakdown:							
					Utilization %			
		vnership Cost		\$114.76	NA 100			
		perating Cost		\$91.98	100			
		vnership Cost, perating Cost,		\$9.06 \$5.02	NA 100			
		perating Cost Operator Cost		\$41.30	NA			
		otal Unit Cost		\$262.12	IVA			
	To	tal Fleet Cost	/Hour: \$262	2.12				
МА	ATERIAL QUA		<u> </u>		method: Area			
	ernate Methods:	VIIILS	Sele	ected estimating	g memod: Area			
			D1 W -1	NT A	DCV		NT A	
	72.22	acres	Bank Volume: Rip Depth (ft):	NA 2.50	BCY Volume: 6	94,621	NA	BCY or
11ca. <u>1</u>						94,021		DCT OF
			ted quantity: 2022 C	C&V Provided	Estimate			
<u>HO</u>	<u>URLY PRODU</u>	<u>CTION</u>						
Seis	smic:							
		Sei	smic Velocity:	NA	feet/seco	ond		
Area	a·							
7110	<u>u.</u>	Average l	Ripping Depth:	2.45	feet/pass	3		
			Ripping Width:	6.50	feet/pass			
			ipping Length:	245.00	feet/pass			
		Average	Dozer Speed:	88.00	feet/min	ute		
			aneuver Time:	0.25	minutes/	pass		
		Production	n per unit area:	0.723	acres/ho	ur		
<u>Job</u>	Condition Correct	ion Factors						
	Unadjus	ted Hourly U	nit Production:	0.723	Acres/hr			
			Site Altitude:	9,500	feet (CAT II	D)		
			Altitude Adj: Job Efficiency:	1.00 0.83	(CAT H) (1 shift/d	*		
			Net Correction:	0.83	(1 siiii/c multiplie	•		
		Adjusted Ho	ourly Unit Production:	0.60	Acres/hr			
			urly Fleet Production:	0.60	Acres/hr			
JO	B TIME AND C	COST						
	Fleet size:	1	Grader(s)	Total job tim	ne: 28	37.01	Hou	ırs
	Unit cost: \$4	36.825	Per acre	Total job co	st· \$7	5,230		

BULLDOZER WORK

Task description:	N. Cı	esson Mine	Area - Pile	Leveling - Mass Grad	ing	
: Cresson Project		Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION	<u>ON</u>				
Task #: A020	0	State:	Colorado		Abbreviation:	None
Date: 11/20		County:	Teller		Filename:	M244-A0200
9:42:5	56 PM	Ž				
User: ZTT						
Agency or	organization	name: DI	RMS			
HOURLY EQUI	PMENT CO	<u>OST</u>				
Basic Machine:	Cat D10T -	10SU				
Horsepower:	574					
Blade Type:	Semi-Unive	ersal				
Attachment:	NA					
Shift Basis:	1 per day					
Data Source:	(CRG)			<u> </u>		
Cost Breakdown:						
				Utilization %		
Ownership Cost/H	our:		\$178.69	NA		
Operating Cost/H	our:		\$160.22	100		
Ripper own. Cost/H			\$0.00	NA		
Ripper op. Cost/H	lour:		\$0.00	0		
Operator Cost/H	our:		\$41.30	NA		
MATERIAL QU Initial Volume: Swell factor:	27,350 1.000					
Loose volume:	27,350 LCY					
_	<u> </u>	2022 CC		1 E . C		
Source of estimated Source of estimated		Cat Hand	&V Provided	1 Estimate		
Source of estimated	swell factor.	Cat Halic	IDOOK			
HOURLY PROL	OUCTION					
Average push distar	ice:	50 feet				
Unadjusted hourly p		2,748.7 LC	Y/hr			
Materials consistence	cy description	Rock,	poorly ripped	l or blasted 0.6		
Average push gradi	ent: -10 %					
Average site altitud		feet				
Material weight:	_2,800	lbs/LCY				
Weight description:	Granit	e - Broken				
Job Condition Corre				Source		
	rator Skill:		.750	(AVG.)		
Material co			.600	(CAT HB)		
Dozii	ng method:	1	.200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3606

Adjusted unit production: 991.18 LCY/hr
Adjusted fleet production: 1982.36 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.384/LCY

Total job time: 13.80 Hours
Total job cost: \$10,491

BULLDOZER WORK

Task description:	N. Cresson Mine	Area - Pile	Leveling - Fine Grading	5		
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244	
PROJECT IDENT	<u>IFICATION</u>					
Task #: A0201 Date: 11/20/20 9:43:52 User: ZTT	State: County:	Colorado Teller		Abbreviation: Filename:	None M244-A0201	
Agency or or	ganization name: DI	RMS				
HOURLY EQUIPM	MENT COST					
	Cat D7R DS Series II L	GP				
Horsepower:	240		_			
Blade Type:	Straight		<u></u>			
	NA					
	1 per day		_			
Data Source:	(CRG)		<u> </u>			
Cost Breakdown:						
			<u>Utilization %</u>			
Ownership Cost/Hou		\$114.76	NA			
Operating Cost/Hou		\$91.98	100			
Ripper own. Cost/Hou		\$0.00	NA			
Ripper op. Cost/Hou	ır:	\$0.00	0			
Operator Cost/Hou	ır:	\$41.30	NA			
Swell factor: 1	,039 .000					
Loose volume: 3	,039 LCY					
Source of estimated vo Source of estimated sv		&V Provided	Estimate			
HOURLY PRODU	CTION					
Average push distance Unadjusted hourly pro		/hr				
Materials consistency	description: Rock,	poorly ripped	or blasted 0.6			
Average push gradient Average site altitude:	-10 % 9,500 feet					
Material weight:	2,800 lbs/LCY			_		
Weight description:	Granite - Broken					
Job Condition Correct			Source			
		.750	(AVG.)			
Material cons	sistency: 0	.600	(CAT HB)	<u> </u>		
Dozing	method: 1	.000	(GEN.)			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3005

Adjusted unit production: 240.40 LCY/hr
Adjusted fleet production: 240.4 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.032/LCY

Total job time: 12.64 Hours
Total job cost: \$3,136

BULLDOZER WORK

Task description:	N. Cresson Mine	N. Cresson Mine Area - 200 - 250 ft Lift - Mass Grading					
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244		
PROJECT IDENTI	FICATION						
Task #: A0202 Date: 11/20/202 9:44:55 P	State: County:	Colorado Teller		Abbreviation: Filename:	None M244-A0202		
User: ZTT				-			
Agency or org	anization name:DF	RMS					
HOURLY EQUIPM	ENT COST						
	at D10T - 10SU						
	74		<u> </u>				
	emi-Universal		<u> </u>				
Attachment: N			<u> </u>				
	per day		<u> </u>				
Data Source: (C	CRG)						
Cost Breakdown:			l				
		**	<u>Utilization %</u>				
Ownership Cost/Hour:		\$178.69	NA 100				
Operating Cost/Hour: Ripper own. Cost/Hour:		\$160.22 \$0.00	100 NA				
Ripper op. Cost/Hour:		\$0.00	0				
Operator Cost/Hour:		\$41.30	NA NA				
$\begin{array}{c} \textbf{MATERIAL QUAN} \\ \textbf{Initial Volume:} & \underline{1,5} \\ \textbf{Swell factor:} & \underline{1.0} \end{array}$	72,058						
	72,058 LCY	<u> </u>					
Source of estimated vol Source of estimated swe		&V Provided book	l Estimate				
HOURLY PRODUC	CTION						
Average push distance: Unadjusted hourly prod	uction: $\frac{400 \text{ feet}}{497.3 \text{ LCY}}$	/hr					
Materials consistency de	escription: Consol	idated stock	pile 1.0				
Average push gradient: Average site altitude:	-30 % 9,500 feet						
Material weight:				_			
Weight description:	Granite - Broken						
Job Condition Correction			Source				
Operato		750	(AVG.)				
Material consis		000	(CAT HB)				
Dozing m	nethod: 1.	200	(S-BY-S)				

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7855

Adjusted unit production: 390.63 LCY/hr
Adjusted fleet production: 781.26 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.973/LCY

Total job time: 2,012.21 Hours
Total job cost: \$1,530,132

BULLDOZER WORK

Task description:	N. Cresson Mine	Area - 200	- 250 ft Lift - Fine Grad	ing		
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244	
PROJECT IDENTII	FICATION					
Task #: A0203 Date: 11/20/202 9:46:15 P User: ZTT	State: County:	Colorado Teller		Abbreviation: Filename:	None M244-A0203	
Agency or org	anization name:DF	RMS				
HOURLY EQUIPM	ENT COST					
Basic Machine: C	at D7R DS Series II L	GP				
<u> </u>	40					
	traight		<u> </u>			
Attachment: N			_			
	per day					
Data Source: (C	CRG)		<u>—</u>			
Cost Breakdown:						
			<u>Utilization %</u>			
Ownership Cost/Hour:		\$114.76	NA			
Operating Cost/Hour:	:	\$91.98	100			
Ripper own. Cost/Hour:	:	\$0.00	NA			
Ripper op. Cost/Hour:		\$0.00	0			
Operator Cost/Hour:		\$41.30	NA			
MATERIAL QUAN Initial Volume: 174 Swell factor: 1.0	4,673	_				
	4,673 LCY	 ;				
Source of estimated vol- Source of estimated swe		&V Provided book	Estimate			
HOURLY PRODUC	CTION					
Average push distance: Unadjusted hourly prod	400 feet 180.4 LCY	/hr				
Materials consistency de	escription: Consol	idated stockp	pile 1.0			
Average push gradient: Average site altitude:	-30 % 9,500 feet					
Material weight:	2,800 lbs/LCY			_		
Weight description:	Granite - Broken					
Job Condition Correction			Source			
Operator		750	(AVG.)			
Material consis		000	(CAT HB)			
Dozing m	nethod: 1.	.000	(GEN.)			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6546

Adjusted unit production: 118.09 LCY/hr
Adjusted fleet production: 118.09 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$2.100/LCY

Total job time: 1,479.15 Hours
Total job cost: \$366,892

TRUCK/LOADER TEAM WORK

ite: Cresson Projec	<u>t</u>	Permit .	Action	n: <u>2023</u>		Permit/Job#:	M1980244
PROJECT IDE	NTIFICATION	[
Task #:A020			olorac	lo	Ab		None
	1/2023 :55 PM	County: To	eller			Filename: N	M244-A0204
User: $\frac{2.32}{ZTT}$.55 F WI						
	r organization nar	ne: DRMS	S				
HOURLY EQU	IPMENT COS				Shift has	is: 1 per day	
HOCKET EQU	HWENT COS	<u>L</u>	F	quipment Descri		is. <u>i per day</u>	
-	Truck Loader Tea	m -Truck:	Cat 7		ption		
		-Loader:		992K			
Sup	port Equipment -L		Cat I	D10T - 10SU			
Road N	-Di Maintenance –Mot	ump Area: or Grader:		16M			
		iter Truck:		er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Los	ader Team Loader		Support I Load Area	Equipment	Mainten Motor Grade	ance Equipment Water Truck
	Truck	Loader		Load Area	Dump Area	Wiotor Grade	water Truck
Utilization-machine:	100		100	100	NA	2:	
Ownership cost/hour:	\$206.48	\$229.		\$178.69	NA	\$212.2	
Operating cost/hour:	\$160.10	\$200.		\$160.22	NA	\$31.22	
%Utilization-riper:	NA	ΦΩ.	0	NA to oo	NA NA	N/	
pper own. cost/hour:	NA NA		.00	\$0.00	NA NA	\$0.00	
Ripper op. cost/hour:	\$33.71	\$0. \$40.	.00	\$0.00 \$41.30	NA NA	\$0.00 \$28.50	
Operator cost/hour: Unit Subtotals:	\$400.29	\$470		\$380.21	NA NA	\$28.30	
Number of Units:	5400.29	\$470.	1	\$380.21 1	0		1
Group Subtotals:	Work:	\$2,471.69	1	Support:	\$380.21	Maint	
*				Support.	\$300.21	IVIaiiii	. \$407.63
Total work team co	ost/hour: \$3,259.	<u>75 </u>					
MATERIAL QU	JANTITIES						
•		,	COV	G .11	C 1 015		
Initial volume Loose volume			CCY LCY	Swell	factor: 1.215		
				2011	-		
	ource of estimated e of estimated swe			CC&V Provided andbook	Estimate		
Boure	Material Purch		\$0.00	undbook			
	To		\$0.00				
11011011110							
HOURLY PRO	<u>DDUCTION</u>						
Truck Capacity:							
Truck Payload (we				Da 1. // CV/			
Material Desc	weight: 1,600 ription: Top So	nil		Pounds/LCY			
レ しらし	TIPHOII, IOPOL	***					

Payload Capacit	y: 125.00	LCY	Y			
T						
Truck Bed (volume) Bas Struck Volume		I CV				
Heaped Volume		_ LCY LCY				
Average Volume		LCY				
Adjusted Volume		LCY				
Adjusted Volume	70.00	_ LC1				
F	inal Truck Volur	me Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			D	leat Cies Classe	NIA	
Rated Capacity	y: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Facto		Other - rock/d		0-120%) 1.100		
Adjusted Capacit	y: 17.600	LCY				
Job Condition Correcti	ons:	;	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HI	,		
too Ellielenej.						
Net Correction:	0.830	0.813				
Net Correction:			Passas Paguirad to	Fill Truck	4	naceac
Net Correction: Loading Tool Cycle Ti	me: Numl	0.813 ber of Loading Tool F	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin	me: Numb novels: ne vs. Job Condit	ber of Loading Tool F	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sl Machine Cycle Tii Selected Va	me: Numb novels: me vs. Job Condit lue within this Ba	ber of Loading Tool F tion Rating: NA asic Rating: NA	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sl Machine Cycle Tin Selected Va Track Loade	me: Numb novels: me vs. Job Condit lue within this Ba ers – Material Des	ber of Loading Tool F tion Rating: NA asic Rating: NA	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sl Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m	me: Numb novels: me vs. Job Condit lue within this Ba ers – Material Des	tion Rating: NA asic Rating: NA Scription:	Passes Required to			passes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m. Load: NA	me: Number Numbe	tion Rating: Assic Rating: NA NA Scription: Maneuver: NA		Dump: _ 0	.100	passes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sl Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load	me: Numbovels: me vs. Job Conditule within this Basers – Material Destin.): ers - Unadjusted	tion Rating: Assic Rating: NA NA Scription: Maneuver: NA		Dump: 0	.100 0.625 m	passes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sl Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Factor	me: Numbers Nu	tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T		Dump: 0 maneuver): Factor (min.	.100 0.625 m) Source	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Factor	me: Number of Nu	tion Rating: NA asic Rating: NA Scription: Maneuver: NA Basic Loader Cycle T	Fime (load, dump, 1	Dump: 0 maneuver): Factor (min. 0.020	.100 0.625 m Source (Cat HB)	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Factor Materia	me: Number of Nu	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 nent - factor not applic	Fime (load, dump, s	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.625 m Source (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpit Truck Ownersh	me: Number of Nu	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not applications of trucks are	Fime (load, dump, s	Dump: 0 maneuver): Factor (min. 0.020	.100 0.625 m Source (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operation	me: Number of Nu	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Basic Loader Cycle T erial 0.02 nent - factor not application of trucks ar peration -0.04	Fime (load, dump, s	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100 0.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpit Truck Ownersh	me: Number of Nu	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 nent - factor not application of trucks an peration -0.04 arget 0.00	Cable 0.00	Dump:0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operation	me: Number of Nu	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 hent - factor not application -0.04 urget 0.00 Net Cycle T	Cable 0.00 and loaders -0.04 Time Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operation	me: Number of Nu	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 nent - factor not application -0.04 arget 0.00 Net Cycle T Adjusted Loa	Cable 0.00	Dump:0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operation	me: Number of Nu	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 nent - factor not application -0.04 arget 0.00 Net Cycle T Adjusted Loa	cable 0.00 nd loaders -0.04 Time Adjustment: nder Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor Materia Stockpi Truck Ownersh Operation Dump Targ	me: Numbovels: me vs. Job Condit lue within this Basers – Material Destrin.): ers - Unadjusted ors al: Mixed mat le: No adjustmip: Common or constant or cet: Nominal ta	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 nent - factor not application -0.04 arget 0.00 Net Cycle T Adjusted Loa	cable 0.00 nd loaders -0.04 Time Adjustment: nder Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	inutes
Net Correction: Loading Tool Cycle Ti Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor Materia Stockpi Truck Ownersh Operation Dump Targ	me: Number ovels: me vs. Job Conditule within this Basers – Material Destrin.): ers – Unadjusted ors al: Mixed mather of No adjusting: Common of the constant of the cons	ber of Loading Tool F tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 nent - factor not application -0.04 arget 0.00 Net Cycle T Adjusted Load Minutes	cable 0.00 nd loaders -0.04 Time Adjustment: nder Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	inutes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5000.00	8.40	3.00	11.40	724	6.968

Haul Time: 6.968 minutes

Return Route:

	Return Route.							
	Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
Ī	1	5000.00	-8.40	3.00	-5.40	3450	1.494	

Return Time: 1.494 minutes
Total Truck Cycle Time: 12.294 minutes

Loading Tool unit

Production Truck Unit Production

343.59 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 285.18 LCY/Hour Optimal No. of Trucks: 5 Truck(s)

Selected Number of Trucks: 5 Truck(s)

Adjusted hourly truck team production: 1,425.91 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____40.79 Hours

Unit cost: \$2.447 /LCY Total job cost: \$132,955

BULLDOZER WORK

		- 11100 10р	oil - Dozer Spreading		
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENT	<u>TIFICATION</u>				
Task #: A0205	State:	Colorado		Abbreviation:	None
Date: $\frac{A0203}{11/20/20}$		Teller		Filename:	M244-A0205
9:47:12	•	101101		1 11011011101	1,12 110200
User: ZTT				-	
Agency or o	rganization name: D	RMS			
HOURLY EQUIP	MENT COST				
	Cat D7R DS Series II L	GP			
-	240		<u> </u>		
	Straight		<u> </u>		
	NA		<u> </u>		
_	1 per day		_		
_	(CRG)		_		
Cost Breakdown:					
Cost Breakdown.			<u>Utilization %</u>		
Ownership Cost/Hou	ır:	\$114.76	NA		
Operating Cost/Hot		\$91.98	100		
Ripper own. Cost/Hou		\$0.00	NA		
Ripper op. Cost/Hou	-	\$0.00	25		
Operator Cost/Hou		\$41.30	NA		
MATERIAL QUA	<u>NTITIES</u>				
Initial Volume: 4	4.722				
	4,722 .215				
Swell factor: 1	4,722 .215 4,337 LCY	<u> </u>			
Swell factor: 1 Loose volume: 5	.215 4,337 LCY		Estimata		
Swell factor: 1	.215 4,337 LCY olume: 2022 CC	&V Provided	Estimate		
Swell factor: 1 Loose volume: 5 Source of estimated vo	.215 4,337 LCY colume: 2022 CC well factor: Cat Hance		<u>Estimate</u>		
Swell factor: 1 Loose volume: 5 Source of estimated volumes Source of estimated swell HOURLY PRODU	.215 4,337 LCY colume: 2022 CC well factor: Cat Hand		Estimate		
Swell factor: 1 Loose volume: 5 Source of estimated volume source of estimated swell states and settlement of the states are successful.	.215 4,337 LCY colume: 2022 CC	lbook	Estimate		
Swell factor: 1 Loose volume: 5 Source of estimated volumes of estimated swell by the state of t	2022 CC 2022 CC Cat Hand	lbook	Estimate		
Swell factor: 1 Loose volume: 5 Source of estimated volumes Source of estimated sw. HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien	.215 4,337 LCY colume: 2022 CC well factor: Cat Hand ICTION e: 50 feet coduction: 800.0 LCY description: Loose t: -10 %	lbook /hr	Estimate		
Swell factor: 1 Loose volume: 5 Source of estimated volumes of estimated swell factors of estimated sw	2022 CC 2022 CC Cat Hand	lbook /hr	Estimate		
Swell factor: 1 Loose volume: 5 Source of estimated versure of estimated swell by the source of estimated swell by the swell by the swell by the swell by the swell b	2022 CC 2022	lbook /hr	Estimate		
Swell factor: 1 Loose volume: 5 Source of estimated volumes of estimated swell factors of estimated swell for the source of estimated swell factors of estim	2022 CC 2022	lbook /hr			
Swell factor: 1 Loose volume: 5 Source of estimated versions of estimated swell and source of estimated swell and successful a	.215 4,337 LCY olume: 2022 CC well factor: Cat Hand JCTION e: 50 feet 800.0 LCY description: Loose t: -10 % 9,500 feet	/hr stockpile 1.2	Source		
Swell factor: 1 Loose volume: 5 Source of estimated versions of estimated swell and source of estimated swell and successful a	2022 CC 2022	lbook /hr			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.0527

Adjusted unit production: 842.16 LCY/hr
Adjusted fleet production: 842.16 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s) Unit cost: \$0.295/LCY

Total job time: 64.52 Hours
Total job cost: \$16,004

BULLDOZER RIPPING WORK

	Task description:	_ N. Cr	resson Mine Area - Top	soil - Ripping					
Site:	Cresson Projec	et	Permit Action:	2023	Peri	nit/Job#:	M19802	244	
	PROJECT IDE	NTIFICATIO	<u>ON</u>						
	Task #: A02	06	State: Colorado		Abbre	viation:	None		
		1/2023	County: Teller			ename:	M244-A	0206	
	1:49	:56 PM							
	User: ZTT	<u> </u>							
	Agency of	or organization i	name: DRMS						
	HOURLY EQU	IPMENT CO	<u>ost</u>						
	Basic M	fachine: Cat	D7R DS Series II LGP		Horsepower:		240		
	Ripper Atta		nank Ripper	<u></u>	Shift Basis:		er day		
	11		11		Data Source:		CRG)		
	Cost Breakdown:								
	Cost Dicardown.				Utilization %				
		Ownership Coa	st/Hour:	\$114.76	NA				
		Operating Co	st/Hour:	\$91.98	100				
		r Ownership Co		\$9.06	NA				
	Rippe	er Operating Co		\$5.02	100				
		Operator Co		\$41.30	NA				
		Total Unit Co	st/Hour:	\$262.12					
		Total Fleet Co	st/Hour: \$26	2.12					
	MATERIAL QUANTITIES Selected estimating method: Area								
	Alternate Methods		Self	cted estimating	g method. Area				
		<u></u>	D 1 11 1	27.1	D CVV				
mic:	NA 55.44		Bank Volume:	NA 2.50	BCY		NA	BCY or	
rea:	33.44	acres	Rip Depth (ft):	2.50	Volume: 22	3,608		BC 1 Of	
		Source of estim	nated quantity: 2022 C	CC&V Provided	Estimate				
	HOURLY PRO	DUCTION							
	Seismic:								
	<u>Scisific.</u>	S	eismic Velocity:	NA	feet/secon	d			
		5	eisine velocity.	1171	1000 500011	u			
	Area:		D' ' D d	2.45	S /				
			Ripping Depth:	2.45	feet/pass				
			Ripping Width: Ripping Length:	6.50 300.00	feet/pass feet/pass				
			ge Dozer Speed:	88.00	feet/minu	te.			
			Maneuver Time:	0.25	minutes/p				
			on per unit area:	0.734	acres/hour				
	Job Condition Cor		•						
			Unit Production:	0.734	Acres/hr				
		-	Site Altitude:	9,500	feet				
			Altitude Adj:	1.00	(CAT HB)			
			Job Efficiency:	0.83	(1 shift/da				
			Net Correction:	0.83	multiplier	•			
		Adjusted I	Hourly Unit Production:	0.61	Acres/hr				
			Iourly Fleet Production:	0.61	Acres/hr				
	JOB TIME AN	v	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		- 14140, 111				
	Fleet size:	1	Grader(s)	Total job tim	ne: 91 .	.00	H	ours	
		h 100 55=		· ·					
	Unit cost:	\$430.227	Per acre	Total job cos	st: \$23 ,	852			

TRUCK/LOADER TEAM WORK

Task description: Site: Cresson Project		son Mine Area - ' Permit Actio			Permit/Job#: M	1080244
Site: Cresson Project	<u> </u>	Permit Actio	DII: <u>2023</u>		Perini/Job#: Ni	1980244
PROJECT IDE	NTIFICATION	<u>1</u>				
Task #: A020	07	State: Colora	ado	Ab	breviation: No	ne
Date: 11/2	1/2023	County: Teller				244-A0207
	:10 PM					
User: <u>ZTT</u>						
Agency o	r organization na	me: DRMS				
HOURLY EQU	IPMENT COS	Т		Shift bas	is: 1 per day	
		<u></u>	Equipment Descri		<u> </u>	
-	Truck Loader Tea		777F	puon		
			Г 992К			
Supp	port Equipment -I	Load Area: Cat ump Area: NA	D10T - 10SU			
Road N	Maintenance – Mot		Г 16М			
	-Wa	ater Truck: Wat	ter Tanker, 7,000	Gal.		
Coat Ducoledoren	Tanala/Lo	ader Team	Cummout 1	Cavimmant	Maintanan	nce Equipment
<u>Cost Breakdown</u> :	Truck/Lo	Loader	Load Area	Equipment Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,459.	17				
MATERIAL QU	<u>JANTITIES</u>					
Initial volume		CCY		factor: 1.215		
Loose volume	e: 4,5 6	7 LCY				
	ource of estimated		CC&V Provided	Estimate		
Source	e of estimated swe Material Purch		Handbook			
		otal Cost: \$0.00				
	-					
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity:						
Truck Payload (we						
Material		ai1	Pounds/LCY			
Rated P	ription: Top So ayload: 200,00					

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fir	nal Truck Volum	e Based on Number o	f Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class:l	NA	
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:	1.100	Other - rock/di	rt mixtures (100)-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correctio	ns:	S	ite Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.012				
Net Correction.	0.030	0.813				
Loading Tool Cycle Tim		er of Loading Tool Pa	usses Required to	Fill Truck:	<u>4</u> 1	passes
	ne: Numbe		asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Number	er of Loading Tool Pa	asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number vels: e vs. Job Condition within this Base	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	vels: e vs. Job Condition ne within this Bases — Material Description	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	vels: e vs. Job Condition we within this Bases – Material Descript.):	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min	vels: e vs. Job Condition we within this Bases s – Material Descript:	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.10		
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA	vels: e vs. Job Condition we within this Bases — Material Descent.): The condition of the	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.10	00	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	evels: e vs. Job Condition e within this Bases s – Material Descent.): ers - Unadjusted Bases	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Ti		Dump: 0.10	0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	e vs. Job Conditions within this Bases – Material Description.): The conditions of the within this Bases – Material Description.	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Ti	me (load, dump, 1	Dump: 0.10 maneuver):	00 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Materia	e vs. Job Conditions wells: e vs. Job Conditions Bases — Material Description.): es - Unadjusted Bases — Unadjusted Bases — Mixed material Descriptions of the material Description of the material	on Rating: NA Sic Rating: NA Stription: NA Stription: NA Stription: NA Stasic Loader Cycle Tierial 0.02 Sent - factor not applications of trucks and	me (load, dump, able 0.00	Dump: 0.10 maneuver): 0.020 0.000 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases – Material Description.): The second of the second	on Rating: NA sic Rating: NA stription: NA sasic Loader Cycle Ti rial 0.02 ent - factor not application roughly of trucks and eration -0.04	me (load, dump, able 0.00	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Materia Stockpile Truck Ownership	vels: e vs. Job Condition we within this Bases – Material Description.): The second of the second	on Rating: NA Sic Rating: NA Stription: NA S	me (load, dump, nable 0.00	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 minute Source	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases – Material Description.): The second of the second	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application applicatio	me (load, dump, mable 0.00 loaders -0.04 loa	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases – Material Description.): The second of the second	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, mable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time:	Dump: 0.10 maneuver):	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases – Material Description.): The second of the second	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, mable 0.00 loaders -0.04 loa	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases – Material Description.): The second of the second	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, mable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time:	Dump: 0.10 maneuver):	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	evels: e vs. Job Condition wels: e vs. Job Condition within this Bases s – Material Description s – Unadjusted Bases it: Mixed material within this Bases it: Mixed material within this Bases it: Material Description within this Bases it: Material Description within this Bases it: Mondition within this Bases it: Monditi	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, pable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time: Time per Truck:	Dump: 0.10 maneuver):	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	vels: e vs. Job Condition the within this Bases – Material Description.): The second of the within this Bases – Material Description. The second of the	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T	me (load, dump, nable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time: Time per Truck:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4897.00	-6.10	3.00	-3.10	3450	1.494

Haul Time: 1.494 minutes

Return Route:

rectarii re	Tetam Teac.							
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)		
1	4897.00	6.10	3.00	9.10	2134	2.515		

Return Time: 2.515 minutes
Total Truck Cycle Time: 7.841 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

538.73 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 447.15 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,341.44 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 3.43
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$8,431

TRUCK/LOADER TEAM WORK

Task description:	N. Cres	son Mine Area - '	Topsoil - Lift 2 -	Transport			
Site: Cresson Project	et	Permit Action	on: 2023		Permit/Job#: N	11980244	
PROJECT IDE	NTIFICATION	I					
Task #: A02		State: Colora	ndo	Ab	breviation: No	one	
Date: 11/2	21/2023	County: Teller			Filename: M244-A0208		
$\begin{array}{c} 2:35 \\ User: & ZTT \end{array}$	5:58 PM						
	or organization nar	ne: DRMS					
	_			G1 'C 1			
HOURLY EQUIPMENT COST Shift basis: 1 per day							
	Truck Loader Tea		Equipment Descri 777F	ption			
		-Loader: CA	Г 992К				
Sup	port Equipment -I		D10T - 10SU				
Road	D- Maintenance –Mot	ump Area: NA	Г 16М				
			ter Tanker, 7,000	Gal.			
			_				
Cost Breakdown	Truck/Lo Truck	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenar Motor Grader	nce Equipment Water Truck	
				_			
%Utilization-machine:	100	100	100	NA	25	25	
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA NA	\$212.21	\$86.29	
Operating cost/hour: %Utilization-riper:	\$160.10 NA	\$200.29 0	\$160.22 NA	NA NA	\$31.22 NA	\$28.44 NA	
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00	
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12	
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86	
Number of Units:	4	1	1	0	1	1	
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85	
Total work team c	ost/hour: \$2,859.	46					
7.5.4 MYD7.1.7. O							
MATERIAL Q	<u>UANTITIES</u>						
Initial volum		CCY		factor: 1.215			
Loose volum	e: 16,9 0	D7 LCY					
	ource of estimated		CC&V Provided	Estimate			
Sourc	ce of estimated swe Material Purch		Handbook				
		otal Cost: \$0.00					
HOURLY PR	ODUCTION						
	<u>CDCCIION</u>						
<u>Truck Capacity:</u> Truck Payload (w	eight) Basis:						
Material			Pounds/LCY				
	cription: Top So						
Rated l	Payload: 200,00	00	Pounds				

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buck	et Size Class:!	NA	
Rated Capacity:	16.000	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100-	120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	ns:	Sit	te Altitude (ft.): 92	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB)			
Job Efficiency:	0.830	0.830	(CAT HB))		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Time		0.813 r of Loading Tool Pas	sses Required to F	ïll Truck:	4	passes
Loading Tool Cycle Time	e: Numbe	1	sses Required to F	ill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Short	e: Numbe	r of Loading Tool Pas	sses Required to F	ill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time	e: Numbe	r of Loading Tool Pas	sses Required to F	ill Truck:	4	passes
Excavators and Front Short Machine Cycle Time Selected Valu Track Loaders	e: Numbe vels: vs. Job Conditio e within this Basi – Material Descr	on Rating: NA NA	sses Required to F	ill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min	e: Numbe vels: vs. Job Conditio e within this Basi — Material Descr .):	on Rating: NA ic Rating: NA ription:	sses Required to F			passes
Excavators and Front Short Machine Cycle Time Selected Valu Track Loaders	e: Numbe vels: vs. Job Conditio e within this Basi — Material Descr .):	on Rating: NA NA	sses Required to F	Truck: Dump:0.10		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min	e: Numbe vels: vs. Job Conditio e within this Basi – Material Descr .):	on Rating: Ic Rating: NA ription: Maneuver: NA		Dump: 0.10	00	passes
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA	vels: vs. Job Condition within this Basis Material Description: Material Description: Material Description: Material Description: Note: Material Description: No	on Rating: Ic Rating: NA ription: Maneuver: NA		Dump: 0.10	00	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material	e: Numbervels: vs. Job Condition within this Basin Material Description: Material Descript	r of Loading Tool Pasen Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02	ne (load, dump, m	Dump: 0.10 naneuver): Factor (min.) 0.020	0.625 min Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile	e: Numbe vels: vs. Job Conditio e within this Basi — Material Descr .): M s - Unadjusted Basi Mixed mater No adjustment	r of Loading Tool Pasen Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applical	ne (load, dump, m	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000	0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership	vels: vs. Job Condition within this Basi — Material Descr .): M s - Unadjusted Basi Mixed mater No adjustment Common ow	r of Loading Tool Pasen Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applical nership of trucks and	ne (load, dump, m	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	vels: vs. Job Condition within this Basi Material Descr No adjustment Common ow Constant ope	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applical nership of trucks and eration -0.04	ne (load, dump, m	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership	vels: vs. Job Condition within this Basi Material Descr No adjustment Common ow Constant ope	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applical nership of trucks and eration -0.04 get 0.00	ne (load, dump, m	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	vels: vs. Job Condition within this Basi Material Descr No adjustment Common ow Constant ope	on Rating: On Rating: NA Ic Rating: NA Pription: Maneuver: NA Pription: Maneuver: NA Pription: NA	ne (load, dump, moble 0.00 loaders -0.04	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	vels: vs. Job Condition within this Basi Material Descr No adjustment Common ow Constant ope	on Rating: On Rating: NA Ic Rating: NA Pription: Maneuver: NA Pription: Maneuver: NA Pription: NA	ne (load, dump, moble 0.00 loaders -0.04	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	vels: vs. Job Condition within this Basi Material Descr No adjustment Common ow Constant ope	on Rating: On Rating: NA Ic Rating: NA Pription: Maneuver: NA Pription: Maneuver: NA Pription: NA	ne (load, dump, moble 0.00 loaders -0.04 loa	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	vels: vs. Job Condition within this Basis — Material Descr .): Material Descr .): Material Descr .): Material Descr .): Constant ope .: Nominal targ	on Rating: On Rating: On Rating: NA Ic Rating: NA Pription: Maneuver: NA Pription: Maneuver: NA Pription: Naic Loader Cycle Ting It - factor not applicate to 2.00 Net Cycle Timg Adjusted Loader Net Load Ti	ne (load, dump, mobile 0.00 loaders -0.04 lo	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target Truck Cycle Time: Truck Exchange Time	vels: vs. Job Condition within this Basi — Material Descr .): M s - Unadjusted Basi Mixed mater No adjustment Common ow Constant ope Nominal targ	on Rating: On Rating: On Rating: NA Ic Rating: Maneuver: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applical nership of trucks and oration -0.04 get 0.00 Net Cycle Tim Adjusted Loade Net Load Ti Minutes	ne (load, dump, moble 0.00 loaders -0.04 loaders - Cycle Time:	Dump: 0.10 naneuver):	0.625 min Source	utes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	vels: vs. Job Condition within this Basis — Material Descr .): No adjusted Basis .: Mixed mater .: No adjustment .: Common ow .: Nominal targ .: Nominal targ .: 1.795	on Rating: On Rating: On Rating: NA Ic Rating: NA Pription: Maneuver: NA Pription: Maneuver: NA Pription: Naic Loader Cycle Ting It - factor not applicate to 2.00 Net Cycle Timg Adjusted Loader Net Load Ti	ne (load, dump, mobile 0.00 loaders -0.04 lo	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

4250.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4250.00	8.70	3.00	11.70	675	6.342

Haul Time: **6.342** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min)

3.00

-8.70

Return Time: 1.270 minutes
Total Truck Cycle Time: 11.444 minutes

3450

1.270

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

369.11 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 306.36 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,225.46 LCY/Hour Adjusted single truck/loader team production: 1,225.46 LCY/Hour Adjusted multiple truck/loader team production: 1,225.46 LCY/Hour

-5.70

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 13.80
 Hours

 Unit cost:
 \$2.333
 /LCY
 Total job cost:
 \$39,450

TRUCK/LOADER TEAM WORK

Task description:	N. Cres	son Mine Area - '	Topsoil - Lift 3 -	Transport		
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #: A020 Date: 11/2	9	State: Colora County: Teller		Ab	breviation: No Filename: M2	one 244-A0209
Agency o	r organization naı	me: DRMS				
HOURLY EQU	IPMENT COS				is: <u>1 per day</u>	
,	Truck Loader Tea		Equipment Descri 777F	ption		
-Loader: CAT 992K						
Support Equipment -Load Area: Cat D10T - 10SU						
-Dump Area: NA Road Maintenance -Motor Grader: CAT 16M						
	-Wa	ater Truck: Wat	ter Tanker, 7,000	Gal.		
Coot Ducoledonum	Т1-/І	T	C	C:-	Maintanan	Eit
<u>Cost Breakdown:</u>	Truck/Lo	ader Team Loader	Load Area	Equipment Dump Area	Motor Grader	nce Equipment Water Truck
0/ Litilization machine.	100	100	100	-		25
%Utilization-machine: Ownership cost/hour:	\$206.48	\$229.24	100 \$178.69	NA NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	4	1	1	0	1	1
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85
Total work team co		46				
MATERIAL QU						
Initial volume Loose volume		CCY LCY		factor: 1.215		
	ource of estimated e of estimated swo Material Purch	ell factor: Cat I		Estimate		
	1		,			
HOURLY PRO	<u>DUCTION</u>					
Truck Capacity: Truck Payload (we Material			Pounds/LCY			
	ription: Top So		Dounda			
Rated P	ayload: 200,00	IU	Pounds			

Payload Capacity	7: 125.00	LCY	7			
T. 1.D.1(1).D.1						
Truck Bed (volume) Basi Struck Volume:		I CV				
Heaped Volume:		LCY LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
Adjusted Volume.	70.00	_ Le i				
F	inal Truck Volum	ne Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			D	last Cias Class	NI A	
Rated Capacity	7: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor		Other - rock/d		0-120%) 1.100		
Adjusted Capacity	7: 17.600	LCY				
Job Condition Correction	ons:	\$	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HI	,		
Job Efficiency.						
Net Correction:	0.830	0.813				
Net Correction:			Passas Required to	Fill Truck	4	naccac
Net Correction: Loading Tool Cycle Tin	me: Numb	0.813 eer of Loading Tool P	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin	me: Numb ovels: ne vs. Job Conditi	er of Loading Tool P	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va	me: Numb ovels: ne vs. Job Conditi lue within this Ba	or of Loading Tool P on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
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<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Truck(s)

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3125.00	8.60	3.00	11.60	675	4.674

Task # A0209

Haul Time: 4.674 minutes

Return Route:

Retain Route.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3125.00	-8.60	3.00	-5.60	3450	0.942

Return Time: 0.942 minutes
Total Truck Cycle Time: 9.448 minutes

Selected Number of Trucks: 4

Loading Tool unit

Optimal No. of Trucks:

Production Truck Unit Production LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 371.09 LCY/Hour

Adjusted hourly truck team production: 1,484.36 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour

Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

4

Truck(s)

Fleet size: _____1 Team(s) Total job time: _____25.05 Hours

Unit cost: \$2.146 /LCY Total job cost: **\$71,630**

ite: Cresson Project		Permit	Actio	n: 2023		Permit/Job#:	M1980244	
PROJECT IDEN	TIFICATION	•						
Task #: A0210			Colora	do	Ab	breviation:	None	
Date: 11/22/ 1:46:2		County: 7	Γeller			Filename:	M244-A0210	,
User: ZTT						_		
Agency or	organization nan	ne: DRM	S					
HOURLY EQUI	PMENT COST	Γ			Shift bas	is: <u>1 per day</u>		
		_	F	Equipment Descri				
Т	ruck Loader Tea	m -Truck:	Cat		ption			
		-Loader:		992K				
Suppo	ort Equipment -L	oad Area: imp Area:	Cat I	D10T - 10SU				
Road Ma	aintenance –Mot	1		`16M				
		ter Truck:		er Tanker, 7,000	Gal.			
					_	3.7.1	.	
Cost Breakdown:	Truck/Loa	der Team Loader		Support I Load Area	Equipment Dump Area	Mainte Motor Grad	enance Equipn er Water T	
					-			
Utilization-machine:	100		100	100	NA		25	25
Ownership cost/hour:	\$206.48	\$229		\$178.69	NA	\$212.		86.29
Operating cost/hour:	\$160.10	\$200	0.29	\$160.22	NA	\$31.		\$28.44
%Utilization-riper: ipper own. cost/hour:	NA NA	\$0	0.00	NA \$0.00	NA NA	\$0.	NA OO	\$0.00
Ripper op. cost/hour:	NA		0.00	\$0.00	NA	\$0.		\$0.00
Operator cost/hour:	\$33.71		0.71	\$41.30	NA	\$28.		\$21.12
Unit Subtotals:	\$400.29	\$470		\$380.21	NA	\$271.		135.86
Number of Units:	3	· · · · · · · · · · · · · · · · · · ·	1	1	0	,	1	1
Group Subtotals:	Work:	\$1,671.11		Support:	\$380.21	Mai	nt: \$407.85	
Total work team cos	t/hour: \$2,459.	17				I		
MATERIAL QU	ANTITIES							
Initial volume:			CCY	Swell	factor: 1.215			
Loose volume:			LCY	Swell	1actor. 1.213			
Sou	arce of estimated		2022	CC&V Provided	Estimate			
	of estimated swe			andbook	Littilate			
	Material Purch		\$0.00					
	To	otal Cost: _	\$0.00					
HOURLY PRO	<u>DUCTION</u>							
Truck Capacity:								
Truck Payload (weig				D 1.7.633				
Material w Descri		.i1		Pounds/LCY				
Rated Pa				Pounds				

Payload Capacity:	125.00	LC	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class:	NA	
Rated Capacity:	16.000	LCY (heaped	1)			
Bucket Fill Factor:	1.100	Other - rock/o	dirt mixtures (100	0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				_
Job Condition Correction	us:_		Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
			Passas Paguirad to	Eill Tenok	4	2 00000
Net Correction: Loading Tool Cycle Time Excavators and Front Show	e: Numbe		Passes Required to	Fill Truck:	4	passes
	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	er of Loading Tool I	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool I	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool I	Passes Required to	Fill Truck:	4	passes
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Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Bas Material Desc):	on Rating: NA Sic Rating: NA Wription: Maneuver: NA		Dump: 0	.100	passes
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<u>Truck Travel (Haul & Return) Time:</u> maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	8.50	3.00	11.50	675	3.006

Haul Time: **3.006** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 2000.00 3.00 -5.50 3450 -8.50 0.623

Return Time: 0.623 minutes
Total Truck Cycle Time: 7.461 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

566.17 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 469.92 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,409.77 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 11.43
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$28,116

Task description: Site: Cresson Project		son Mine Area - ' Permit Actio		_	Permit/Job#: M	1980244
Site. Cresson Project	<u>, </u>	1 crime 2 tech	511. <u>2023</u>		1 emily 300 // 111	1700244
PROJECT IDEN	NTIFICATION	<u>I</u>				
Task #: A021	1	State: Colora	ado	Ab	breviation: No	ne
Date: 11/22	2/2023	County: Teller			Filename: M2	244-A0211
	13 PM					
User: ZTT						
Agency or	r organization naı	me: DRMS				
HOURLY EQUI	PMENT COS	Т		Shift bas	is: <u>1 per day</u>	
HOURET EQUI		<u></u>	Equipment Descri		is. <u>i per day</u>	
-	Fruck Loader Tea		777F	puon		
			Г 992К			
Supp	oort Equipment -I		D10T - 10SU			
Dood M	-D Iaintenance –Mot	ump Area: NA	Г 16М			
Koau IV.			ter Tanker, 7,000	Gal.		
			,			
Cost Breakdown:		ader Team		Equipment		ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$1,270.82	Support:	\$380.21	Maint:	\$407.85
Total work team co	st/hour: \$2,058.	88				
MATERIAL QU	<u> JANTITIES</u>					
Initial volume	: 1,436	CCY	Swell	factor: 1.215		
Loose volume	: 1,74	5 LCY				
Sc	ource of estimated	l volume: 2022	CC&V Provided	Estimate		
Source	e of estimated swe		Iandbook			
	Material Purch					
	10	otal Cost: \$0.00	,			
HOURLY PRO	DUCTION					
•						
<u>Truck Capacity:</u> Truck Payload (wei	ight) Basis:					
Material v			Pounds/LCY			
Descr	ription: Top So					
Rated Pa	ayload: <u>200,00</u>	00	Pounds			

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number o	f Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: N	NA	_
Rated Capacity:	16.000	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dir	t mixtures (100	0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	<u>ıs:</u>	Si	te Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Time		er of Loading Tool Pa	sses Required to	Fill Truck:	4	passes
	e: Numbe	1	sses Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time	e: Numbe	er of Loading Tool Pa	sses Required to	Fill Truck:	41	passes
Excavators and Front Short Machine Cycle Time Selected Value	e: Numbe	er of Loading Tool Pa on Rating: NA sic Rating: NA	sses Required to	Fill Truck:	4	passes
Excavators and Front Short Machine Cycle Time Selected Value	e: Number vels: e vs. Job Condition within this Base — Material Desc	er of Loading Tool Pa on Rating: NA sic Rating: NA	sses Required to	Fill Truck:	4	passes
Excavators and Front Short Machine Cycle Time Selected Valu Track Loaders	e: Number vels: e vs. Job Condition e within this Base — Material Desc .):	er of Loading Tool Pa on Rating: NA sic Rating: NA	sses Required to	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min	e: Number vels: e vs. Job Condition e within this Base – Material Desc .):	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.10		
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA	e: Number vels: e vs. Job Condition e within this Base — Material Desc .): Note: A second condition A second condition A second condition Note: A second condition Not	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.10	0	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader	e: Number vels: vels: vs. Job Condition e within this Bas – Material Desc .): s - Unadjusted B Mixed mater	er of Loading Tool Pa on Rating: NA sic Rating: NA rription: Maneuver: NA sasic Loader Cycle Tin	me (load, dump, 1	Dump: 0.10 maneuver): (Factor (min.) 0.020	0.625 min	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile	e: Number vels: vels: vs. Job Condition e within this Base — Material Desc .): s - Unadjusted B Mixed mater : No adjustme	on Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Timerial 0.02	ne (load, dump, 1	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000	00 0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: No adjusted Base — Mixed material Mixed material Common ow	on Rating: NA Sic Rating: NA Pription: NA Sasic Loader Cycle Tine Prial 0.02 Ent - factor not application of trucks and	ne (load, dump, 1	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material Desc. No adjustme : Common ow : Constant ope	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Pasic Loader Cycle Timerial 0.02 Part - factor not application of trucks and deration -0.04	ne (load, dump, 1	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040	00	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material Desc. No adjustme : Common ow : Constant ope	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prial 0.02 Part - factor not application of trucks and teration -0.04 get 0.00	me (load, dump, 1 lble 0.00 loaders -0.04	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material Desc. No adjustme : Common ow : Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Tine rial 0.02 ent - factor not application applicat	me (load, dump, 1 lble 0.00 loaders -0.04	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material Desc. No adjustme : Common ow : Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Tine rial 0.02 ent - factor not application -0.04 get 0.00 Net Cycle Tine Adjusted Load	ne (load, dump, 1 lble 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material Desc. No adjustme : Common ow : Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Tine rial 0.02 ent - factor not application -0.04 get 0.00 Net Cycle Tine Adjusted Load	me (load, dump, 1 lble 0.00 loaders -0.04	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in No adjustme — Common ow — Constant ope — Nominal target.	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Tine Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle Tine Adjusted Load Net Load T	me (load, dump, rough) loaders -0.04 ne Adjustment: er Cycle Time: Time per Truck:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Short Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in No adjustme — Common ow — Constant ope — Nominal target.	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Tine rial 0.02 ent - factor not application -0.04 get 0.00 Net Cycle Tine Adjusted Load	me (load, dump, rough) loaders -0.04 ne Adjustment: er Cycle Time: Time per Truck:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material No adjustme — Common ow — Constant ope — Nominal targetime: Nominal targetime: 0.80	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Tine Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle Tine Adjusted Load Net Load T	me (load, dump, 1 lble 0.00 loaders -0.04 me Adjustment: er Cycle Time: ime per Truck:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	9.30	3.00	12.30	675	1.169

Haul Time: 1,169 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	-9.30	3.00	-6.30	3450	0.272

Return Time: 0.272 minutes
Total Truck Cycle Time: 5.273 minutes

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production 801.12 LCY/Hour Adjusted for job efficiency: 664.93 LCY/Hour

Optimal No. of Trucks: _____ 2 ___ Truck(s) Selected Number of Trucks: ____ 2 ___ Truck(s)

Adjusted hourly truck team production: 1,329.86 LCY/Hour

Adjusted single truck/loader team production:
Adjusted multiple truck/loader team production:
1,329.86 LCY/Hour
1,329.86 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____1.31 Hours

Unit cost: \$1.548 /LCY Total job cost: \$2,701

BULLDOZER WORK

it/Job#: M1980244
ation: None
name: M244-A0212
_

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 238.84 LCY/hr
Adjusted fleet production: 238.84 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.039/LCY

Total job time: 300.71 Hours
Total job cost: \$74,590

BULLDOZER RIPPING WORK

	Task description:	N. C	resson Mine Area - To	psoi - Lift 1-5 - 1	Ripping			
Site:	Cresson Project	t	Permit Action:	2023	Per	mit/Job#:	M198024	14
	PROJECT IDE	NTIFICATI	<u>ON</u>					
	Task #: A021	13	State: Colorado		Abbre	eviation:	None	
		1/2023	County: Teller		Fi	lename:	M244-A02	213
		:01 PM						
	User: ZTT							
	Agency o	r organization	name: DRMS					
;	HOURLY EQU	IPMENT CO	<u>OST</u>					
	Basic M	achine: Cat	D7R DS Series II LGP		Horsepower:		240	
	Ripper Attac	chment: 3-S	hank Ripper		Shift Basis:		er day	
					Data Source:	((CRG)	
	Cost Breakdown:							
		0 1: 0	. 77.7	011476	Utilization %			
		Ownership Co		\$114.76	NA 100			
	Rinner	Operating Co Ownership Co		\$91.98 \$9.06	100 NA			
		r Operating Co		\$5.02	100			
	11	Operator Co		\$41.30	NA			
		Total Unit Co	ost/Hour:	\$262.12				
		Total Fleet Co	ost/Hour \$20	52.12				
•	MATERIAL QU		Se	lected estimating	g method: Area			
	Alternate Methods:	<u>:</u>						
nic:	NA		Bank Volume:	NA	BCY		NA	
ea:	73.28	acres	Rip Depth (ft):	2.50	Volume: 29	95,563		BCY or
		Source of estin	nated quantity: 2022	CC&V Provided	l Estimate			
	HOURLY PRO	DUCTION						
		<u>Decrion</u>						
	Seismic:		Caiamia Valaaitu	NIA	fact/seco	n d		
		•	Seismic Velocity:	NA	feet/secon	iiu		
:	Area:							
			e Ripping Depth:	2.45	feet/pass			
			e Ripping Width: Ripping Length:	6.50 245.00	feet/pass feet/pass			
			age Dozer Speed:	88.00	feet/minu	ite		
			Maneuver Time:	0.25	minutes/p			
			tion per unit area:	0.723	acres/hou			
:	Job Condition Corr	rection Factors	<u>.</u>					
	Unac	ljusted Hourly	Unit Production:	0.723	Acres/hr			
		·	Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HE	3)		
			Job Efficiency:	0.83	(1 shift/d	•		
			Net Correction:	0.83	multiplie	r		
		Adjusted	Hourly Unit Production	0.60	Acres/hr			
			Hourly Fleet Production		Acres/hr			
;	JOB TIME ANI	O COST						
	Fleet size:	1	Grader(s)	Total job tim	ne: 122	2.12	Hou	ırs
	Unit cost:	\$436.825	Per acre	Total job co	et· ¢21	2,011		
	omi cost.	$\psi T J U \cdot U \Delta J$	i Ci aCi C	TOTAL TOU CO	D.72	(4VII		

Task description:		son Mine Area -				
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDEN	NTIFICATION	1				
Task #: A021		State: Colora	ado	Λh	breviation: No	na
		County: Teller		A0		244-A0214
1:47:	58 PM					
User: ZTT						
Agency or	r organization naı	me: DRMS				
HOURLY EQU	IPMENT COS	$oldsymbol{\Gamma}$		Shift bas	is: <u>1 per day</u>	
		<u></u>	Equipment Descri			
-	Truck Loader Tea		<i>777</i> F	ption		
		-Loader: CA	Т 992К			
Supp	oort Equipment -I		D10T - 10SU			
Road M	ם- Iaintenance –Mot	ump Area: NA	Т 16М			
			ter Tanker, 7,000	Gal.		
<u>Cost Breakdown</u> :		ader Team Loader	Support l Load Area	Equipment	Maintenan Motor Grader	ce Equipment Water Truck
	Truck	Loader	Load Area	Dump Area	Motor Grader	water fruck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA NA	0	NA to oo	NA	NA	NA to oo
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour: Operator cost/hour:	NA \$33.71	\$0.00 \$40.71	\$0.00 \$41.30	NA NA	\$0.00 \$28.56	\$0.00 \$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA NA	\$28.30	\$135.86
Number of Units:	\$400.29 4	\$470.24 1	\$380.21 1	0	\$271.99	\$133.80 1
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85
-			Support.	φ360.21	Maiit.	φ407.63
Total work team co	st/hour: \$2,859.	46				
MATEDIAL OL	I A NITITIES					
MATERIAL QU						
Initial volume		CCY		factor: 1.215		
Loose volume	e: <u>39,37</u>					
	ource of estimated		CC&V Provided	Estimate		
Source	e of estimated swe Material Purch		Handbook			
		otal Cost: $\frac{$0.00}{$0.00}$				
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (we	ight) Basis:					
Material			Pounds/LCY			
Desc Rated Pa	ription: $\frac{\text{Top So}}{200,00}$		Pounds			
Kaleu P	ay10au	,	Foulus			

Payload Capacity	125.00	LCY	<i>Y</i>			
Truck Bed (volume) Basi		LCV				
Struck Volume: Heaped Volume:	<u>60.60</u> 78.80	LCY LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:		LCY				
Adjusted Volume.	70.00	LCI				
F	inal Truck Volum	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			D	leat Cies Classe	NIA	
Rated Capacity	: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor		Other - rock/d)-120%) 1.100		
Adjusted Capacity	17.600	LCY				
Job Condition Correction	ons:	\$	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HI			
Job Efficiency.						
Net Correction:	0.830	0.813				
Net Correction:		1	Passas Required to	Fill Truck:	4	naccac
Net Correction: Loading Tool Cycle Tir	ne: Numb	0.813 er of Loading Tool P	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin	ne: Numbo	er of Loading Tool P	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Number ovels: ne vs. Job Conditi- ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.	er of Loading Tool P on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mi	ne: Number ovels: ne vs. Job Condition within this Bases — Material Description.):	er of Loading Tool P on Rating: NA sic Rating: NA cription:	Passes Required to			passes
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Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted E	er of Loading Tool P on Rating: NA NA cription: Maneuver: NA	·	Dump: 0	.100 0.625 m	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor	ne: Number ovels: ne vs. Job Condition ue within this Bases - Material Description.): ers - Unadjusted E	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T	·	Dump: 0 maneuver): Factor (min.	.100 0.625 m) Source	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Number ovels: ne vs. Job Condition ue within this Bases – Material Description.): ers - Unadjusted Bases – Unadjusted Bas	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T	Time (load, dump,	Dump: 0 maneuver): Factor (min. 0.020	.100 0.625 m) Source (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Bases – Unadjusted Bases	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applic	Time (load, dump, scable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.625 m Source (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Bases –	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic wnership of trucks an	Time (load, dump, scable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040	.100 0.625 m Source (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T rial 0.02 ent - factor not applic wnership of trucks an eration -0.04	Time (load, dump, scable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100 0.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool P on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applic wnership of trucks an eration -0.04 get 0.00	ime (load, dump, seable 0.00 ad loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool P on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applic wnership of trucks an eration -0.04 get 0.00 Net Cycle Ti	Cime (load, dump, stable 0.00 and loaders -0.04 ime Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not application frucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, seable 0.00 ad loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate ne: No adjustment of the constant opens.	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not application frucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	Cable 0.00 ad loaders -0.04 ime Adjustment: ader Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio Dump Targe	ne: Number ovels: ne vs. Job Condition within this Bases — Material Description.): ers - Unadjusted Bases — Unadjusted Bases — No adjustment of Common own: Constant opet: Nominal tar	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not application frucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	Cable 0.00 ad loaders -0.04 ime Adjustment: ider Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operation Dump Targer	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers – Unadjusted Ers – No adjustment op: Common over on: Constant opet: Nominal tar	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T crial 0.02 ent - factor not application of trucks and tr	cable 0.00 ad loaders -0.04 ime Adjustment: ader Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	inutes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9380.00	-2.00	3.00	1.00	3503	3.207

Haul Time: 3.207 minutes

Return Route:

Return Route.										
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)				
1	9380.00	2.00	3.00	5.00	3296	3.216				

Return Time: 3.216 minutes
Total Truck Cycle Time: 10.255 minutes

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production 411.91 LCY/Hour Adjusted for job efficiency: 341.89 LCY/Hour

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,367.55 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 29.55 Hours

Unit cost: \$2.146 /LCY Total job cost: **\$84,505**

BULLDOZER WORK

						•	
Cresson Project		Perr	nit Action:	2023		Permit/Job#:	M1980244
PROJECT IDENT	IFICATION						
Task #: A0215 Date: 11/20/20 9:49:24 I User: ZTT)23 Co	State: ounty:	Colorado Teller			Abbreviation: Filename:	None M244-A0215
		· DD	MC				
Agency or or	ganization name	: DR	MS				
HOURLY EQUIPM	MENT COST						
Horsepower: 2 Blade Type: 5 Attachment: 1 Shift Basis: 1	Cat D7R DS Seri 240 Straight NA I per day (CRG)	es II LO	GP				
Cost Breakdown:	(Cito)			<u> </u>			
Ownership Cost/Hou			\$114.76	<u>Utilizatio</u> NA		_	
Operating Cost/Hou: Ripper own. Cost/Hou:			\$91.98 \$0.00	100 NA		<u>—</u>	
Ripper op. Cost/Hou			\$0.00	25		<u>—</u>	
Operator Cost/Hou			\$41.30	NA		<u> </u>	
MATERIAL QUAN	NIIIIES						
Initial Volume: 32 Swell factor: 1.	2,404 215		<u> </u>				
Initial Volume: 32 Swell factor: 1.	2,404 215 9,371 LCY	22 CC&	&V Provided	l Estimate			
Initial Volume: 32 Swell factor: 1. Loose volume: 39 Source of estimated vo	2,404 215 9,371 LCY blume: 20 cell factor: Ca			l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated vo Source of estimated sw	2,404 215 2,371 LCY blume: 20 Ca CTION : 370	t Handl	book	l Estimate			
Initial Volume: 32 Swell factor: 1 Loose volume: 35 Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance	2,404 215 2,371 LCY Solume: 20 Calculate the second of th	t Handl feet 6 LCY/	book	l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly product	2,404 215 2,371 LCY Solume: 20 Cell factor: Ca CTION : 370 duction: 173. description:	t Handl feet 6 LCY/	book hr	l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prod Materials consistency of Average push gradient	2,404 215 2,371 LCY Solume: 20 Calculate a 20 Calc	t Handl feet 6 LCY/ Loose s	book hr	l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prod Materials consistency of Average push gradient Average site altitude:	2,404 215 2,371 LCY Solume: 20 Column: 20 Column: 370 Column: 173. description: -30 % 9,500 feet	t Handl feet 6 LCY/ Loose s	book hr	l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prod Materials consistency of Average push gradient Average site altitude: Material weight: Weight description: Job Condition Correction	2,404 215 2,371 LCY Solume: 20 Call factor: 20 Call factor: 370 duction: 173. description: -30 % 9,500 feet 1,600 lbs/L Top Soil	t Handl feet 6 LCY/ Loose s	hr stockpile 1.2	<u>Sc</u>	ource		
Initial Volume: Swell factor: Loose volume: Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prod Materials consistency of Average push gradient Average site altitude: Material weight: Weight description: Job Condition Correction	2,404 215 9,371 LCY Solume: 20 Call factor: 20 Call factor: 370 duction: 173. description: 20 1,600 lbs/L Top Soil 1,600 Factor Tor Skill: 20 1,500 Factor Tor Skill: 20 1,600 Factor Tor Skill: 20 1,600 Factor	feet 6 LCY/ Loose s CY	book hr	<u>Sc</u>	ource VG.) T HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 238.84 LCY/hr
Adjusted fleet production: 238.84 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.039/LCY

Total job time: Total job cost: 164.84 Hours \$40,888

BULLDOZER RIPPING WORK

	Task description:	N. C	resson Mine Area -	Topsoil - GlobeH	illHR - Ripping			
Site:	Cresson Projec	ct	Permit Action	on: 2023	Pe	ermit/Job#:	M1980244	1
	PROJECT IDE	<u>NTIFICATI</u>	<u>ON</u>					
	Task #: A02	216	State: Colora	ado	Abb	reviation:	None	
		21/2023	County: Teller			Filename:	M244-A02	16
	1:51	1:51 PM	<u> </u>					
	User: ZT7	Γ						
	Agency	or organization	name: DRMS					
	HOURLY EQU	JIPMENT CO	OST					
			D7R DS Series II LO	ъ	Horsepower:		240	
	Ripper Atta		hank Ripper		Shift Basis:		er day	_
	11		11		Data Source:		CRG)	_
	Cost Breakdown:							
	Cost Dicardowii.				Utilization %			
		Ownership Co	ost/Hour:	\$114.76	NA			
		Operating Co		\$91.98	100			
		r Ownership Co		\$9.06	NA	•		
	Ripp	er Operating Co		\$5.02	100			
		Operator Co		\$41.30	NA	-		
		Total Unit Co	ost/Hour:	\$262.12	_			
		Total Fleet Co	ost/Hour:	\$262.12				
	MATERIALO				=			
	MATERIAL Q			Selected estimating	ng method: Area	l		
	Alternate Method	<u>s:</u>						
nic:	NA		Bank Volum		BCY _		NA	
rea:	40.17	acres	Rip Depth (f	t): 2.50	Volume:	162,019	F	BCY of
		Source of estin	nated quantity: 20	22 CC&V Provide	ed Estimate			
	HOURLY PRO	DUCTION						_
		DUCTION						
	Seismic:							
		i	Seismic Velocity:	NA	feet/sec	ond		
	Area:							
		Averag	ge Ripping Depth:	2.45	feet/pas	S		
			e Ripping Width:	6.50	feet/pas			
			Ripping Length:	300.00	feet/pas			
			age Dozer Speed:	88.00	feet/mir			
			Maneuver Time:	0.25	minutes	-		
			tion per unit area:	0.734	acres/ho	our		
	Job Condition Con	rrection Factors	<u>i</u>					
	Una	djusted Hourly	Unit Production:	0.734	Acres/h	r		
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT H	*		
			Job Efficiency:	0.83	(1 shift/	•		
			Net Correction:	0.83	multipli	er		
		Adjusted	Hourly Unit Product	ion: 0.61	Acres/hr			
		Adjusted	Hourly Fleet Producti	ion: 0.61	Acres/hr			
	JOB TIME AN	D COST						
	Fleet size:	1	_ Grader(s)	Total job ti	me:	55.93	Hour	S
	Unit cost:	\$430.227	Per acre	Total job c	rost: ø1	17,282		
	LIBERT COST	D4 11/././		TOTAL TODA (1131	1.707		

BULLDOZER WORK

Task description:	ECOSA Mine A	rea - 50 - 15	0 ft Lift - Mass Gradin	g	
: Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIF	<u>ICATION</u>				
Task #: A0300	State:	Colorado		Abbreviation:	None
Date: 11/20/2023	County:	Teller		Filename:	M244-A0300
9:50:37 PN	1			=	
User: ZTT					
Agency or orga	nization name: DI	RMS			
HOURLY EQUIPME	ENT COST				
Basic Machine: Ca	t D10T - 10SU				
Horsepower: 574			<u>—</u>		
<u> </u>	mi-Universal				
Attachment: NA					
Shift Basis: 1 p	er day				
	RG)				
Cost Breakdown:					
COSt DICARGOWII.			Utilization %		
Ownership Cost/Hour:		\$178.69	NA		
Operating Cost/Hour:	-	\$160.22	100		
Ripper own. Cost/Hour:	-	\$0.00	NA		
Ripper op. Cost/Hour:	-	\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
	4,578				
Swell factor: 1.00 Loose volume: 1,30	4,578 LCY				
Source of estimated volu Source of estimated swel HOURLY PRODUC	l factor: Cat Hand	&V Provided	1 Estimate		
HOUKLI I KUDUC					
Average push distance: Unadjusted hourly produ	200 feet 946.0 LCY	/hr			
Materials consistency des	scription: Consol	idated stock	pile 1.0		
Average push gradient:	-10 %				
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY				
Weight description:	Granite - Broken				
Job Condition Correction		7. 0	Source		
Operator		.750	(AVG.)		
Material consist		.000	(CAT HB)		
Dozing me	ethod: 1	.200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6010

Adjusted unit production: 568.55 LCY/hr
Adjusted fleet production: 1137.1 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.669/LCY

Total job time: 1,147.29 Hours
Total job cost: \$872,424

BULLDOZER WORK

Task description:	ECOSA Mine Area - 50 - 15	0 ft Lift - Fine Grading		
Cresson Project	Permit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFIC	CATION			
Task #: A0301 Date: 11/20/2023 9:51:30 PM User: ZTT	State: Colorado County: Teller		Abbreviation: Filename:	None M244-A0301
Agency or organi	zation name: DRMS			
HOURLY EQUIPMEN	NT COST			
Horsepower: 240 Blade Type: Strai Attachment: NA Shift Basis: 1 per	day			
Data Source: (CRC	G)			
Cost Breakdown: Ownership Cost/Hour: Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour:	\$114.76 \$91.98 \$0.00 \$0.00	Utilization % NA 100 NA 0		
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANTI Initial Volume: 256,00 Swell factor: 1.000 Loose volume: 256,00				
Source of estimated volum. Source of estimated swell f		1 Estimate		
HOURLY PRODUCT	<u>ION</u>			
Average push distance: Unadjusted hourly product	145 feet 381.4 LCY/hr			
Materials consistency descri	ription: Consolidated stock	pile 1.0		
Average push gradient: Average site altitude:	-30 % 9,500 feet			
Material weight:	2,800 lbs/LCY		_	
Weight description:	Granite - Broken			
Job Condition Correction F Operator Sl		Source (AVG.)		
Material consister Dozing meth	ncy: 1.000	(CAT HB) (GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6546

Adjusted unit production: 249.66 LCY/hr
Adjusted fleet production: 249.66 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.994/LCY

Total job time: 1,025.65 Hours
Total job cost: \$254,405

Task description:	·	Mine Area - Top			D	(1000044
Site: Cresson Project	·	Permit Action	on: 2023		Permit/Job#: M	11980244
PROJECT IDEN	NTIFICATION	Ī				
Task #: A030		- State: Colora	ado	Ah	breviation: No	nne
		County: Teller				244-A0302
	37 PM					
User: ZTT						
Agency or	organization nar	ne: DRMS				
HOURLY EQUI	PMENT COST	Γ		Shift bas	is: 1 per day	
			Equipment Descri		<u> </u>	
	Fruck Loader Tea		777F	ption		
			Т 992К			
Supp	ort Equipment -I	Load Area: Cat ump Area: NA	D10T - 10SU			
Road M	Iaintenance –Mot		T 16M			
	-Wa	ater Truck: Wat	ter Tanker, 7,000	Gal.		
Coat Brookdown	Tmials/Lo	ader Team	Cummont 1	Carinmant	Maintana	nce Equipment
Cost Breakdown:	Truck	Loader	Load Area	Equipment Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	st/hour: \$2,459.	<u> 17</u>				
MATERIAL QU	<u>ANTITIES</u>					
Initial volume		CCY		factor: 1.215		
Loose volume	: 72,57	LCY				
	ource of estimated		CC&V Provided	Estimate		
Source	e of estimated swe Material Purch		Handbook			
		otal Cost: $\frac{\$0.00}{\$0.00}$				
HOURLY PRO	<u>DUCTION</u>					
Truck Capacity:						
Truck Payload (wei			D 1 7 CT			
Material v	weight: $\frac{1,600}{\text{Top So}}$	nil	Pounds/LCY			
Rated Pa			Pounds			

Payload Capacity:	125.00	LC'	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class:	NA	
Rated Capacity:	16.000	LCY (heaped	1)	•		
Bucket Fill Factor:	1.100	Other - rock/o)-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				_
Job Condition Correction	ıs:		Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:	0.830	0.813				
Loading Tool Cycle Time	e: Numbe		Passes Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Time Excavators and Front Show	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Numbe vels: vs. Job Conditio	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Base Material Desc	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc .):	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to		.100	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	e: Number vels: vs. Job Condition within this Base Material Desc .):	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0.		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Base Material Desc .): No. 1	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0.	.100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	e: Number vels: vels: vs. Job Condition within this Base Material Desc .): S - Unadjusted B	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle Tasks		Dump: 0.	.100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors	e: Number vels: vels: vs. Job Condition within this Bas — Material Desc .): S - Unadjusted B Mixed mater	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle Tasks	Time (load, dump, 1	Dump: 0. maneuver): Factor (min.)	.100 0.625 min) Source	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow	on Rating: NA	Time (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040	.100	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow Constant ope	on Rating: NA	Time (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	.100	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow Constant ope	on Rating: NA	Time (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 min Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Trial 0.02 Sent - factor not appliance of trucks a seration -0.04 Section On Net Cycle Teach of the Cycle Teach of	Time (load, dump, 1 icable 0.00 nd loaders -0.04	Dump: _0. maneuver):	.100 O.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, 1 icable 0.00 nd loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, 1 icable 0.00 nd loaders -0.04	Dump: _0. maneuver):	.100 O.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, 1 icable 0.00 nd loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base Material Desc is - Material Desc is - Unadjusted B is Mixed mater is No adjustme is Common ow is Constant ope is Nominal targ	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Fial 0.02 Ent - factor not application -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04 Fime Adjustment: lader Cycle Time: I Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base — Material Desc .): S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: Maneuver: NA Station: Maneuver: NA Station: Maneuver: NA Station: Maneuver: NA Station: NA Station: NA	Time (load, dump, ricable 0.00 nd loaders -0.04 Time Adjustment: rader Cycle Time: der Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3214.00	0.00	3.00	3.00	2409	1.770

Haul Time: 1.770 minutes

Return Route:

Ttotal II Ito	ate.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3214.00	0.00	3.00	3.00	3503	1.189

Return Time: 1.189 minutes
Total Truck Cycle Time: 6.791 minutes

Loading Tool unit

Production Truck Unit Production

Coptimal No. of Trucks:

3 Truck(s)

Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 516.29 LCY/Hour Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,548.86 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 54.48
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$133,971

Task description:	ECOSA	Mine Area - To	psoil - Lift 2 - Tr			
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: <u>M</u>	11980244
PROJECT IDEN	TIFICATION	I				
Task #: A030		=	ndo.	Λh	breviation: No	one
		State: Colora County: Teller	ido	A0		244-A0303
1:49:	14 PM					
User: ZTT						
Agency or	organization na	me: DRMS				
HOURLY EQUI	PMENT COS	Γ		Shift bas	is: <u>1 per day</u>	
<u> </u>	21,221,12 000		Equipment Descri		191 <u>1 por uny</u>	
	Truck Loader Tea		777F	ption		
			Γ 992K			
Supp	ort Equipment -I D-	Load Area: Cat ump Area: NA	D10T - 10SU			
Road M	Taintenance –Mot		Г 16М			
-	-Wa	ater Truck: Wat	er Tanker, 7,000	Gal.		
Cost Bussladown	Т1-/І	T	C	Z	Maintana	F
Cost Breakdown:	Truck/Lo	ader Team Loader	Load Area	Equipment Dump Area	Motor Grader	nce Equipment Water Truck
0/11/11/11				•		
%Utilization-machine:	100	100	100	NA NA	25	25
Ownership cost/hour: Operating cost/hour:	\$206.48 \$160.10	\$229.24 \$200.29	\$178.69 \$160.22	NA NA	\$212.21 \$31.22	\$86.29 \$28.44
%Utilization-riper:	\$160.10 NA	\$200.29	\$160.22 NA	NA NA	\$31.22 NA	\$28.44 NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$1,270.82	Support:	\$380.21	Maint:	\$407.85
Total work team co	st/hour: \$2,058.	88				
MATERIAL QU	<u> ANTITIES</u>					
Initial volume	: 51,030	CCY	Swell	factor: 1.215		
Loose volume	62,00	LCY				
	ource of estimated		CC&V Provided	Estimate		
Source	of estimated swe		Handbook			
	Material Purch	ase Cost: \$0.00 otal Cost: \$0.00				
	1.		•			
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (wei						
Material v		'1	Pounds/LCY			
Desci Rated Pa	ription: Top So $200,00$		Pounds			
Tutou I t		~				

Payload Capacity: _	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity			Ruck	et Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)	Duck	et Size Class.	(A	
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100-	120%) 1.100		_
Adjusted Capacity:	17.600	LCY	(100	120,0) 11100		_
, , , <u>, , , , , , , , , , , , , , , , </u>			A14:4	500 f4		
Job Condition Corrections:			e Altitude (ft.): 9	<u>500</u> feet		
A14'4 1 A 1'	Truck	Loader	Source	<u> </u>		
Altitude Adj:	1.000 0.830	0.980 0.830	(CAT HB)			
		0.030	(САТ ПВ)		
Job Efficiency:	0.630		, , ,			
Job Efficiency: Net Correction: Loading Tool Cycle Time:	0.830 Number	0.813 r of Loading Tool Pas	ses Required to F	Fill Truck:	41	passes
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value	0.830 Number ls: s. Job Condition within this Basi	0.813 r of Loading Tool Pas n Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	4	passes
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders –	0.830 Number States St	0.813 r of Loading Tool Pas n Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	4	passes
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value	0.830 Number States St	0.813 r of Loading Tool Pas n Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	4	passes
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders –	0.830 Number States St	0.813 r of Loading Tool Pas n Rating: NA ic Rating: NA	ses Required to F	Fill Truck:		passes
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.):	0.830 Number of the second states of the second se	n Rating: NA		Dump: 0.100		
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA	0.830 Number ls: s. Job Condition within this Basin Material Description Methods of the Material Description of t	n Rating: NA		Dump: 0.100 naneuver): 0 Factor (min.)	0 0.625 min Source	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material:	0.830 Number of the second of	n Rating: NA	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020	0 0.625 min Source (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile:	0.830 Number of the second states of the second st	n Rating: NA	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000	0 Source (Cat HB) (Cat HB)	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 Number of the second state of the secon	n Rating: NA	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040	0	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed materi No adjustmer Common ow Constant ope	n Rating: NA	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	0	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 Number of the second state of the secon	n Rating: NA	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed materi No adjustmer Common ow Constant ope	on Rating: NA In In In Rating: NA In I	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed materi No adjustmer Common ow Constant ope	n Rating: n Rating: NA ic Rating: Maneuver: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and ration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed materi No adjustmer Common ow Constant ope	n Rating: n Rating: NA ic Rating: Maneuver: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and ration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, mole 0.00 loaders -0.04 loaders -Cycle Time:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Number ls: s. Job Condition within this Basis Material Description Material Description Material Description Material Description Mixed Mixed Material No adjustment Common ow Constant open Nominal targetage (Constant open Nominal targetage)	n Rating: n Rating: NA ic Rating: Maneuver: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and ration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, mole 0.00 loaders -0.04 loaders -0.04 leaders -0.04 lead	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Number Is: s. Job Condition within this Basis Material Description Material Description Material Description Mixed	n Rating: NA In Rating: NA	ne (load, dump, moble 0.00 loaders -0.04 loaders -0.04 loaders -Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> maintained 3.0

1.663

3294.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3294.00	-5.20	3.00	-2.20	3450	1.042

Haul Time: **1.042** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min)

3.00

5.20

Return Time: 1.663 minutes
Total Truck Cycle Time: 6.537 minutes

2327

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production

8.20

646.20 LCY/Hour Adjusted for job efficiency: 536.35 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 1,072.70 LCY/Hour Adjusted single truck/loader team production: 1,072.70 LCY/Hour Adjusted multiple truck/loader team production: 1,072.70 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **57.80** Hours

Unit cost: \$1.919 /LCY Total job cost: **\$119,002**

Site: Cresson Project		Permit Action	on: 2023		Permit/Job#:	M1980244
PROJECT IDEN	<u>NTIFICATION</u>					
Task #: A030	4	State: Colora	ado	Ab	breviation:	None
Date: 11/22		County: Teller			Filename:	M244-A0304
	04 PM					
User: <u>ZTT</u> Agency or	organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST	<u> </u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
Ί	Truck Loader Tea		777F Г 992K			
Supp	ort Equipment -L		D10T - 10SU			
~~PP	* *	ımp Area: NA				
Road M	aintenance – Moto		Т 16М			
	-Wa	ter Truck: War	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Loa	dor Toom	Support 1	Equipment	Mainta	nance Equipment
Cost Breakdown.	Truck	Loader	Load Area	Dump Area	Motor Grade	
%Utilization-machine:	100	100	100	NA	2	25 25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.2	21 \$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.2	22 \$28.44
%Utilization-riper:	NA	0	NA	NA	N.	A NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	90.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.5	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.9	99 \$135.86
Number of Units:	3	1	1	0		1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Main	nt: \$407.85
Total work team co	st/hour: \$2,459. 1	17				
MATERIAL QU	ANTITIES					
Initial volume	: 54,071	CCY	Swell	factor: 1.215		
Loose volume	: 65,69	6 LCY				
So	urce of estimated	volume: 2022	CC&V Provided	Estimate		
Source	of estimated swe		Handbook			
	Material Purcha					
	То	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
•	DUCTION					
Truck Capacity: Truck Payload (wei	aht) Pagis					
Material v			Pounds/LCY	•		

Pounds

Description:

Rated Payload:

Top Soil 200,000

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fir	al Truck Volume	e Based on Number o	f Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: 1	NA	_
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:	1.100	Other - rock/di	rt mixtures (100)-120%) 1.100		_
Adjusted Capacity:	17.600	LCY	,	,		_
Job Condition Correction	<u>ıs:</u>	S	ite Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HE			
N. C. and in a	0.020	0.012		<u> </u>		
Net Correction:	0.830	0.813				
Net Correction:	0.830	0.813				
Loading Tool Cycle Tim	e: Numbe	er of Loading Tool Pa	asses Required to	Fill Truck:	1	passes
	e: Numbe	1	usses Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	e: Numbe	er of Loading Tool Pa	asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Numbervels: e vs. Job Condition e within this Bas	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Number vels: e vs. Job Condition within this Base — Material Desc	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	e: Number vels: e vs. Job Condition e within this Base — Material Desc .):	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	e: Number vels: e vs. Job Condition e within this Bas – Material Desc h.):	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.10		
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute) Load: NA	e: Number vels: e vs. Job Condition e within this Base — Material Desc h.):	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.10	00	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute of the cycle Time Elements) Load: NA Wheel and Track Loader	e: Number vels: e vs. Job Condition e within this Bas — Material Desc a.): S - Unadjusted B	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA daneuver: NA dasic Loader Cycle Ti		Dump: 0.10	00 0.625 min	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minutes) Load: NA Wheel and Track Loader Cycle Time Factor	e: Number vels: e vs. Job Condition within this Base — Material Descent: b: Mixed material Descent: Mixed material Descent:	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA daneuver: NA dasic Loader Cycle Ti	me (load, dump, 1	Dump: 0.10 maneuver): 0 Factor (min.)	00 0.625 min	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minum Load: NA Wheel and Track Loader Cycle Time Factor Material	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: No adjusted Base : Mixed material in No adjustments: Common ow	on Rating: NA Sic Rating: NA Stription: NA Stription: NA Stription: NA Stasic Loader Cycle Tierial 0.02 Sent - factor not application of trucks and	me (load, dump, able 0.00	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040	00 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: Mixed materials: No adjustme is Common ow is Constant oper vels:	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Tierial 0.02 Sent - factor not application of trucks and seration -0.04	me (load, dump, able 0.00	Dump: 0.10 maneuver): 0.000 Factor (min.) 0.020 0.000 -0.040 -0.040	00	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: Mixed materials: No adjustme is Common ow is Constant oper vels:	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Tierial 0.02 Sent - factor not application of trucks and seration -0.04 get 0.00	me (load, dump, nable 0.00	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000	00	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: Mixed materials: No adjustme is Common ow is Constant oper vels:	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Ti rial 0.02 ent - factor not application	me (load, dump, mable 0.00 loaders -0.04 loa	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: Mixed materials: No adjustme is Common ow is Constant oper vels:	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Ti rial 0.02 ent - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, mable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time:	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: Mixed materials: No adjustme is Common ow is Constant oper vels:	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Ti rial 0.02 ent - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, mable 0.00 loaders -0.04 loa	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: Mixed materials: No adjustme is Common ow is Constant oper vels:	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Ti rial 0.02 ent - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, mable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time:	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Descent.): Solution of the second	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Ti rial 0.02 ent - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, pable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time: Time per Truck:	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Desc. b: Mixed materials: No adjustme: Common ow: Constant ope: Nominal targetime: 0.80	on Rating: NA Sic Rating: NA Pription: NA Praint of Loader Cycle Ti Prial 0.02 Pent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tir Adjusted Load Net Load T	me (load, dump, nable 0.00 I loaders -0.04 me Adjustment: ler Cycle Time: Time per Truck:	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3698.00	-8.90	3.00	-5.90	1870	2.136

Haul Time: 2.136 minutes

Return Route:

1/	Return Route.						
S	eg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1		3698.00	8.90	3.00	11.90	1628	2.403

Return Time: 2.403 minutes
Total Truck Cycle Time: 8.371 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

504.62 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour

Adjusted for job efficiency: 418.84 LCY/Hour

Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,256.51 LCY/Hour Adjusted single truck/loader team production: 1,256.51 LCY/Hour Adjusted multiple truck/loader team production: 1,256.51 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 52.28
 Hours

 Unit cost:
 \$1.957
 /LCY
 Total job cost:
 \$128,577

Task description:	ECOSA	Mine Area - Toj	psoil - Lift 4 - Tr	ansport		
Site: Cresson Project	<u>t</u>	Permit Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #:A030 Date:11/22)5	State: Colora County: Teller	ado	Ab	breviation: No.	one 244-A0305
	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS	<u>———</u> <u>Г</u>		Shift bas	is: 1 per day	
-	T1 I 1 T		Equipment Descri	ption		
	Truck Loader Tea		777F Г 992К			
Sup	port Equipment -I	Load Area: Cat	D10T - 10SU			
Pood N	-Di Maintenance –Mot	ump Area: NA	Γ 16M			
Road N			er Tanker, 7,000	Gal.		
		,				
Cost Breakdown:	Truck/Lo	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenar Motor Grader	nce Equipment Water Truck
				•		water fruck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour: %Utilization-riper:	\$160.10 NA	\$200.29 0	\$160.22 NA	NA NA	\$31.22 NA	\$28.44 NA
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	4	1	1	0	1	1
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,859.	46				
MATERIAL QU	<u>JANTITIES</u>					
Initial volume Loose volume		CCY LCY		factor: 1.215		
	ource of estimated e of estimated swe Material Purch To	ell factor: Cat H		Estimate		
HOURLY PRO	<u>ODUCTION</u>					
Truck Capacity: Truck Payload (we						
Material Desc Rated P	ription: Top So		Pounds/LCY Pounds			

Payload Capacity:	125.00	LC'	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Bucl	ket Size Class:	NA	
Rated Capacity:	16.000	LCY (heaped	l)			
Bucket Fill Factor:	1.100	Other - rock/o	dirt mixtures (100	-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	ıs:		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:			Passas Paguirad to	Fill Truck:	4	naccac
Loading Tool Cycle Time	e: Numbe	0.813 er of Loading Tool	Passes Required to	Fill Truck:	41	passes
	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	er of Loading Tool I	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool I	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc .):	er of Loading Tool I	Passes Required to		.100	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Bas Material Desc):	on Rating: NA Sic Rating: NA Wription: Maneuver: NA		Dump: 0.		passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Bas Material Desc):	on Rating: NA Sic Rating: NA Wription: Maneuver: NA		Dump: 0.		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Bas Material Desc :): S - Unadjusted B	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle Talenthal Cycle Talenthal State Loader Cy		Dump: 0.	.100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material:	vels: vs. Job Condition within this Bas — Material Desc a): y s - Unadjusted B Mixed material	on Rating: NA	Γime (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020	.100 0.625 min Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed material No adjustme	on Rating: NA Sic Rating: NA Waneuver: NA Sasic Loader Cycle Carial 0.02 ent - factor not appli	Fime (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000	.100 0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow	on Rating: NA	Fime (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040	.100 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Fime (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	.100	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Γime (load, dump, r icable 0.00 nd loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 minumates Source (Cat HB) (Cat HB	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Trial 0.02 Sent - factor not applied where the property of trucks at seration -0.04 Section -0.04 Section Net Cycle Total Cycle Total Net Cycle Tot	Fime (load, dump, ricable 0.00 nd loaders -0.04	Dump: _0. maneuver):	.100 O.625 min() Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 nd loaders -0.04 Time Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min O.625 min O.625 min (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo	Fime (load, dump, ricable 0.00 nd loaders -0.04	Dump: _0. maneuver):	.100 O.625 min() Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Loo Net Load	Time (load, dump, ricable 0.00 nd loaders -0.04 Time Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min() Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc a.): Material Desc b. S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Lo	Fime (load, dump, ricable 0.00 nd loaders -0.04 Fime Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min() Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA sic Rating: NA ription: NA ription: NA rial 0.02 rial 0.02 rent - factor not application -0.04 get 0.00 Net Cycle T Adjusted Loo Net Load	Fime (load, dump, recorded to the content of the co	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 minutes	utes

Truck Travel (Haul & Return) Time: maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4912.00	-9.20	3.00	-6.20	1870	2.765

Haul Time: 2.765 minutes

Return Route:

Return Route.							
	Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
	1	4912.00	9.20	3.00	12.20	1628	3.160

Return Time: 3.160 minutes
Total Truck Cycle Time: 9.757 minutes

Loading Tool unit

Production Truck Unit Production

Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production

432.94 LCY/Hour Adjusted for job efficiency: 359.34 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,437.35 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 39.49
 Hours

 Unit cost:
 \$2.146
 /LCY
 Total job cost:
 \$112,925

Task description:	ECOSA	Mine Area - Toj	psoil - Lift 5 - Tr	ansport		
Site: Cresson Projec	t	Permit Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	Ī				
Task #: A030 Date: 11/2	06 2/2023 :38 PM	State: Colora County: Teller	ado	Ab	breviation: No M2	ne 244-A0306
	or organization nar	ne: DRMS				
HOURLY EQUIPMENT COST Shift basis: 1 per day						
			Equipment Descri	ption		
	Truck Loader Tea		777F			
Sup	-Loader: CAT 992K Support Equipment -Load Area: Cat D10T - 10SU					
		ump Area: NA				
Road N	Maintenance –Mot -Wa		Γ 16M er Tanker, 7,000 (Gal.		
Cost Breakdown:	Truck/Lo Truck	ader Team Loader	Support I Load Area	Equipment	Maintenar Motor Grader	water Truck
				Dump Area		
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA NA	\$212.21	\$86.29
Operating cost/hour: %Utilization-riper:	\$160.10 NA	\$200.29 0	\$160.22 NA	NA NA	\$31.22 NA	\$28.44 NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	5	1	1	0	1	1
Group Subtotals:	Work:	\$2,471.69	Support:	\$380.21	Maint:	\$407.85
Total work team co		75				
Initial volume Loose volume	e: 53,926	CCY LCY	Swell	factor: 1.215		
	ource of estimated e of estimated swo Material Purch To	ell factor: Cat H		Estimate		
HOURLY PRO	<u>ODUCTION</u>					
Truck Capacity:	ight) Danie					
<u>Truck Payload (we</u> Material			Pounds/LCY			
	eription: Top So		Pounds			

Truck/Loader Worksheet Con	t a	1 ask # A0306			Page 2 of 3	
Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60 L	.CY				
Heaped Volume:	78.80 L	CY				
Average Volume:	69.70 L	.CY				
Adjusted Volume:	78.80 L	CY				
Final 7	Гruck Volume F	Based on Number of I	oader Passes:	70.40	LCY	
Loading Tool Capacity			D 1	leet Cies Classe N	T A	
B . 10	16000	I CW (1 1)	Buci	ket Size Class: N	IA .	
Rated Capacity:	16.000	LCY (heaped)	.: (100	0-120%) 1.100		_
	1.100	Other - rock/dirt r	nixtures (100	J-120%) 1.100		=
Adjusted Capacity:	17.600	LCY				
Job Condition Corrections:		Site	Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Excavators and Front Shovels Machine Cycle Time vs Selected Value w	. Job Condition					
Track Loaders - N	Material Descrip	otion:				
Cycle Time Elements (min.):						
Load: NA	Ma	neuver: NA		Dump: 0.100)	
Wheel and Track Loaders -	Unadjusted Bas	ic Loader Cycle Time	(load, dump, r	maneuver):0	0.625 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	Mixed material 0.02		0.020	(Cat HB)		
Stockpile:	No adjustment - factor not applicable 0.00			0.000	(Cat HB)	
Truck Ownership:		Common ownership of trucks and loaders -0.04			(Cat HB)	_
Operation:	Constant operation -0.04			-0.040	(Cat HB)	
Dump Target:	Nominal target			0.000	(Cat HB)	_
		Net Cycle Time		-0.060	_ minutes	
		Adjusted Loader Net Load Tin		0.565 1.795	minutes minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted	for site altitude:	0.800	Minu
Truck Load Time:	1.795	Minutes		for site altitude:	1.832	_ Minu
ck Maneuver and Dump Time:	1.20	Minutes	Adjusted	for site altitude:	1.200	Minu
•		_	v	-		=

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Page 3 of 3

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6407.00	-9.60	3.00	-6.60	1411	4.780

Haul Time: 4.780 minutes

Return Route:

Retain Route.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6407.00	9.60	3.00	12.60	1467	4.463

Return Time: 4.463 minutes
Total Truck Cycle Time: 13.075 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

323.07 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 268.15 LCY/Hour Optimal No. of Trucks: 5 Truck(s)

Selected Number of Trucks: 5 Truck(s)

Adjusted hourly truck team production: 1,340.73 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 49.18
 Hours

 Unit cost:
 \$2.447
 /LCY
 Total job cost:
 \$160,318

Ownership cost/hour: \$206.48 \$229.24 \$178.69 NA \$212.21 \$86.2 Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$28.4 %Utilization-riper: NA 0 NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.0 Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.0 Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$21.5	Site: Cresson Project		Permit Actio	on: 2023		Permit/Job#:!	M1980244
Date: 11/22/2023	PROJECT IDEN	NTIFICATION	[
Date: 11/22/2023	Task #: A030	7	State: Colora	ndo	Ab	breviation: N	Ione
User: ZTT							
HOURLY EQUIPMENT COST		31 PM	<u></u>				
HOURLY EQUIPMENT COST	User: ZTT						
Equipment Description	Agency or	organization nar	ne: DRMS				
Truck Loader Truck Cat 777F	HOURLY EQUI	PMENT COST	<u>r</u>		Shift bas	is: <u>1 per day</u>	
Cat 777F			I	Equipment Descri	ption		
Support Equipment - Load Area: -Dump Area: NA NA Water Tanker, 7,000 Gal.	-	Гruck Loader Tea	ım -Truck: Cat	777F			
Post Breakdown: Truck Loader Truck Water Tanker, 7,000 Gal.							
Road Maintenance - Motor Grader: - Water Truck:	Supp			D10T - 10SU			
Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment	Road M			Г 16М			
Truck Loader Load Area Dump Area Motor Grader Water Truck Wutilization-machine: 100	Roud IV				Gal.		
Truck Loader Load Area Dump Area Motor Grader Water Truck Wutilization-machine: 100			,				
Multilization-machine: 100	Cost Breakdown:						
Ownership cost/hour: \$206.48 \$229.24 \$178.69 NA \$212.21 \$86.20 Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$28.42 %Utilization-riper: NA 0 NA NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$21. Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$135.8 Number of Units: 6 1 1 0 1 1 Group Subtotals: Work: \$2,871.98 \$10.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00 \$1.00		Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$28.4	%Utilization-machine:	100	100	100	NA	25	5 25
%Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$21. Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$135.8 Number of Units: 6 1 1 0 1 1 0 1 407.85 Total work team cost/hour: \$3,660.04 \$380.21 Maint: \$407.85 MATERIAL QUANTITIES Loose volume: \$20,957 CCY Swell factor: 1.215 Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 \$0.00	Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$	Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
Ripper op. cost/hour: NA	%Utilization-riper:	NA	0	NA	NA	NA	. NA
Operator cost/hour: \$33.71	Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$135.8 Number of Units: 6 1 1 0 1 Group Subtotals: Work: \$2,871.98 Support: \$380.21 Maint: \$407.85 MATERIAL QUANTITIES Initial volume: 20,957 CCY Swell factor: 1.215 Loose volume: 25,463 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook Material Purchase Cost: Total Cost: \$0.00 \$0.00	Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Number of Units: 6 1 1 0 1 Group Subtotals: Work: \$2,871.98 Support: \$380.21 Maint: \$407.85 Total work team cost/hour: \$3,660.04 MATERIAL QUANTITIES Initial volume: 20,957 CCY Swell factor: 1.215 Loose volume: 25,463 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00	Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Group Subtotals: Work: \$2,871.98 Support: \$380.21 Maint: \$407.85 Total work team cost/hour: \$3,660.04 MATERIAL QUANTITIES Initial volume: 20,957 CCY Swell factor: 1.215 Loose volume: 25,463 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: 50.00 Total Cost: \$0.00	Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Total work team cost/hour: \$3,660.04 MATERIAL QUANTITIES Initial volume: 20,957 CCY Swell factor: 1.215 Loose volume: 25,463 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: 50.00 Total Cost: \$0.00	Number of Units:	6	1	1	0	1	1
MATERIAL QUANTITIES Initial volume: 20,957	Group Subtotals:	Work:	\$2,871.98	Support:	\$380.21	Maint	\$407.85
Initial volume: 20,957 CCY Swell factor: 1.215 Loose volume: 25,463 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00	Total work team co	st/hour: \$3,660.	04				
Loose volume: Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: Total Cost: LCY 2022 CC&V Provided Estimate Cat Handbook \$0.00 \$0.00	MATERIAL QU	JANTITIES					
Loose volume: Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: Total Cost: LCY 2022 CC&V Provided Estimate Cat Handbook \$0.00 \$0.00	Initial volume	20 957	CCY	Swell	factor: 1.215		
Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: 2022 CC&V Provided Estimate Cat Handbook \$0.00 \$0.00					1.213		
Source of estimated swell factor: Material Purchase Cost: Total Cost: Total Cost: Cat Handbook \$0.00 \$0.00	So	•		CC & V Provided	Estimata		
Material Purchase Cost: \$0.00 Total Cost: \$0.00					Estillate		
	Source						
HOURLY PRODUCTION		T					
HOURLY PRODUCTION		10					
		10					

Pounds/LCY

Pounds

Material weight:

Description: Rated Payload:

1,600

Top Soil 200,000

		LCY	- -
Buck mixtures (100 e Altitude (ft.): 9 Source (CAT HB	xet Size Class: N -120%) 1.100 -2500 feet		- -
Buck mixtures (100 e Altitude (ft.): 9 Source (CAT HB	xet Size Class: N -120%) 1.100 -2500 feet		- - -
Buck mixtures (100 e Altitude (ft.): 9 Source (CAT HB	xet Size Class: N -120%) 1.100 -2500 feet		- -
Buck mixtures (100 e Altitude (ft.): 9 Source (CAT HB	xet Size Class: N -120%) 1.100 -2500 feet		 -
Buck mixtures (100 e Altitude (ft.): 9 Source (CAT HB	xet Size Class: N -120%) 1.100 -2500 feet		- -
Buck mixtures (100 e Altitude (ft.): 9 Source (CAT HB	xet Size Class: N -120%) 1.100 -2500 feet		 - -
mixtures (100 e Altitude (ft.): 9 Source (CAT HB	2-120%) 1.100 2500 feet	A	- - -
mixtures (100 e Altitude (ft.): 9 Source (CAT HB	2-120%) 1.100 2500 feet	A	_ - -
e Altitude (ft.): 9 Source (CAT HB	9 <u>500</u> feet		-
e Altitude (ft.): 9 Source (CAT HB	9 <u>500</u> feet		_
Source (CAT HB			
Source (CAT HB			
(CAT HB	3)		
	3)		
(CAT HB			
1	3)		
ses Required to I	Fill Truck:	p	passes
	Dump: 0.100)	
ie (load, dump, r	maneuver): 0.	.625 minu	ıtes
	Factor (min.)	Source	
			_
ole 0.00			_
loaders -0.04	-0.040	(Cat HB)	_
	-0.040	(Cat HB)	<u> </u>
	0.000	(Cat HB)	_
e Adjustment:	-0.060	minutes	
		-	
me per Truck: _	1.795	minutes	
Adjusted	for site altitude:	0.800	Minutes
Adjusted	for site altitude:	1.832	Minutes
Adjusted	for site altitude:	1.200	Minutes
10	e (load, dump, rolle 0.00 oaders -0.04 e Adjustment: rocycle Time: me per Truck: Adjusted Adjusted	e (load, dump, maneuver):0 Factor (min.)	Dump: 0.100

Truck(s)

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9080.00	-8.90	3.00	-5.90	1870	5.111

Haul Time: 5.111 minutes

Return Route:

11000111 1100001									
Seg#	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time			
	(Ft)		(%)	(%)	(fpm)	(min)			
1	9080.00	8.90	3.00	11.90	1628	5.709			

Return Time: 5.709 minutes Total Truck Cycle Time: 14.652 minutes

Selected Number of Trucks: 6

Loading Tool unit

Adjusted for job efficiency: 1,332.22 LCY/Hour Production 1,605.09 LCY/Hour Truck Unit Production 288.30 LCY/Hour Adjusted for job efficiency: 239.29 LCY/Hour

> Adjusted hourly truck team production: 1,435.71 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour LCY/Hour

Adjusted multiple truck/loader team production: 1,332.22

JOB TIME AND COST

Optimal No. of Trucks: 6

Fleet size: 1 Team(s) Total job time: **19.11** Hours

Unit cost: \$2.747 /LCY Total job cost: \$69,954

Truck(s)

BULLDOZER WORK

Task description:	ECO	ECOSA Mine Area -Topsoil - Lift1 - 6 - Dozer Spreading					
Cresson Project		Per	mit Action:	2023	Permit/Job#:	M1980244	
PROJECT IDEN							
Task #: _ A030	3	State:	Colorado		Abbreviation:	None	
Date: 11/20		County:	Teller		Filename:	M244-A0308	
User: $\frac{9:52:4}{ZTT}$	1 PM				<u> </u>		
Agency or	organization	name: DF	RMS				
HOURLY EQUI	PMENT CO	<u>OST</u>					
Basic Machine:	Cat D7R D5	S Series II L	GP				
Horsepower:	240			<u> </u>			
Blade Type:	Straight			_			
Attachment:	NA			<u> </u>			
Shift Basis:	1 per day						
Data Source:	(CRG)			<u> </u>			
Cost Breakdown:			1				
				<u>Utilization 9</u>	<u>%</u>		
Ownership Cost/H			\$114.76	NA			
Operating Cost/H			\$91.98	100			
Ripper own. Cost/H			\$0.00	NA			
Ripper op. Cost/H			\$0.00	25			
Operator Cost/H	our:		\$41.30	NA			
MATERIAL QU Initial Volume: Swell factor:	283,020 1.215		_				
Loose volume:	343,869 LCY	7	<u> </u>				
Source of estimated Source of estimated		2022 CC Cat Hand	&V Provided	Estimate			
HOURLY PROD	<u>OUCTION</u>						
Average push distar Unadjusted hourly p		220 feet 266.4 LCY	/hr				
Materials consistence	y description:	Loose	stockpile 1.2				
Average push gradio	ent: -30 %						
Average site altitude		feet					
Material weight:	_1,600	lbs/LCY					
Weight description:	Top S	oil					
Job Condition Corre				Source			
	rator Skill:		.750	(AVC			
Material co			.200	(CAT I			
Dozir	g method:	1.	.000	(GEN	1.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 366.51 LCY/hr
Adjusted fleet production: 366.51 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.677/LCY

Total job time: 938.23 Hours
Total job cost: \$232,720

BULLDOZER RIPPING WORK

	Task description:	ECO	SA Mine Aı	ea - Topsoil	- Ripping				
Site	: Cresson Projec	t	Peri	mit Action:	2023	Pe	ermit/Job#:	M1980)244
	PROJECT IDE	NTIFICATI	<u>ON</u>						
	Task #: A030)9	State:	Colorado		Abb	reviation:	None	
		1/2023	County:	Teller			Filename:	M244-A	40309
	1:53:	:19 PM	•						
	User: ZTT								
	Agency o	r organization	name: DR	RMS					
	HOURLY EQU	IPMENT CO	<u>OST</u>						
	Basic M	[achine: Cat	D7R DS Ser	ies II LGP		Horsepower:		240	
	Ripper Attac		hank Ripper			Shift Basis:		er day	
	11					Data Source:		CRG)	
	Cost Breakdown:								
	Cost Bicardowii.					Utilization %			
		Ownership Co	ost/Hour:		\$114.76	NA			
		Operating Co			\$91.98	100			
		Ownership Co			\$9.06	NA	=		
	Rippe	r Operating Co			\$5.02	100			
		Operator Co			\$41.30	NA	-		
		Total Unit Co	ost/Hour:		\$262.12				
		Total Fleet Co	ost/Hour:	\$262	2.12				
	MATERIAL QU	J ANTITIES		Sele	cted estimating	method: Area	ı		
	Alternate Methods	<u>:</u>							
smic:	NA		Banl	k Volume:	NA	BCY		NA	
Area:	350.85	acres		Depth (ft):	2.50		1,415,095	- 1,1-2	BCY or 0
		Course of estim		=	C % V Duovidad	Estimata			_
		Source of estil	nated quantit	y: <u>2022 C</u>	C&V Provided	Estillate			
	HOURLY PRO	DUCTION							
	Seismic:								
		\$	Seismic Velo	city:	NA	feet/sec	ond		
	Area:								
	Alea.	Averao	e Ripping De	enth:	2.45	feet/pas	S		
			e Ripping W		6.50	feet/pas			
			Ripping Ler		501.00	feet/pas			
		Aver	age Dozer Sp	eed:	88.00	feet/mir	nute		
			Maneuver T		0.25	minutes	-		
		Produc	tion per unit a	area:	0.755	acres/ho	our		
	Job Condition Corr	rection Factors	1						
	Unac	djusted Hourly	Unit Produc	tion:	0.755	Acres/h	r		
			Site Altit	ude:	9,500	feet			
			Altitude		1.00	(CAT H			
			Job Efficie		0.83	(1 shift/	•		
			Net Correc	tion:	0.83	multipli	er		
		Adjusted	Hourly Unit	Production:	0.63	Acres/hr			
			Hourly Fleet		0.63	Acres/hr			
	JOB TIME ANI	O COST							
	Fleet size:	1	Grader(s)		Total job tim	ne:5	60.08	H	Iours
	Unit cost:	\$418.434	Per acre		Total job cos	st· ¢1	46,807		
	CIII COSt.	Ψ 110.TJT	i or acre		10th 100 cos	υ φ 1 .	10,007		

BULLDOZER WORK

Task description:	E. Cresson Mine	Area - Pile	Leveling - Mass Grading		
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFI	CATION				
Task #: A0400	State:	Colorado		Abbreviation:	None
Date: 11/20/2023	County:	Teller		Filename:	M244-A0400
9:54:16 PM					
User: ZTT					
Agency or organ	nization name: DI	RMS			
HOURLY EQUIPME	NT COST				
Basic Machine: Cat	D10T - 10SU				
Horsepower: 574					
	ni-Universal				
Attachment: NA					
	er day				
Data Source: (CR	(G)				
Cost Breakdown:			1		
0 1' 0 4		Φ1 7 0. c0	<u>Utilization %</u>		
Ownership Cost/Hour: Operating Cost/Hour:		\$178.69 \$160.22	NA 100	<u> </u>	
Ripper own. Cost/Hour:		\$100.22	NA	<u> </u>	
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT Initial Volume: 473 Swell factor: 1.000					
Loose volume: 473 l					
Source of estimated volum	ne: 2022 CC	— &V Provideo	1 Estimate		
Source of estimated swell					
HOURLY PRODUCT	<u> TION</u>				
Average push distance:	50 feet				
Unadjusted hourly produc	etion: 2,748.7 LC	Y/hr			
Materials consistency des	cription: Rock,	poorly ripped	d or blasted 0.6		
Average push gradient:	-10 %				
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY				
Weight description:	Granite - Broken				
Job Condition Correction		750	Source		
Operator S Material consiste		.750 .600	(AVG.) (CAT HB)		
iviateriai consiste	thod:	.200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3606

Adjusted unit production: 991.18 LCY/hr
Adjusted fleet production: 1982.36 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.384/LCY

Total job time: 0.24 Hours
Total job cost: \$181

BULLDOZER WORK

Task description:	E. Cresson Mine	Area - Pile	Leveling - Fine Grading		
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTI	FICATION				
Task #: A0401 Date: 11/20/20: 9:55:38 F User: ZTT	State: County:	Colorado Teller		Abbreviation: Filename:	None M244-A040
Agency or org	ganization name: DF	RMS			
HOURLY EQUIPM	TENT COST				
	Cat D7R DS Series II L	GP			
	40		_		
Blade Type: S	traight				
Attachment: N	JA				
	per day				
	CRG)		<u> </u>		
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour	:	\$114.76	NA		
Operating Cost/Hour		\$91.98	100		
Ripper own. Cost/Hour		\$0.00	NA		
Ripper op. Cost/Hour		\$0.00	0		
Operator Cost/Hour		\$41.30	NA		
MATERIAL QUAN Initial Volume: 53 Swell factor: 1.0		_			
	LCY				
Source of estimated vol Source of estimated sw		&V Provided book	Estimate		
HOURLY PRODUC	<u>CTION</u>				
Average push distance: Unadjusted hourly prod		/hr			
Materials consistency d	lescription: Rock, 1	poorly ripped	or blasted 0.6		
Average push gradient: Average site altitude:	-10 % 9,500 feet				
Material weight:	2,800 lbs/LCY			_	
Weight description:	Granite - Broken				
Job Condition Correction			Source		
Operato		750	(AVG.)		
Material consi		600	(CAT HB)		
Dozing r	nethod: 1.	.000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3005

Adjusted unit production: 240.40 LCY/hr
Adjusted fleet production: 240.4 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.032/LCY

Total job time: 0.22 Hours
Total job cost: \$55

BULLDOZER WORK

Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFICA	TION				
Task #: A0402	State:	Colorado		Abbreviation:	None
Date: 11/20/2023	County:	Teller		Filename:	M244-A0402
9:59:01 PM	<u>—</u>				
User: ZTT	_				
Agency or organizati	ion name: DF	RMS			
HOURLY EQUIPMENT	COST				
Basic Machine: Cat D10	T - 10SU				
Horsepower: 574			_		
Blade Type: Semi-U	niversal				
Attachment: NA			_		
Shift Basis: 1 per da	У		_		
Data Source: (CRG)			_		
Cost Breakdown:		T.			
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$178.69	NA 100		
Operating Cost/Hour:		\$160.22	100 NA		
Ripper own. Cost/Hour:		\$0.00 \$0.00	NA 0		
Ripper op. Cost/Hour: Operator Cost/Hour:		\$41.30			
Operator Cost/nour:		Φ41.30	NA		
Total unit Cost/Hour: \$3	80.21				
Total Fleet Cost/Hour: \$7	60.42				
MATERIAL QUANTITI	<u>ES</u>				
Initial Volume: 3,262,245	5				
Swell factor: 1.000		 ;			
Loose volume: 3,262,24 5	5 LCY				
Source of estimated volume:	2022 CC	&V Provided	Estimate		
Source of estimated swell fact	-		Estimate		
Source of estimated swell race		00011			
HOURLY PRODUCTION	N				
Average push distance:					
Unadjusted hourly production		'hr			
chacjusted hourry production		111			
Materials consistency descript	ion: Loose s	stockpile 1.2			
Average push gradient: -10	0 %				
	500 feet				
Material weight: 2,8	800 lbs/LCY			_	
Weight description: Gr	ranite - Broken				
Job Condition Correction Fact			Source		
Operator Skill		750	(AVG.)		
Material consistency		200	(CAT HB)		
Dozing method:	• 1	200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7212

Adjusted unit production: 652.25 LCY/hr
Adjusted fleet production: 1304.5 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.583/LCY

Total job time: 2,500.76 Hours
Total job cost: \$1,901,641

BULLDOZER WORK

Task description:	E. Cre	esson Mine	Area - 40 -	400 ft Lif	t - Fine Gradi	ng	
Cresson Project		Per	mit Action:	2023		Permit/Job#:	M1980244
PROJECT IDEN	<u> </u>	<u>N</u>					
Task #: A0403 Date: 11/20/2	2023	State: County:	Colorado Teller			Abbreviation: Filename:	None M244-A0403
User: $\frac{10:00:1}{ZTT}$	14 PM	•				=	
Agency or o	organization n	ame: DF	RMS				
HOURLY EQUIP	MENT CO	ST					
Basic Machine:	Cat D7R DS		GP				
Horsepower:	240						
Blade Type:	Straight						
Attachment:	NA						
Shift Basis:	1 per day						
Data Source:	(CRG)						
Cost Breakdown:							
Cost Broakdo WII.				Ut	ilization %		
Ownership Cost/Ho	ur:		\$114.76		NA		
Operating Cost/Ho			\$91.98		100		
Ripper own. Cost/Ho			\$0.00		NA		
Ripper op. Cost/Ho			\$0.00		0		
Operator Cost/Ho			\$41.30		NA		
MATERIAL QUA	ANTITIES						
Swell factor:	287,794 1.000 287,794 LCY		<u></u>				
	,	2022 CC		I Estimata			
Source of estimated s		Cat Hand	&V Provided	Estimate			
HOURLY PROD	<u>UCTION</u>						
Average push distand Unadjusted hourly pr		400 feet 180.4 LCY	/hr				
Materials consistency	description:	Consol	idated stock	oile 1.0			
Average push gradier	nt: -30 %						
Average site altitude:		eet	<u> </u>				
Material weight:	2,8001	bs/LCY				_	
Weight description:	Granite	- Broken					
Job Condition Correct				T.	Source		
	ator Skill:		.750		(AVG.)		
Material con			.000		(CAT HB)		
Dozing	g method:	$\overline{1}$.	.000		(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6546

Adjusted unit production: 118.09 LCY/hr
Adjusted fleet production: 118.09 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$2.100/LCY

Total job time: 2,437.07 Hours
Total job cost: \$604,497

Task description:	E. Cress	son Mine Area -	Topsoil - Lift 2 -	Transport		
Site: Cresson Project	<u>t</u>	Permit Acti	ion: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	<u>I</u>				
Task #:A040		State: Color		Ab	breviation: No	
	2/2023 12 PM	County: Teller	r		Filename: M2	44-A0404
User: $\frac{1.53}{ZTT}$	12 1 141					
Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS	<u>r</u>		Shift bas	is: <u>1 per day</u>	
-			Equipment Descri	ption		
	Truck Loader Tea		t 777F T 992K			
Supp	oort Equipment -I		t D10T - 10SU			
		ump Area: NA				
Road M	Iaintenance – Mot		T 16M ater Tanker, 7,000	Cal		
	- VV 2	nter Truck: Wa	tter Tanker, 7,000	Gai.		
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour: Unit Subtotals:	\$33.71	\$40.71	\$41.30	NA NA	\$28.56	\$21.12
Number of Units:	\$400.29	\$470.24 1	\$380.21	NA 0	\$271.99 1	\$135.86 1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
•		·	Support.	ψ300.21	Maint.	\$ +07.83
Total work team co	st/hour: \$2,459.	<u>17 </u>				
MATERIAL QU	JANTITIES					
Initial volume	e: 10,228	CCY	Z Swell	factor: 1.215		
Loose volume	2: 12,42	LCY	7			
So	ource of estimated	l volume: 2022	2 CC&V Provided	Estimate		
Source	e of estimated swe	-	Handbook			
	Material Purch					
	10	otal Cost: \$0.0	U			
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity:						
Truck Payload (we						
Material		.11	Pounds/LCY			
Desc Rated P	ription: $\frac{\text{Top So}}{200,00}$		Pounds			

Payload Capacity: _	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity			Ruck	tet Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)	Buck	et Size Class. N	NA	_
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100-	-120%) 1.100		_
Adjusted Capacity:	17.600	LCY	(11			_
Job Condition Corrections:		 Sit	te Altitude (ft.): 9	500 feet		
300 Condition Corrections	Truck	Loader	Source	<u>500</u> lect		
Altitude Adj:	1.000	0.980	(CAT HB))		
	0.830	0.830	(CAT HB)	,		
Job Efficiency:						
Job Efficiency: Net Correction:		0.813				
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Time:	0.830 Numbe	0.813 r of Loading Tool Pas	sses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove	0.830 Numbe	r of Loading Tool Pas	sses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time:	0.830 Numbe ls: s. Job Conditio	r of Loading Tool Pas	sses Required to F	Fill Truck:		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	0.830 Numbe ls: s. Job Conditio within this Basi	r of Loading Tool Pas on Rating: <u>NA</u> ic Rating: <u>NA</u>	sses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr	r of Loading Tool Pas on Rating: <u>NA</u> ic Rating: <u>NA</u>	eses Required to F	Fill Truck:	4 1	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders –	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr	r of Loading Tool Pas on Rating: <u>NA</u> ic Rating: <u>NA</u>	sses Required to F	Fill Truck:		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.):	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA Ic Rating: NA In NA		Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA Ic Rating: NA In NA		Dump: 0.100	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders –	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ' to 3/4" diameter -0.0	ne (load, dump, m	Dump: 0.100	0 0.625 min	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr Unadjusted Ba Material 1/8' Dumped by t	r of Loading Tool Pasen Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin to 3/4" diameter -0.0 ruck 0.02	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.)	0 0.625 min Source	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr Unadjusted Ba Material 1/8' Dumped by t Common ow	r of Loading Tool Pasen Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tine to 3/4" diameter -0.0 ruck 0.02 nership of trucks and	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Material 1/8' Dumped by t Common ow Constant ope	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tin to 3/4" diameter -0.0 ruck 0.02 nership of trucks and eration -0.04	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr Unadjusted Ba Material 1/8' Dumped by t Common ow	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ' to 3/4" diameter -0.0 ruck 0.02 nership of trucks and eration -0.04 get 0.00	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Material 1/8' Dumped by t Common ow Constant ope	r of Loading Tool Pasen Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ' to 3/4" diameter -0.0 ruck 0.02 nership of trucks and ration -0.04 get 0.00 Net Cycle Tim	ne (load, dump, m)2 loaders -0.04 ne Adjustment:	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Material 1/8' Dumped by t Common ow Constant ope	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin to 3/4" diameter -0.0 cruck 0.02 nership of trucks and cration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, m)2 loaders -0.04 ne Adjustment:	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Material 1/8' Dumped by t Common ow Constant ope	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin to 3/4" diameter -0.0 cruck 0.02 nership of trucks and cration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, m 22 loaders -0.04 le Adjustment:er Cycle Time:	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.545	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Material 1/8' Dumped by t Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin to 3/4" diameter -0.0 cruck 0.02 nership of trucks and cration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	loaders -0.04 le Adjustment: er Cycle Time: lime per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.545	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Material 1/8' Dumped by t Common ow Constant ope Nominal targ	on Rating: On Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ' to 3/4" diameter -0.0 ruck 0.02 nership of trucks and ration -0.04 get 0.00 Net Cycle Tim Adjusted Loader Net Load Ti	ne (load, dump, model) loaders -0.04 lee Adjustment: er Cycle Time: leme per Truck: Adjusted	Dump: 0.100 naneuver): 0 Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.545 1.735	O Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3294.00	-0.10	3.00	2.90	2409	1.782

Task # A0404

Haul Time: 1.782 minutes

Return Route:

recturn rec	rute.					Return Route.							
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)							
1	3294.00	0.10	3.00	3.10	3503	1.218							

Return Time: 1.218 minutes
Total Truck Cycle Time: 6.770 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

Coptimal No. of Trucks:

1,643.32 LCY/Hour Adjusted for job efficiency: 1,363.95 LCY/Hour Adjusted for job efficiency: 517.83 LCY/Hour Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,553.49 LCY/Hour Adjusted single truck/loader team production: 1,363.95 LCY/Hour Adjusted multiple truck/loader team production: 1,363.95 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____ Hours

Unit cost: \$1.803 /LCY Total job cost: **\$22,406**

ite:	Cresson Project		Permit A	Action	n:2023		Permit/Job#:	M19802	44
<u>F</u>	ROJECT IDEN	TIFICATION							
	Task #: A040	5	State: Co	olorad	o	Ab	breviation:	None	
	Date: 11/22		County: Te	eller			Filename:	M244-A0)405
	$\begin{array}{c} $	51 PM					_		
		organization nar	ne: DRMS						
_									
ŀ	IOURLY EQUI	PMENT COS'	<u>r</u>				is: 1 per day		
	Т	ruck Loader Tea	m -Truck:	Cat 7	quipment Descri 77F	ption			
			-Loader:	CAT	992K				
	Supp	ort Equipment -L		Cat D NA	10T - 10SU				
-	Road M	اط- aintenance –Mot	1	CAT	16M				
					r Tanker, 7,000	Gal.			
•	Cost Breakdown:	Tenals/Loa	nder Team		Cummont I	Zavimmant	Mainta	enance Equ	immant
	ost Breakdown.	Truck	Loader		Load Area	Equipment Dump Area	Motor Grad		er Truck
Jtili	zation-machine:	100	10	00	100	NA		25	2
wne	ership cost/hour:	\$206.48	\$229.	24	\$178.69	NA	\$212.	21	\$86.2
Ope	rating cost/hour:	\$160.10	\$200.	29	\$160.22	NA	\$31.	22	\$28.4
	Utilization-riper:	NA		0	NA	NA		JA	N.
•	own. cost/hour:	NA	\$0.0		\$0.00	NA	\$0.		\$0.0
	er op. cost/hour:	NA	\$0.0		\$0.00	NA	\$0.		\$0.0
Ope	erator cost/hour:	\$33.71	\$40.		\$41.30	NA	\$28.		\$21.1
N.	Unit Subtotals:	\$400.29	\$470.		\$380.21	NA	\$271.		\$135.8
	umber of Units:	Works	¢1 671 11	1	Summant:	\$380.21	Mai	1 \$400	
	Group Subtotals:	Work:	\$1,671.11		Support:	\$380.21	Man	nt: \$40°	1.85
Τ	otal work team cos	st/hour: \$2,459.	<u> 17 </u>						
N	ATERIAL QU	ANTITIES							
	Initial volume:		(CCY	Swell	factor: 1.215			
	Loose volume:			LCY	5 611				
	So	urce of estimated	volume: 2	2022 C	CC&V Provided	Estimate			
	Source	of estimated swe	ell factor:	Cat Ha	ındbook				
		Material Purch		00.00					
		To	otal Cost: \$	80.00					
<u>I</u>	HOURLY PRO	DUCTION							
	ruck Capacity:								
	ruck Payload (wei								
	Matarial r	veight: 1,600			Pounds/LCY				
	Material w	iption: Top So	11		_ rounds/LC1				

Payload Capacity	125.00	LC'	Y			
Tourse De d'Arrelieure Norse						
Truck Bed (volume) Basis Struck Volume:	<u>:</u> 60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
. ,						
	nal Truck Volum	ne Based on Number	of Loader Passes:	70.40	LCY	
<u>Loading Tool Capacity</u>			Ruel	ket Size Class: N	NA	
Rated Capacity:		LCY (heaped	1)		NA.	_
Bucket Fill Factor:	1.100	Other - rock/o	dirt mixtures (100	-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correctio	ns:		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	3)		
Job Efficiency:	0.830	0.830	(CAT HB	3)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tin		0.813 Der of Loading Tool 1	Passes Required to 1	Fill Truck:	4 1	passes
	e: Numb		Passes Required to 1	Fill Truck:	4 I	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	<u>e:</u> Numb vels:	per of Loading Tool li	Passes Required to l	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb vels: e vs. Job Conditi	oer of Loading Tool lion Rating: NA	Passes Required to l	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	vels: e vs. Job Condition we within this Ba a – Material Desc	oer of Loading Tool lion Rating: NA	Passes Required to I	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	vels: e vs. Job Conditing within this Bands — Material Description.	oer of Loading Tool lion Rating: NA	Passes Required to l	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min	vels: e vs. Job Conditing within this Base — Material Description.):	oer of Loading Tool I		Dump: 0.10		
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader	vels: e vs. Job Condition we within this Bass – Material Description.): es - Unadjusted F	oer of Loading Tool I		Dump: 0.10	00	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA	vels: e vs. Job Condition we within this Base — Material Description.): es - Unadjusted Fast	oer of Loading Tool I	Γime (load, dump, n	Dump: 0.10	00 0.625 minu Source	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	vels: e vs. Job Condition we within this Bass – Material Description s – Unadjusted F	oer of Loading Tool I ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle I 8" to 3/4" diameter -	Γime (load, dump, n	Dump: 0.10 maneuver): (Factor (min.)	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	vels: e vs. Job Condition e within this Bactor s – Material Description rs - Unadjusted Factor s lt: Material 1/8 the Dumped by the Common of	per of Loading Tool I ion Rating: NA Isic Rating: NA cription: NA Basic Loader Cycle Table 197 to 3/4" diameter - 1 truck 0.02 where the control of trucks at	Fime (load, dump, n	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040	00 0.625 minu Source (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition wels: e vs. Job Condition we within this Ba s – Material Description cs – Unadjusted F s l: Material 1/8 c: Dumped by c: Common over constant op	per of Loading Tool I ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Table 197 8" to 3/4" diameter - 197 7 truck 0.02 whership of trucks at peration -0.04	Fime (load, dump, n	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040	00	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	vels: e vs. Job Condition wels: e vs. Job Condition we within this Ba s – Material Description cs – Unadjusted F s l: Material 1/8 c: Dumped by c: Common over constant op	oer of Loading Tool I ion Rating: Sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Touck 0.02 wnership of trucks and peration -0.04 rget 0.00	Γime (load, dump, n 0.02 nd loaders -0.04	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition wels: e vs. Job Condition we within this Ba s – Material Description cs – Unadjusted F s l: Material 1/8 c: Dumped by c: Common over constant op	oer of Loading Tool I ion Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Touck 0.02 where the control of trucks are peration -0.04 rget 0.00 Net Cycle Touck O.02 Net Cycle Touck O.02 Net Cycle Touck O.02	Γime (load, dump, r 0.02 nd loaders -0.04	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition wels: e vs. Job Condition we within this Ba s – Material Description cs – Unadjusted F s l: Material 1/8 c: Dumped by c: Common over constant op	oer of Loading Tool I ion Rating: Sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Touck 0.02 whership of trucks and peration -0.04 rget 0.00 Net Cycle Touck Loading Tool I Adjusted Loading Tool I Ion Rating: NA	Time (load, dump, note to 10.02) Ind loaders -0.04 Time Adjustment: ader Cycle Time:	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.545	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition wels: e vs. Job Condition we within this Ba s – Material Description cs – Unadjusted F s l: Material 1/8 c: Dumped by c: Common over constant op	oer of Loading Tool I ion Rating: Sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Touck 0.02 whership of trucks and peration -0.04 rget 0.00 Net Cycle Touck Loading Tool I Adjusted Loading Tool I Ion Rating: NA	Γime (load, dump, r 0.02 nd loaders -0.04	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Condition wels: e vs. Job Condition we within this Ba s – Material Description cs – Unadjusted F s l: Material 1/8 c: Dumped by c: Common over constant op	oer of Loading Tool I ion Rating: Sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Touck 0.02 whership of trucks and peration -0.04 rget 0.00 Net Cycle Touck Loading Tool I Adjusted Loading Tool I Ion Rating: NA	Time (load, dump, note to 10.02) Ind loaders -0.04 Time Adjustment: ader Cycle Time:	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.545	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	vels: e vs. Job Condition wels: e vs. Job Condition we within this Ba s – Material Desc n.): es - Unadjusted I s l: Material 1/8 e: Dumped by c: Common ov n: Constant op n: Nominal tan	oer of Loading Tool I ion Rating: Sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Touck 0.02 whership of trucks and peration -0.04 rget 0.00 Net Cycle Touck Loading Tool I Adjusted Loading Tool I Ion Rating: NA	Time (load, dump, note 10.02) Ind loaders -0.04 Time Adjustment: ader Cycle Time: I Time per Truck:	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.545	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	vels: e vs. Job Conditi the within this Ba s – Material Desc n.): es - Unadjusted F s the Material 1/8 the Dumped by the Common over Constant op the Nominal tan	oer of Loading Tool I ion Rating: Sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Table 8" to 3/4" diameter - truck 0.02 wnership of trucks are overation -0.04 rget 0.00 Net Cycle Table Adjusted Load	Time (load, dump, rough) 0.02 Ind loaders -0.04 Time Adjustment: ader Cycle Time: I Time per Truck: Adjusted	Dump: 0.10 maneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.545 1.735	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3698.00	-0.10	3.00	2.90	2409	1.950

Haul Time: 1.950 minutes

Return Re	Return Route:									
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)				
1	3698.00	0.10	3.00	3.10	3503	1.333				

Return Time: 1.333 minutes
Total Truck Cycle Time: 7.053 minutes

Loading Tool unit

Production 1,643.32 LCY/Hour Adjusted for job efficiency: 1,363.95 LCY/Hour Truck Unit Production 598.86 LCY/Hour Adjusted for job efficiency: 497.05 LCY/Hour Selected Number of Trucks: _____ 3 ____ Truck(s) Optimal No. of Trucks: 3 Truck(s)

> Adjusted hourly truck team production: 1,491.16 LCY/Hour Adjusted single truck/loader team production: 1,363.95 LCY/Hour Adjusted multiple truck/loader team production: 1,363.95 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **7.64** Hours Unit cost: \$1.803 /LCY Total job cost: \$18,784

Site: Cresson Project		Permit Acti	on: 2023		Permit/Job#:	M1980244
PROJECT IDEN	NTIFICATION					
Task #: A040	6	State: Color	ado	Ab	breviation:	None
		County: Teller			Filename:	M244-A0406
	51 PM					
User: ZTT						
Agency or	organization nam	ne: DRMS				
HOURLY EQUI	PMENT COST	<u> </u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
	Fruck Loader Tea	m -Truck: Cat	777F			
			T 992K			
Supp	oort Equipment -L	oad Area: Cat imp Area: NA	D10T - 10SU			
Road M	laintenance –Moto		T 16M			
			ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Loa			Equipment		nance Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grade	er Water Truck
%Utilization-machine:	100	100	100	NA	2	25 25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.2	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.2	\$28.44
%Utilization-riper:	NA	0	NA	NA	N.	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.5	
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.9	99 \$135.86
Number of Units:	3	1	1	0		1 1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Main	nt: \$407.85
Total work team co	st/hour: \$2,459. 1	17				
MATERIAL QU	<u>JANTITIES</u>					
Initial volume	: 50,320	CCY	Swell	factor: 1.215		
Loose volume	61,13	9 LCY	•			
So	ource of estimated	volume: 2022	CC&V Provided	Estimate		
Source	of estimated swe		Handbook			
	Material Purcha					
	То	otal Cost: \$0.0	Ü			
HOURLY PRO	DUCTION					
	<u>DUCTION</u>					
Truck Capacity: Truck Payload (wei	oht) Racie					
Material v			Pounds/LCY			

Pounds

Description:

Rated Payload:

Top Soil 200,000

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity			Duals	et Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)	Duck	et Size Class. N	NA	_
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100-	-120%) 1.100		_
Adjusted Capacity:	17.600	LCY	`	,		=
Job Condition Corrections		Sit	e Altitude (ft.): 9	500 feet		
300 Condition Corrections	Truck	Loader	Source	<u>500</u> rect		
Altitude Adj:	1.000	0.980	(CAT HB))		
	0.830	0.830	(CAT HB)			
Job Efficiency:						
Job Efficiency:		0.813				
Job Efficiency: Net Correction:	0.830	0.813				
·	0.830	0.813 r of Loading Tool Pas	ses Required to F	Fill Truck:	4	passes
Net Correction:	0.830 Numbe		ses Required to F	Fill Truck:	1	passes
Net Correction: Loading Tool Cycle Time:	0.830 Numbe	r of Loading Tool Pas	ses Required to F	Fill Truck:	4 1	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	0.830 Numbe els: s. Job Condition within this Basic	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	1	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value	0.830 Number States St	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders —	0.830 Number States St	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.):	0.830 Number States: The second of the sec	on Rating: NA ic Rating: NA ription: Maneuver: NA		Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA	0.830 Number States: The second of the sec	on Rating: NA ic Rating: NA ription: Maneuver: NA		Dump: 0.100	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value: Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders —	0.830 Number States: The second of the sec	r of Loading Tool Pas on Rating: Ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim		Dump: 0.100	0 0.625 min	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile:	0.830 Number States: The States of the Sta	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.)	0 0.625 min Source	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 Number of the series of	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Number of the second of	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and icration -0.04	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 Number of the series of	on Rating: On Rating: NA ic Rating: Maneuver: Maneuver: NA asic Loader Cycle Time ial 0.02 nt - factor not applicate nership of trucks and interaction -0.04 get 0.00	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Number of the second of	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 ration -0.04 get 0.00 Net Cycle Tim	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Number of the second of	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 ration -0.04 get 0.00 Net Cycle Tim Adjusted Loade	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 Number of the second of	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 ration -0.04 get 0.00 Net Cycle Tim Adjusted Loade	ne (load, dump, mole 0.00 loaders -0.04 load	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Number Sels: The self of the	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 ration -0.04 get 0.00 Net Cycle Tim Adjusted Loade	ne (load, dump, mole 0.00 loaders -0.04 loaders -0.04 loaders -me per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Number of the second se	r of Loading Tool Pas on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 cration -0.04 get 0.00 Net Cycle Tim Adjusted Loade Net Load Ti	ne (load, dump, moble 0.00 loaders -0.04 loaders -0.04 loaders -Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	O Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4912.00	-0.10	3.00	2.90	2409	2.454

Haul Time: 2.454 minutes

Return Route:

110101111111						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time
	(Ft)		(%)	(%)	(fpm)	(min)
1	4912.00	0.10	3.00	3.10	3503	1.680

Return Time: 1.680 minutes
Total Truck Cycle Time: 7.966 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

530.28 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 440.13 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,320.39 LCY/Hour Adjusted single truck/loader team production: 1,320.39 LCY/Hour Adjusted multiple truck/loader team production: 1,320.39 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 46.30
 Hours

 Unit cost:
 \$1.862
 /LCY
 Total job cost:
 \$113,868

			Topsoil - Lift 5 -			
Site: Cresson Project	et	Permit Action	on: 2023		Permit/Job#: M	11980244
PROJECT IDE	NTIFICATIO	<u>N</u>				
Task #: A04	-07	State: Colora	ado	Ab	breviation: No	one
	22/2023	County: Teller			Filename: M2	244-A0407
$\begin{array}{c} $	5:30 PM					
	or organization na	me: DRMS				
	-					
HOURLY EQU	JIPMENT COS				is: <u>1 per day</u>	
	Truck Loader Te		Equipment Descri 777F	ption		
	Truck Bouder Te		Г 992К			
Suj	pport Equipment -		D10T - 10SU			
Road	-L Maintenance –Mo	Dump Area: NA	Г 16М			
			ter Tanker, 7,000	Gal.		
G (P 11	T 1.7	1	G		3.6.1.	.
Cost Breakdown	Truck/Lo	Dader Team Loader	Support I Load Area	Equipment Dump Area	Maintenai Motor Grader	Nater Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team of	ost/hour: \$2,459	.17				
MATERIAL Q	UANTITIES					
Initial volun		CCY	Swell	factor: 1.215		
Loose volun				1.213		
5	Source of estimate	d volume: 2022	CC&V Provided	Estimate		
	ce of estimated sw		Handbook	<u> </u>		
	Material Purc					
	Γ	Cotal Cost: \$0.00)			
HOURLY PR	ODUCTION					
Truck Capacity:						
Truck Payload (w						
	1 1 . 1		Down do/LCV			
Materia	weight: $1,600$ cription: Top S	. 11	Pounds/LCY			

Truck/Loader Worksheet Con	t'd	Task # A0407			Page 2 of 3	
Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:		CY				
Heaped Volume:		CY				
Average Volume:		CY				
Adjusted Volume:	78.80 L	CY				
Final 7	Гruck Volume В	Based on Number of Load	er Passes:	70.40	LCY	
Loading Tool Capacity			Rucke	et Size Class:	NA	
Rated Capacity:	16.000	LCY (heaped)	Duck	ct bize class.	.1/1	_
Bucket Fill Factor:	1.100	Other - rock/dirt mixtu	res (100 ₋	120%) 1.100		_
Adjusted Capacity:	17.600	LCY	1103 (100-	12070) 1.100		_
Adjusted Capacity.	17.000					
Job Condition Corrections:	·	Site Alti	tude (ft.): <u>95</u>	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB)			
Job Efficiency:	0.830	0.830	(CAT HB)			
Net Correction:	0.830	0.813				
Loading Tool Cycle Time: Excavators and Front Shovels		of Loading Tool Passes Re	equired to F	ill Truck:		passes
Machine Cycle Time vs Selected Value w	. Job Condition					
Track Loaders – I Cycle Time Elements (min.):	viateriai Descrip	onon:				
Load: NA	Ma	neuver: NA	_	Dump: 0.10	00	
Wheel and Track Loaders -	Unadjusted Basi	ic Loader Cycle Time (loa	ıd, dump, m	aneuver):	0.625 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	Mixed material	1 0.02		0.020	(Cat HB)	_
Stockpile:	No adjustment	- factor not applicable 0.0	00	0.000	(Cat HB)	_
Truck Ownership:	Common owne	ership of trucks and loader	rs -0.04	-0.040	(Cat HB)	
Operation:	Constant opera			-0.040	(Cat HB)	
Dump Target:	Nominal target			0.000	(Cat HB)	_
		Net Cycle Time Adju		-0.060	minutes	
		Adjusted Loader Cyc		0.565	minutes	
		Net Load Time pe	r Truck:	1.795	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted f	for site altitude:	0.800	Minutes
Truck Load Time:	1.795	Minutes	Adjusted f	For site altitude:	1.832	Minutes
ck Maneuver and Dump Time:	1.20	Minutes	Adjusted f	for site altitude:	1.200	Minutes
ck Maneuver and Dump Time:	1.20	Minutes	Adjusted f	or site altitude:	1.200	Min –

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6407.00	-0.10	3.00	2.90	2409	3.075

Haul Time: 3.075 minutes

Return Route:

rectarii rec	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6407.00	0.10	3.00	3.10	3503	2.106

Return Time: 2.106 minutes
Total Truck Cycle Time: 9.013 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

468.68 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 389.00 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,167.00 LCY/Hour Adjusted single truck/loader team production: 1,167.00 LCY/Hour Adjusted multiple truck/loader team production: 1,167.00 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 93.94
 Hours

 Unit cost:
 \$2.107
 /LCY
 Total job cost:
 \$231,007

Task description:	E. Cres	son Mine Ar	rea - '	Горsoil - Lift 6 -	Transport		
Site: Cresson Project		Permit	Actio	on: 2023		Permit/Job#: _	M1980244
PROJECT IDEN	TIFICATION	1					
Task #: A040		_	Colora	ıdo	Ab	breviation:	None
Date: 11/22	/2023		Teller				M244-A0408
	15 PM					_	
User: <u>ZTT</u> Agency or	organization na	me: DRM:	S				
HOURLY EQUI					Shift bos	is: <u>1 per day</u>	
HOURLI EQUI	I MENT COS	1	1	Equipment Descri		is. <u>i pei day</u>	
	Truck Loader Tea	am -Truck:	Cat	777F	ption		
		-Loader:		Γ 992K			
Supp	ort Equipment -I	Load Area: ump Area:	Cat NA	D10T - 10SU			
Road M	Taintenance – Mot			Г 16М			
	-Wa	ater Truck:	Wat	er Tanker, 7,000	Gal.		
Cost Develolores	Tr 1 /T .	. 1 T		C	D	Malada	
Cost Breakdown:	Truck/Lo	ader Team Loader		Load Area	Equipment Dump Area	Motor Grade	nance Equipment Water Truck
%Utilization-machine:			100		_		
Ownership cost/hour:	\$206.48	\$229	100	100 \$178.69	NA NA	\$212.2	
Operating cost/hour:	\$160.10	\$200		\$160.22	NA NA	\$31.2	
%Utilization-riper:	NA	Ψ200	0	NA	NA NA	Ψ31.2 N.	· ·
Ripper own. cost/hour:	NA	\$0	0.00	\$0.00	NA	\$0.0	
Ripper op. cost/hour:	NA	\$0	0.00	\$0.00	NA	\$0.0	90.00
Operator cost/hour:	\$33.71	\$40).71	\$41.30	NA	\$28.5	\$21.12
Unit Subtotals:	\$400.29	\$470).24	\$380.21	NA	\$271.9	9 \$135.86
Number of Units:	4		1	1	0		1 1
Group Subtotals:	Work:	\$2,071.40		Support:	\$380.21	Main	t: \$407.85
Total work team co		46					
MATERIAL QU							
Initial volume Loose volume			CCY LCY	Swell	factor: 1.215		
	urce of estimated			CC&V Provided	Estimata		
	of estimated sw			Handbook	Estimate		
	Material Purch		\$0.00				
	T	otal Cost:	\$0.00)			
HOURLY PRO	DUCTION						
Truck Capacity:							
Truck Payload (wei	ght) Basis:						
Material v		.,		Pounds/LCY			
Desci Rated Pa	ription: Top Solution $\frac{\text{Top Solution}}{200,00}$			Pounds			
Raied Pa	iy10au	<i>I</i> U		r ounus			

Payload Capacity	125.00	LCY				
Truck Bed (volume) Basi						
Struck Volume:	60.60	_ LCY				
Heaped Volume:	78.80	_ LCY				
Average Volume:		_ LCY				
Adjusted Volume:	78.80	_ LCY				
	inal Truck Volu	me Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity			Buck	ket Size Class: N	Ā	
Rated Capacity	r:16.000	LCY (heaped)				_
Bucket Fill Factor	:: 1.100	Other - rock/dirt	mixtures (100	-120%) 1.100		_
Adjusted Capacity	: <u>17.600</u>	LCY				
Job Condition Correction	ons:	Sit	e Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	5)		
Job Efficiency:	0.830	0.830	(CAT HB	5)		
Net Correction:	0.830	0.813				
	0,000	0.010				
Loading Tool Cycle Time		ber of Loading Tool Pas	ses Required to l	Fill Truck:	4 1	passes
	ne: Num		ses Required to l	Fill Truck:	4 1	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin	ne: Num	ber of Loading Tool Pastion Rating: NA	sses Required to l	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Num ovels: ne vs. Job Condi	tion Rating: NA asic Rating: NA	ses Required to l	Fill Truck:	4 1	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numovels: ne vs. Job Condiue within this Best - Material De	tion Rating: NA asic Rating: NA	sses Required to l	Fill Truck:	4 1	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader	ne: Numovels: ne vs. Job Condiue within this Best - Material De	tion Rating: NA asic Rating: NA	sses Required to l	Fill Truck: Dump:0.100	,	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA	ne: Numovels: ne vs. Job Condiue within this Bors – Material Desin.):	tion Rating: NA asic Rating: NA scription:		Dump: 0.100	,	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA	ne: Numovels: ne vs. Job Condiue within this Bes – Material Dein.):	tion Rating: NA NA Scription: Maneuver: NA		Dump: 0.100)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numovels: ne vs. Job Condiue within this Bus – Material Dein.): ers - Unadjusted ors	tion Rating: NA STATE ST	ne (load, dump, n	Dump: 0.100 naneuver): 0.100 Factor (min.) 0.020)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed material Mixed material	tion Rating: NA asic Rating: NA NA scription: Maneuver: NA Basic Loader Cycle Tinterial 0.02 ment - factor not applicate	ne (load, dump, n	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000	.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed mai e: No adjustr p: Common o	tion Rating: NA asic Rating: NA NA Scription: Maneuver: NA Basic Loader Cycle Tinterial 0.02 Ment - factor not applications and supplications and supplications.	ne (load, dump, n	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed material e: No adjustr p: Common on n: Constant of	tion Rating: NA asic Rating: NA Scription: Maneuver: NA Basic Loader Cycle Tinterial 0.02 ment - factor not applicate townership of trucks and operation -0.04	ne (load, dump, n	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed material e: No adjustr p: Common on n: Constant of	tion Rating: NA asic Rating: NA NA Scription: Maneuver: NA Basic Loader Cycle Tinterial 0.02 ment - factor not application operation -0.04 arget 0.00	ne (load, dump, noble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed material e: No adjustr p: Common on n: Constant of	tion Rating: NA asic Rating: NA NA scription: Maneuver: NA Basic Loader Cycle Timeterial 0.02 ment - factor not applicate ownership of trucks and operation -0.04 arget 0.00 Net Cycle Timeterial Passes NA	ne (load, dump, roble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed material e: No adjustr p: Common on n: Constant of	tion Rating: NA asic Rating: NA Scription: Maneuver: NA Basic Loader Cycle Tine terial 0.02 ment - factor not applicate ownership of trucks and operation -0.04 arget 0.00 Net Cycle Time Adjusted Loader Cycle Time Cycle Time Adjusted Loader Cycle Time Cycle Time Adjusted Loader Cycle Time Cycle Tim	ne (load, dump, roble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (machine Elements) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed material e: No adjustr p: Common on n: Constant of	tion Rating: NA asic Rating: NA Scription: Maneuver: NA Basic Loader Cycle Tine terial 0.02 ment - factor not applicate ownership of trucks and operation -0.04 arget 0.00 Net Cycle Time Adjusted Loader Cycle Time Cycle Time Adjusted Loader Cycle Time Cycle Time Adjusted Loader Cycle Time Cycle Tim	ne (load, dump, roble 0.00 loaders -0.04 le Adjustment: er Cycle Time:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio Dump Targe	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed mar e: No adjustr p: Common or n: Constant of et: Nominal ta	tion Rating: NA asic Rating: NA NA scription: Maneuver: NA Basic Loader Cycle Tineterial 0.02 ment - factor not applicate ownership of trucks and operation -0.04 arget 0.00 Net Cycle Timeterial Cycle Timeterial O.02 ment - factor not applicate ownership of trucks and operation -0.04 arget 0.00 Net Cycle Timeterial O.03 met Cycle Timeterial O.04 meterial O.04 meterial O.00 meterial O.04 meterial O.00 m	ne (load, dump, noble 0.00 loaders -0.04 loa	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (m. Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operation Dump Targer	ne: Num ovels: ne vs. Job Condi ue within this B rs – Material De in.): ers - Unadjusted ors al: Mixed ma e: No adjustr p: Common o n: Constant o et: Nominal ta	tion Rating: NA asic Rating: NA NA Scription: Maneuver: NA Basic Loader Cycle Timeterial 0.02 ment - factor not applicate townership of trucks and operation -0.04 arget 0.00 Net Cycle Time Adjusted Loade Net Load Ti	ne (load, dump, roble 0.00 loaders -0.04 lee Adjustment: er Cycle Time: me per Truck:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9080.00	-0.10	3.00	2.90	2409	4.184

Haul Time: 4.184 minutes

Return Route:

return re	rute.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9080.00	0.10	3.00	3.10	3503	2.869

Return Time: 2.869 minutes
Total Truck Cycle Time: 10.885 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

388.07 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 322.10 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,288.39 LCY/Hour Adjusted single truck/loader team production: 1,288.39 LCY/Hour Adjusted multiple truck/loader team production: 1,288.39 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 85.18
 Hours

 Unit cost:
 \$2.219
 /LCY
 Total job cost:
 \$243,581

BULLDOZER WORK

Cresson Project	Peri	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIF	FICATION				
Task #: A0409	State:	Colorado		Abbreviation:	None
Date: 11/20/202		Teller		Filename:	M244-A0409
10:01:12 I	•	1 CHC1		i nename.	W1244-A040)
User: ZTT				-	
	anization name: DR	RMS			
HOURLY EQUIPM					
	at D7R DS Series II L0	CD			
Horsepower: 24		OI	<u> </u>		
	raight				
Attachment: N			<u> </u>		
	per day				
	CRG)		<u>—</u> <u>—</u>		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$114.76	NA		
Operating Cost/Hour:		\$91.98	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	25		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUAN					
Initial Volume: 249	9,679				
Initial Volume: 249 Swell factor: 1.2	9,679 15	<u> </u>			
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303	9,679 15 3,360 LCY	_ _ _			
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volume	9,679 15 3,360 LCY ume: 2022 CC	— — &V Providec	1 Estimate		
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes were supported by the state of the sta	9,679 15 3,360 LCY ume: 2022 CCd ell factor: Cat Hand		1 Estimate		
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes Source of estimated swere HOURLY PRODUC	9,679 15 3,360 LCY ume: 2022 CCa ell factor: Cat Hand		1 Estimate		
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance:	2022 CCa ell factor: Cat Hand	book	l Estimate		
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes Source of estimated swell HOURLY PRODUC	2022 CCa ell factor: Cat Hand	book	l Estimate		
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance:	2022 CC6 201 factor: 2022 CC6 Cat Hand CTION 220 feet 266.4 LCY/	book			
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes of estimated swell source of estimated swell successful states of estimated swell states of estimated states of estimated swell states of estimated states of estimated swell states of estimated swell states of estimated states of estimated states of estimated swell states of estimated states o	2022 CC2 2015 factor: 2022 CC2 Cat Hand CTION 220 feet 266.4 LCY/ escription: Loose s	book Thr			
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes of estimated swell swell swell by the standard s	2022 CC6 201 factor: 2022 CC6 Cat Hand CTION 220 feet 266.4 LCY/	book Thr			
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes of estimated swell source of estimated swell states and source of estimated swell states are successful source of estimated swell states are successful successful swell states are successful successful successful states are successful states are successful successful successful successful successful states are successful success	2022 CC2 2015 factor: 2022 CC2 Cat Hand CTION 220 feet 266.4 LCY/ escription: Loose s	book Thr			
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	2022 CCat Hand 2021 Cat Hand 2021 Cat Hand 2022 CCat Hand 2022 CCat Hand 2021 Cat Hand 2021 feet 266.4 LCY/	book Thr			
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes of estimated swell source of estimated swell stance: Materials consistency defined a stance of estimated swell stance: Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	2022 CC2 2023 CC2 2024 CC2 2025 CC2	book Thr stockpile 1.2	Source		
Initial Volume: 249 Swell factor: 1.2 Loose volume: 303 Source of estimated volumes of estimated swell source of estimated swell statement of estimated statement of estimat	2022 CC2 2021 CC2	book Thr			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 366.51 LCY/hr
Adjusted fleet production: 366.51 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.677/LCY

Total job time: 827.70 Hours
Total job cost: \$205,304

BULLDOZER RIPPING WORK

Task description:	E. Cresson Mine Area - Top	psoil - Ripping		
Site: Cresson Project	Permit Action:	2023	Permit/Job#	: M1980244
PROJECT IDENTIFIC	CATION			
Task #: A0410	State: Colorado		Abbreviation:	None
Date: 11/21/2023	County: Teller		Filename:	M244-A0410
1:59:51 PM				
User: ZTT				
Agency or organi				
HOURLY EQUIPMEN				
Basic Machine:			Horsepower:	240
Ripper Attachment:	3-Shank Ripper			per day
			Data Source:	(CRG)
Cost Breakdown:		ı	TI.'1' 0/	
Owner	ship Cost/Hour:	\$114.76	Utilization % NA	
	ting Cost/Hour:	\$91.98	100	
	ship Cost/Hour:	\$9.06	NA	
Ripper Opera	ting Cost/Hour:	\$5.02	100	
	ator Cost/Hour:	\$41.30	NA	
Total I	Unit Cost/Hour:	\$262.12		
Total F	Fleet Cost/Hour: \$20	62.12		
MATERIAL QUANTI	TIES Se	lected estimating	g method: Area	
Alternate Methods:				
smic: NA	Bank Volume:	NA	BCY	NA
Area: $\frac{137}{309.52}$ acre		2.50	Volume: 1,248,397	BCY or
Source	of estimated quantity: 2022	CC&V Provided	1 Estimata	
	· · · · · ·	CC&V 110VIdee	Littilate	
HOURLY PRODUCT	<u>ION</u>			
Seismic:				
	Seismic Velocity:	NA	feet/second	
Area:				
	Average Ripping Depth:	2.45	feet/pass	
	Average Ripping Width:	6.50	feet/pass	
A	verage Ripping Length:	538.00	feet/pass	
Α.	Average Dozer Speed:	88.00 0.25	feet/minute	
	verage Maneuver Time: Production per unit area:	0.23	minutes/pass acres/hour	
Job Condition Correction 1		0.737		
1	<u>ractors</u>			
	Hourly Unit Production:	0.757	Acres/hr	
Onadjusted .	Hourly Unit Production:	0.757	Acres/hr	
Unadjusted	Site Altitude:	9,500	feet	
Onadjusted :	Site Altitude: Altitude Adj:	9,500 1.00	feet (CAT HB)	
Onadjusted :	Site Altitude:	9,500	feet	
·	Site Altitude: Altitude Adj: Job Efficiency: Net Correction:	9,500 1.00 0.83 0.83	feet (CAT HB) (1 shift/day)	
Ad	Site Altitude: Altitude Adj: Job Efficiency:	9,500 1.00 0.83 0.83 : 0.63	feet (CAT HB) (1 shift/day) multiplier	
Ad	Site Altitude: Altitude Adj: Job Efficiency: Net Correction: Ijusted Hourly Unit Production: justed Hourly Fleet Production	9,500 1.00 0.83 0.83 : 0.63	feet (CAT HB) (1 shift/day) multiplier Acres/hr	
Ad Ad	Site Altitude: Altitude Adj: Job Efficiency: Net Correction: Ijusted Hourly Unit Production: justed Hourly Fleet Production	9,500 1.00 0.83 0.83 : 0.63	feet (CAT HB) (1 shift/day) multiplier Acres/hr Acres/hr	Hours

Task description:	E. Cres	son Mine Area - '	Горsoil - WHEX	- Transport			
Site: Cresson Projec	e: Cresson Project		on: 2023		Permit/Job#: M	1980244	
PROJECT IDE	NTIFICATION	1					
Task #: A0411 State: Colors Date: 11/22/2023 County: Teller 1:56:52 PM Teller Teller			ado	Ab	Abbreviation: None Filename: M244-A0411		
User: ZTT	r organization na	me: DRMS					
	<u> </u>						
HOURLY EQU	IPMENT COS	<u></u>			is: 1 per day		
	Truck Loader Tea		Equipment Descri 777F	ption			
		-Loader: CA	Г 992К				
Sup	port Equipment -I D-	Load Area: Cat ump Area: NA	D10T - 10SU				
Road N	Maintenance – Mot	or Grader: CA	Г 16М				
	-Wa	ater Truck: Wat	er Tanker, 7,000	Gal.			
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	nce Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck	
%Utilization-machine:	100	100	100	NA	25	25	
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29	
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44	
%Utilization-riper:	NA	0	NA	NA	NA	NA	
Ripper own. cost/hour: Ripper op. cost/hour:	NA NA	\$0.00 \$0.00	\$0.00 \$0.00	NA NA	\$0.00 \$0.00	\$0.00 \$0.00	
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA NA	\$28.56	\$21.12	
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86	
Number of Units:	3	1	1	0	1	1	
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85	
Total work team co	ost/hour: \$2,459.	17					
MATERIAL QU	JANTITIES						
Initial volume		CCY		factor: 1.215			
Loose volume							
	ource of estimated sweet		CC&V Provided Iandbook	Estimate			
Source	Material Purch						
	T	otal Cost: \$0.00)				
HOURLY PRO	DDUCTION						
Truck Capacity:							
Truck Payload (we							
Material	weight: 1,600 ription: Top So	ni1	Pounds/LCY				
	ayload: 100 30		Pounds				

Truck/Loader Worksheet Con	it'd	1 ask # A0411			Page 2 of 3	
Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60 I	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	78.80 I	LCY				
Final '	Truck Volume I	Based on Number of Loa	ader Passes:	70.40	LCY	
<u>Loading Tool Capacity</u>			Rucl	ket Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)	Duci	ct Size Class. 1	MA.	_
Bucket Fill Factor:	1.100	Other - rock/dirt mi	vtures (100	-120%) 1.100		_
Adjusted Capacity:	17.600	LCY	Atures (100	-120/0) 1.100		_
Adjusted Capacity.	17.000					
Job Condition Corrections:	-	Site A	ltitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	,		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Loading Tool Cycle Time: Excavators and Front Shovel		of Loading Tool Passes	Required to 1	Fill Truck:		passes
Machine Cycle Time vs Selected Value w	. Job Condition					
Track Loaders – I Cycle Time Elements (min.):	Materiai Descrij	puon:				
Load: NA	Ma	aneuver: NA		Dump: 0.10	0	
Wheel and Track Loaders -	Unadjusted Bas	sic Loader Cycle Time (load, dump, r	maneuver):().625 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	Mixed materia	1 0.02		0.020	(Cat HB)	_
Stockpile:		t - factor not applicable	0.00	0.000	(Cat HB)	_
Truck Ownership:	•	ership of trucks and load		-0.040	(Cat HB)	_
Operation:	Constant operation -0.04			-0.040	(Cat HB)	
Dump Target:	Nominal targe			0.000	(Cat HB)	
		Net Cycle Time A	-	-0.060	minutes	
		Adjusted Loader C		0.565	minutes	
		Net Load Time	per Truck:	1.795	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
Truck Load Time:	1.795	Minutes	Adjusted	for site altitude:	1.832	Minutes
ck Maneuver and Dump Time:	1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
_	1.795	Minutes	Adjusted	for site altitude:	1.832	_ N

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1506.00	-8.60	3.00	-5.60	1870	0.959

Ttotal II Ito	Tetain Route.									
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)				
1	1506.00	8.60	3.00	11.60	1628	1.048				

Return Time: 1.048 minutes
Total Truck Cycle Time: 5.839 minutes

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production

723.46 LCY/Hour Adjusted for job efficiency: 600.47 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,801.41 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 146.89 Hours

Unit cost: \$1.846 /LCY Total job cost: **\$361,221**

Task description: E.	Cresson Mine Area -Tops	oil - WHEX - Dozer Spre	ading	
Cresson Project	Permit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFICAT	CION			
Task #: A0412	State: Colorado		Abbreviation:	None
Date: $\frac{A0412}{11/20/2023}$	County: Teller		Filename:	M244-A0412
10:02:06 PM	County. Tener		i ilename.	1412 11 710 112
User: ZTT			=	
Agency or organization	on name: DRMS			
HOURLY EQUIPMENT	COST			
	DS Series II LGP			
Horsepower: 240	20 201100 11 201	<u>—</u>		
Blade Type: Straight				
Attachment: NA		_		
Shift Basis: 1 per day		_		
Data Source: (CRG)				
Cost Breakdown:				
COST DICARGOWII.		Utilization %		
Ownership Cost/Hour:	\$114.76	NA		
Operating Cost/Hour:	\$91.98	100	_	
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	25	<u> </u>	
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANTITIE	<u>SS</u>			
Initial Volume: 161,059				
Swell factor: 1.215 Loose volume: 1.215	CV			
Loose volume: 195,687 L	C1			
Source of estimated volume:	2022 CC&V Provided	Estimate		
Source of estimated swell factor	r: Cat Handbook			
HOURLY PRODUCTION				
Average push distance:	220 feet			
Unadjusted hourly production:	266.4 LCY/hr			
- any more production.				
Materials consistency description	on: Loose stockpile 1.2			
Average push gradient: -30	%			
	00 feet			
Material weight: 1,60	00 lbs/LCY			
Weight description: Top	Soil			
Job Condition Correction Factor	o Soil o <u>r</u>	Source (AVG)		
	o Soil	Source (AVG.) (CAT HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 366.51 LCY/hr
Adjusted fleet production: 366.51 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.677/LCY

Total job time: 533.92 Hours
Total job cost: \$132,434

BULLDOZER RIPPING WORK

	Task description:	E. C	resson Mine Area - Tops	soil - WHEX -	Ripping				
Site:	Cresson Projec	et	Permit Action:	2023	Peri	mit/Job#:	M19802	244	
	PROJECT IDENTIFICATION								
	Task #: A04	13	State: Colorado		Abbre	viation:	None		
	Date: 11/2 2:01	21/2023 :20 PM	County: Teller			ename:	M244-A	0413	
	User: ZTT		name: DRMS						
	HOURLY EQU	· ·							
					11	,	240		
	Ripper Atta		t D7R DS Series II LGP Shank Ripper		Horsepower: Shift Basis:		240 er day		
	Rippei Atta	CIIIICIII. <u>3-8</u>	внанк ктррег	<u>—</u>	Data Source:		CRG)		
	Cost Breakdown:								
					Utilization %				
		Ownership C		\$114.76	NA 100				
	Dinna	Operating C		\$91.98	100				
		r Ownership C er Operating C		\$9.06 \$5.02	NA 100				
	Кіррі	Operator C		\$41.30	NA				
		Total Unit C	-	\$262.12					
		Total Fleet C	ost/Hour: \$262	2.12					
	MATERIAL Q		· · · · · · · · · · · · · · · · · · ·		and the first				
	Alternate Methods		<u>s</u>	ected estimating	method: Area				
		<u>).</u>							
nic:	NA		Bank Volume:	NA 2.50	BCY		NA	DCV	
rea:	199.66	acres	Rip Depth (ft):	2.50	Volume: 80	5,295		BCY or	
		Source of esti	mated quantity: 2022 C	C&V Provided	Estimate				
	HOURLY PRO	DUCTION							
	Seismic:								
	<u>Boisinio.</u>		Seismic Velocity:	NA	feet/secon	ıd			
	A		•						
	Area:	Avera	ge Ripping Depth:	2.45	feet/pass				
			ge Ripping Depth. ge Ripping Width:	6.50	feet/pass				
			e Ripping Length:	300.00	feet/pass				
			rage Dozer Speed:	88.00	feet/minu	te			
		Average	Maneuver Time:	0.25	minutes/p	ass			
		Produc	tion per unit area:	0.734	acres/hour	r			
	Job Condition Cor	rection Factors	<u>s</u>						
	Una	djusted Hourly	Unit Production:	0.734	Acres/hr				
			Site Altitude:	9,500	feet				
			Altitude Adj:	1.00	(CAT HB	*			
			Job Efficiency:	0.83	(1 shift/da	•			
			Net Correction:	0.83	multiplier				
			Hourly Unit Production:	0.61	Acres/hr				
	IOD TIME AND	· ·	Hourly Fleet Production:	0.61	Acres/hr				
	JOB TIME AN	D COST	Cua dau(a)	Trakel 1: 1: 4	225	. 51	77		
	Fleet size:	1	_ Grader(s)	Total job tim	ne: 327	./1	Ho	ours	
	Unit cost:	\$430.227	Per acre	Total job cos	st: \$85 ,	,899			

TRUCK/LOADER TEAM WORK

	~						
Site:	Cresson Project	:	Permit Acti	ion: 2023		Permit/Job#: M	1980244
P	PROJECT IDEN	NTIFICATION	1				
=	Task #: A041		State: Color	rado.	Δh	breviation: No	ine
			County: Teller				244-A0414
		14 PM					
	User: ZTT						
	Agency or	r organization nai	me: DRMS				
F	HOURLY EQU	PMENT COS	$oldsymbol{\Gamma}$		Shift bas	is: <u>1 per day</u>	
_			_	Equipment Descri			
	,	Fruck Loader Tea	am -Truck: Cat	t 777F	ption		
				T 992K			
	Supp	oort Equipment -I	Load Area: Cat ump Area: NA	t D10T - 10SU			
	Road M	Iaintenance –Mot		T 16M			
		-Wa		ter Tanker, 7,000	Gal.		
	No. 4 Days - 1- 1	T 1 /I .	. 1 T	G	C	Maintana	
	Cost Breakdown:	Truck/Lo	ader Team Loader	Load Area	Equipment Dump Area	Motor Grader	nce Equipment Water Truck
% I I+i1i	zation-machine:	100	100	100	NA	25	25
	ership cost/hour:	\$206.48	\$229.24	\$178.69	NA NA	\$212.21	\$86.29
	rating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
	Utilization-riper:	NA	0	NA	NA	NA	NA
	own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripp	er op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ope	erator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
	Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
N	lumber of Units:	3	1	1	0	1	1
(Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Т	otal work team co	st/hour: \$2,459.	17				
<u>N</u>	<u>MATERIAL QU</u>	<u>IANTITIES</u>					
	Initial volume		CCY		factor: 1.215		
	Loose volume	14,63	32 LCY	7			
		ource of estimated		2 CC&V Provided	Estimate		
	Source	e of estimated swe		Handbook			
		Material Purch	tase Cost: $\frac{\$0.0}{\$0.0}$				
		•		-			
<u>I</u>	HOURLY PRO	<u>DUCTION</u>					
7	Truck Capacity:						
1							
	ruck Payload (we						
	Material		a:1	Pounds/LCY			

Payload Capacity:	125.00	LCY	7			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			Ruel	ket Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)		xet Size Class. 1	A	_
Bucket Fill Factor:	1.100	Other - rock/d		-120%) 1.100		=
Adjusted Capacity:	17.600	LCY	it illixtures (100	12070) 1.100		_
ragusted Capacity	17.000	Le i				
Job Condition Corrections:		S	Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	,		
Job Efficiency:	0.830	0.830	(CAT HB	3)		
300 Efficiency:						
Net Correction:	0.830	0.813				
		0.813 er of Loading Tool P	asses Required to l	Fill Truck:	4 p	oasses
Net Correction:	Numbe	1	asses Required to I	Fill Truck:	4 p	oasses
Net Correction: Loading Tool Cycle Time:	Numbe ls: s. Job Conditio	er of Loading Tool P	asses Required to l	Fill Truck:	4 F	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	Numbels: s. Job Condition within this Bas	er of Loading Tool P on Rating: NA ic Rating: NA	asses Required to l	Fill Truck:	4 F	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v	Number ls: s. Job Condition within this Base Material Description	er of Loading Tool P on Rating: NA ic Rating: NA	asses Required to I	Fill Truck:	4 F	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders –	Numbe ls: s. Job Condition within this Bas Material Descr	er of Loading Tool P on Rating: NA ic Rating: NA	asses Required to I	Fill Truck: Dump:0.100		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.):	Numbe ls: s. Job Condition within this Bas Material Descript M	on Rating: NA		Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA	Numbe ls: s. Job Condition within this Bas Material Descript M	on Rating: NA		Dump: 0.100)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders –	Numbe ls: s. Job Condition within this Bas Material Descript M	er of Loading Tool P on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle T		Dump: 0.100) .625 minu	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors	Numberls: s. Job Condition within this Bas Material Descript Unadjusted Bas Mixed mater	er of Loading Tool P on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle T	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.)) 0.625 minu Source	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Number State Number State No adjustme Common ow	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 ont - factor not applic	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 ont - factor not applic rership of trucks an eration -0.04	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Number State Number State No adjustme Common ow	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle T rial 0.02 ont - factor not applic mership of trucks an eration -0.04 get 0.00	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA	ime (load, dump, noable 0.00 d loaders -0.04 dime Adjustment:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 ont - factor not applicate of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 ont - factor not applicate of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, notable 0.00 d loaders -0.04 dime Adjustment: der Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Number State Number State No. Adjusted Base Mixed mater No. adjustme Common ow Constant open Nominal targets.	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 ont - factor not applicate of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, not able 0.00 d loaders -0.04 dime Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Number State Number State No. Number State No.	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle T rial 0.02 ont - factor not applicate of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa Net Load	ime (load, dump, noable 0.00 d loaders -0.04 der Cycle Time: Time per Truck: Adjusted	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Page 3 of 3

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3892.00	-7.70	3.00	-4.70	1870	2.233

Haul Time: 2.233 minutes

Return Route:

11010111111	0 4.00					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time
	,		` '	` /	\1 /	(min)
1	3892.00	7.70	3.00	10.70	1734	2.377

Return Time: 2.377 minutes
Total Truck Cycle Time: 8.442 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

500.38 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 415.31 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,245.94 LCY/Hour Adjusted single truck/loader team production: 1,245.94 LCY/Hour Adjusted multiple truck/loader team production: 1,245.94 LCY/Hour LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 11.74
 Hours

 Unit cost:
 \$1.974
 /LCY
 Total job cost:
 \$28,880

Task description: E.	Cresson Mine Area -Tops	soil - Ironclad - Dozer S	preading	
Cresson Project	Permit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFICA	<u> FION</u>			
Task #: A0415 Date: 11/20/2023 10:02:54 PM User: ZTT	State: Colorado County: Teller		Abbreviation: Filename:	None M244-A0415
Agency or organizati	on name: DRMS			
HOURLY EQUIPMENT	COST			
	DS Series II LGP			
Horsepower: 240		<u></u>		
Blade Type: Straight				
Attachment: NA				
Shift Basis: 1 per day	<u>y</u>	_		
Data Source: (CRG)				
Cost Breakdown:		I		
		<u>Utilization %</u>		
Ownership Cost/Hour:	\$114.76	NA		
Operating Cost/Hour:	\$91.98	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	25	<u></u>	
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANTITII Initial Volume: 12,043 Swell factor: 1.215	<u> </u>			
Loose volume: 14,632 LO	CY			
Source of estimated volume: Source of estimated swell factor	2022 CC&V Provided Cat Handbook	d Estimate		
HOURLY PRODUCTION	<u>N</u>			
Average push distance: Unadjusted hourly production:	220 feet 266.4 LCY/hr			
Materials consistency descript	ion: Loose stockpile 1.2			
<u> </u>	0 % 00 feet			
Material weight: 1,6	600 lbs/LCY			
Weight description: To	p Soil			
Job Condition Correction Fact		Source		
Operator Skill:		(AVG.)		
Material consistency:		(CAT HB)		
Dozing method:	1.000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 366.51 LCY/hr
Adjusted fleet production: 366.51 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.677/LCY

Total job time: 39.92 Hours
Total job cost: \$9,903

BULLDOZER RIPPING WORK

	Task description:	E	. Cresson Mine	Area - Tops	soil - Ironclad -	Ripping			
Site:	Cresson Proje	ect	Per	mit Action:	2023	P	Permit/Job#:	M19802	244
	PROJECT IDI	ENTIFICA	<u>TION</u>						
	Task #: A0	416	State:	Colorado		Abh	reviation:	None	
	Date: 11/	21/2023	County:	Teller			Filename:	M244-A	0416
	User: $\frac{2:0}{ZT}$	2:00 PM T	_				=		
		or organizati	on nama: DE	RMS					
		_		CIVIS					
	HOURLY EQ								
			Cat D7R DS Sei	ries II LGP		Horsepower:	-	240	
	Ripper Att	acnment:	3-Shank Ripper			Shift Basis: Data Source:		er day CRG)	
	Cost Breakdown:								
						Utilization %			
			Cost/Hour:		\$114.76	NA 100	_		
	Dinn	Operating er Ownership	Cost/Hour:		\$91.98 \$9.06	100 NA	_		
		er Ownersing er Operating			\$5.02	100	=		
	тарг		Cost/Hour:		\$41.30	NA	=		
		-	Cost/Hour:		\$262.12	<u> </u>	_		
		Total Fleet	Cost/Hour:	\$262	2.12				
	MATERIAL Q								
			<u>Lo</u>	Sele	ected estimating	method: Are	a		
	Alternate Method	<u>is:</u>							
eismic:	NA 14.93			k Volume: Depth (ft):	NA 2.50	BCY Volume:	60,218	NA	BCY or CC
Area:	14.93	acres	•			_	00,218		BC 1 of CC
		Source of e	stimated quantit	y: 2022 C	CC&V Provided	Estimate			
	HOURLY PRO	<u>ODUCTIO</u>	<u>N</u>						
	Seismic:								
			Seismic Velo	city:	NA	feet/sec	cond		
	Area:								
			rage Ripping De		2.45	feet/pas			
			rage Ripping W		6.50	feet/pas			
			age Ripping Ler verage Dozer Sp		300.00 88.00	feet/pas feet/mi			
			age Maneuver T		0.25	minute			
			luction per unit		0.734	acres/h	-		
	Job Condition Co		_			 -			
			rly Unit Produc	tion:	0.734	Acres/ł	ır		
	C.I.		Site Altit		9,500	feet			
			Altitude		1.00	(CAT I	HB)		
			Job Efficie		0.83	(1 shift			
			Net Correc	·	0.83	multipl	•		
		Adjust	ed Hourly Unit	Production:	0.61	Acres/hr			
			ed Hourly Fleet		0.61	Acres/hr			
	JOB TIME AN	ID COST							
	Fleet size:	1	Grader(s)		Total job time	e:	24.51	Но	ours
	Unit cost:	\$430.227	Per acre		Total job cos	at· •	66,423		
	_ III	Ψ.50.221			1 5 tur 100 cos	4	· · · · · · · ·		

Task description:	E. Cresson Mine	Area - 100	ft Lift - Mass Grading		
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFI	CATION				
Task #: A0417	State:	Colorado		Abbreviation:	None
Date: 11/20/2023	County:	Teller		Filename:	M244-A0417
10:03:55 PM					
User: ACY					
Agency or organ	nization name: DI	RMS			
HOURLY EQUIPME	NT COST				
Basic Machine: Cat	D10T - 10SU				
Horsepower: 574					
	ni-Universal				
Attachment: NA			<u></u>		
	er day				
Data Source: (CR	(G)		<u> </u>		
Cost Breakdown:					
0 11 0 11		Φ1 5 0 60	<u>Utilization %</u>		
Ownership Cost/Hour: Operating Cost/Hour:		\$178.69 \$160.22	NA 100		
Ripper own. Cost/Hour:		\$100.22	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT Initial Volume: 672,0 Swell factor: 1.000	099	<u> </u>			
	099 LCY	<u></u>			
Source of estimated volum	ne: 2022 CC	&V Provided	d Estimate		
Source of estimated swell					
HOURLY PRODUCT	CION				
Average push distance:	105 feet				
Unadjusted hourly produc	tion: 1,665.1 LC	Y/hr			
Materials consistency des	cription: Consol	idated stock	pile 1.0		
Average push gradient:	-20 %				
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY			_	
Weight description:	Granite - Broken				
Job Condition Correction		750	Source		
Operator S Material consiste		.750	(AVG.) (CAT HB)		
Dozing met		.200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6996

Adjusted unit production: 1,164.90 LCY/hr
Adjusted fleet production: 2329.8 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.326/LCY

Total job time: 288.48 Hours \$\frac{288.48 Hours}{\$219,367}\$

Task description:	E. Cresson Mine	Area - 100	ft Lift - Fine Grading		
: Cresson Project	Perr	nit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFI	ICATION				
Task #: A0418 Date: 11/20/2023 10:04:59 Pt	•	Colorado Teller		Abbreviation: Filename:	None M244-A0418
User: ACY				-	
Agency or organ	nization name: DR	MS			
HOURLY EQUIPME	ENT COST				
	D7R DS Series II LO	GP			
Horsepower: 240					
**	night				
Attachment: NA					
	er day				
Data Source: (CR	RG)		<u> </u>		
Cost Breakdown:					
		****	<u>Utilization %</u>		
Ownership Cost/Hour:	-	\$114.76	NA 100		
Operating Cost/Hour:		\$91.98 \$0.00	100		
Ripper own. Cost/Hour: Ripper op. Cost/Hour:		\$0.00	NA 0		
Operator Cost/Hour:		\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$248.04 \$248.04				
MATERIAL QUANT	<u>TITIES</u>				
Initial Volume: 74,6	78				
Swell factor: 1.000		-			
Loose volume: 74,6 ′	78 LCY	_			
Source of estimated volur	2022 CC4	− kV Provideo	l Estimata		
Source of estimated voiding Source of estimated swell			Estimate		
Source of estimated swell	ractor. Cat Hand	JOOK			
HOURLY PRODUCT	TION				
Average push distance:	105 feet				
Unadjusted hourly produc	482.9 LCY/	hr			
Materials consistency des	cription: Consoli	dated stock	pile 1.0		
Avaraga much amadiant	-20 %				
Average push gradient: Average site altitude:	-20 % 9,500 feet				
Average site annude:	2,500 IEEI				
Material weight:	2,800 lbs/LCY			<u>—</u>	
Weight description:	Granite - Broken				
Job Condition Correction	Factor		Source		
Operator S	Skill: 0.	750	(AVG.)		
Material consiste		000	(CAT HB)		
Dozing me	thod:	000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5830

Adjusted unit production: 281.53 LCY/hr
Adjusted fleet production: 281.53 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.881/LCY

Total job time: 265.26 Hours
Total job cost: \$65,795

Task description:	M. Cresson Min	e Area - Pile	Leveling - Mass Gradin	ng	
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFI	ICATION				
Task #: A0500	State:	Colorado		Abbreviation:	None
Date: 11/20/2023		Teller		Filename:	M244-A0500
10:06:02 PI	<u>M</u>				
User: ZTT					
Agency or organ	nization name: DI	RMS			
HOURLY EQUIPME	ENT COST				
Basic Machine: Cat	D10T - 10SU				
Horsepower: 574					
• • • • • • • • • • • • • • • • • • • •	ni-Universal				
Attachment: NA					
	er day				
Data Source: (CR	(G)				
Cost Breakdown:			TT.'1' .' 0/		
Orrmanshin Cost/Horrn		\$178.69	<u>Utilization %</u> NA		
Ownership Cost/Hour: Operating Cost/Hour:		\$178.09	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT Initial Volume: 116, Swell factor: 1.000	523				
	523 LCY				
Source of estimated volur		— &V Provideo	1 Estimata		
Source of estimated voidi			1 Estillate		
HOURLY PRODUCT	TION				
Average push distance: Unadjusted hourly produc	etion: $\frac{50 \text{ feet}}{2,748.7 \text{ LC}}$	Y/hr			
Materials consistency des	cription: Loose	stockpile 1.2			
Avanaga gasah asa Pasa	10.0/				
Average push gradient: Average site altitude:	-10 % 9,500 feet				
Material weight:	2,800 lbs/LCY				
Weight description:	Granite - Broken				
Job Condition Correction		750	Source		
Operator S Material consiste		.750 .200	(AVG.) (CAT HB)		
Dozing me		.200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7212

Adjusted unit production: 1,982.36 LCY/hr
Adjusted fleet production: 3964.72 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.192/LCY

Total job time: 29.39 Hours
Total job cost: \$22,349

Task description:	M. C	resson Min	e Area - Pile	Leveling - Fine Gradin	g	
Cresson Project		Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION	<u>ON</u>				
Task #: A0502 Date: 11/20		State:	Colorado Teller		Abbreviation:	None None
_10:07	03 PM	County:			Filename:	M244-A0501
User: ZTT						
Agency or	organization	name: _DF	RMS			
HOURLY EQUI	PMENT CO	<u>OST</u>				
Basic Machine:		S Series II L	GP			
Horsepower:	240					
Blade Type:	Straight					
Attachment:	NA					
Shift Basis:	1 per day					
Data Source:	(CRG)			<u>—</u>		
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/H			\$114.76	NA		
Operating Cost/H			\$91.98	100		
Ripper own. Cost/H			\$0.00	NA		
Ripper op. Cost/H			\$0.00	0		
Operator Cost/H	our:		\$41.30	NA		
MATERIAL QU	ANTITIES					
Initial Volume: Swell factor: Loose volume:	12,947 1.000 12,947 LCY					
Source of estimated		2022 CC	eV Drovidos	LEstimoto		
Source of estimated		Cat Hand	&V Provided book	Estimate		
HOURLY PROD	<u>UCTION</u>					
Average push distant Unadjusted hourly p		50 feet 800.0 LCY/	/hr			
	_					
Materials consistence		KOCK,	оону пррес	l or blasted 0.6		
Average push gradie Average site altitude		feet				
Material weight:	2,800	lbs/LCY			_	
Weight description:	Granit	e - Broken				
Job Condition Corre				Source		
	rator Skill:		750	(AVG.)		
Material co			600	(CAT HB)		
Dozin	g method:	1.	000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3005

Adjusted unit production: 240.40 LCY/hr
Adjusted fleet production: 240.4 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.032/LCY

Total job time: 53.86 Hours
Total job cost: \$13,359

Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIF	ICATION				
Task #: A0502	State:	Colorado		Ahhmaviation	None
Date: A0502 11/20/2023		Teller		Abbreviation: Filename:	None M244-A0502
10:08:02 Pl	•	101101		T Heliame.	1112 1 1 1103 02
User: ZTT					
Agency or organ	nization name: DI	RMS			
HOURLY EQUIPME	ENT COST				
Basic Machine: Cat	D10T - 10SU				
Horsepower: 574			<u> </u>		
	ni-Universal				
Attachment: NA					
	er day				
Data Source: (CF	RG)		<u>—</u>		
Cost Breakdown:					
0 11 0 4/11		Φ1 7 0. c0	<u>Utilization %</u>		
Ownership Cost/Hour: Operating Cost/Hour:		\$178.69 \$160.22	NA 100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:	-	\$41.30	NA		
MATERIAL QUANT Initial Volume: 1,95: Swell factor: 1.00	8,360				
	8,360 LCY	_			
Source of estimated volur	ne: 2022 CC	— &V Provideo	l Estimate		
Source of estimated swell			- Estimate		
HOURLY PRODUCT	<u>rion</u>				
Average push distance:	650 feet				
Unadjusted hourly produc	250.0 LCY	/hr			
Materials consistency des	cription: Consol	idated stock	pile 1.0		
Average push gradient:	-30 %				
Average site altitude:	9,500 feet	<u> </u>			
Material weight:	2,800 lbs/LCY				
Weight description:	Granite - Broken				
Job Condition Correction Operator S		750	Source (AVG.)		
Material consists		000	(CAT HB)		
		1/1/1/	WAL HD		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7855

Adjusted unit production: 274.93 LCY/hr
Adjusted fleet production: 549.86 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$1.383/LCY

Total job time: 3,561.56 Hours
Total job cost: \$2,708,298

: Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
					111700211
<u>PROJECT IDENTIFI</u>	<u>ICATION</u>				
Task #: A0503	State:	Colorado		Abbreviation:	None
Date: 11/20/2023	County:	Teller		Filename:	M244-A0503
10:08:56 PM	M			_	
User: ZTT					
Agency or organ	nization name: DF	RMS			
HOURLY EQUIPME	ENT COST				
Basic Machine: Cat	D7R DS Series II L	GP			
Horsepower: 240			<u> </u>		
	night				
Attachment: NA	_		<u>—</u>		
	er day		<u></u>		
Data Source: (CR	RG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$114.76	NA		
Operating Cost/Hour:		\$91.98	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$248.04 \$248.04				
MATERIAL QUANT					
Initial Volume: 377,		_			
Swell factor: 1.000					
Loose volume: 377,	595 LCY	<u>—</u>			
Source of estimated volur	ne: 2022 CC	&V Provided	l Estimate		
Source of estimated swell	factor: Cat Hand	book			
	TVON.				
HOURLY PRODUCT	<u>TION</u>				
Average push distance:	400 feet				
Unadjusted hourly produc	tion: 180.4 LCY	'hr			
Materials consistency des	cription: Consol	idated stock	pile 1.0		
Average push gradient:	-30 %				
Average site altitude:	9,500 feet				
Material weight:	2,800 lbs/LCY			<u> </u>	
Weight description:	Granite - Broken				
Job Condition Correction			Source		
Operator S		750	(AVG.)	,	
Material consiste		000	(CAT HB)		
Dozing met	thod: 1	000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6546

Adjusted unit production: 118.09 LCY/hr
Adjusted fleet production: 118.09 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$2.100/LCY

Total job time: 3,197.52 Hours

Total job cost: \$793,120

TRUCK/LOADER TEAM WORK

Task description: Site: Cresson Project		sson Mine Area - Permit Action			Permit/Job#: M	1980244
Site. Cresson Project	·	1 crimit Actio	on. <u>2023</u>		1 CIMI(100#	1700244
PROJECT IDEN	NTIFICATION	<u>I</u>				
Task #: A050)4	State: Colora	ado	Ab	breviation: No	ne
		County: Teller			Filename: M2	244-A0504
	55 PM					
		55146				
Agency or	r organization nai	me: DRMS				
HOURLY EQU	PMENT COS	<u>T</u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
r	Fruck Loader Tea		777F	_		
Supr	oort Equipment -I		Γ 992K D10T - 10SU			
Տարբ		ump Area: NA	D101 - 1030			
Road M	Iaintenance –Mot	or Grader: CA	Т 16М			
-	-Wa	ater Truck: Wat	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	nce Equipment
Cost Breakdown.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	st/hour: \$2,459.	17				
MATERIAL QU	<u>IANTITIES</u>					
Initial volume		CCY		factor: 1.215		
Loose volume	E: 81,54	LCY				
	ource of estimated		CC&V Provided	Estimate		
Source	e of estimated swe		Handbook			
	Material Purch	ase Cost: \$0.00 otal Cost: \$0.00				
	1	Ψυ.υς				
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (wei	ight) Basis:					
Material			Pounds/LCY			
Descr Rated Pa	ription: $\frac{\text{Top So}}{200,00}$		Pounds			
Kateu Pa	ay10au200,00	, o	i ounus			

Payload Capacity	125.00	LCY	,			
T						
Truck Bed (volume) Basis Struck Volume:		LCV				
Heaped Volume:	<u>60.60</u> 78.80	LCY LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
ragusted volume.	70.00	LC I				
Fi	nal Truck Volum	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			D	last Cias Class	NIA	
Rated Capacity:	16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:		Other - rock/di)-120%) 1.100		
Adjusted Capacity:	17.600	LCY				
Job Condition Correctio	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE			
300 Efficiency.						
Net Correction:	0.830	0.813				
Net Correction:			asses Required to	Fill Truck:	4	nasses
Net Correction: Loading Tool Cycle Tim	ne: Numbe	0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	ne: Number ovels: e vs. Job Condition the within this Bases – Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to		.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA	ne: Number ovels: e vs. Job Condition within this Bases — Material Description.):	er of Loading Tool Pool Rating: NA Sic Rating: NA Cription: Maneuver: NA		Dump: 0	.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader	ne: Number ovels: e vs. Job Condition us within this Bases – Material Descent.): The second of the	er of Loading Tool Pool Rating: NA Sic Rating: NA Cription: Maneuver: NA		Dump: 0	.100 0.625 mi	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): rs - Unadjusted Bases	er of Loading Tool P on Rating: NA Sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T		Dump: 0	.100 0.625 mi	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases –	er of Loading Tool P on Rating: NA Sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T	ime (load, dump, i	Dump: 0 maneuver): Factor (min.	.100 0.625 mi) Source	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Number ovels: e vs. Job Condition ue within this Bases s – Material Descent.): rs - Unadjusted Bases l: Mixed material : No adjustme	er of Loading Tool Pool Rating: NA Sic Rating: NA Pription: Maneuver: NA Basic Loader Cycle Terrial 0.02	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020	.100 0.625 mi) Source (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases: Biss Mixed material is: No adjustments: Common own: Constant opens	on Rating: NA	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100 0.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases: Biss Mixed material is: No adjustments: Common own: Constant opens	on Rating: NA	ime (load, dump, pable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 Source (Cat HB) (Cat	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases: Biss Mixed material is: No adjustments: Common own: Constant opens	on Rating: On Rating: NA NA Rating: NA NA Rating: NA Rating: NA Rating: NA Rating: NA Rating: NA NA Rating: NA Rating: NA NA Rating: NA NA NA NA NA NA	ime (load, dump, reable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060	.100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases: Biss Mixed material is: No adjustments: Common own: Constant opens	on Rating: NA sic Rating: NA eription: NA Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not applic vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 0.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases: Biss Mixed material is: No adjustments: Common own: Constant opens	on Rating: NA sic Rating: NA eription: NA Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not applic vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060	.100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases: Biss Mixed material is: No adjustments: Common own: Constant opens	on Rating: NA sic Rating: NA eription: NA Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not applic vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 0.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe Truck Cycle Time: Truck Exchange Ti	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): The second of the second of the second over th	on Rating: On Rating: NA NA Pription: Maneuver: NA Basic Loader Cycle Townership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load Minutes	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565 1.795	.100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition us within this Bass s – Material Description.): The second of the second over the seco	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle Telephonership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi O.625 mi O.625 mi O.625 mi O.626 mi O.627 mi O.628 Mi	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2595.00	1.80	3.00	4.80	1550	1.865

Haul Time: 1.865 minutes

Return Route:

Tetali Toute.							
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	2595.00	-1.80	3.00	1.20	3503	0.939	

Return Time: 0.939 minutes
Total Truck Cycle Time: 6.636 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

636.56 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 528.35 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,585.04 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 61.21
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$150,525

Cresson Project						eading	
		Per	mit Action:	2023		_ Permit/Job#:	M1980244
PROJECT IDENT	CIFICATIO	<u>N</u>					
Task #: A0505 Date: 11/20/2 10:10:4 User: ZTT	2023	State: County:	Colorado Teller			Abbreviation: Filename:	None M244-A0505
Agency or o	organization r	name: DI	RMS				
HOURLY EQUIP	MENT CO	ST					
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source: Cost Breakdown: Ownership Cost/Ho	Cat D7R DS 240 Straight NA 1 per day (CRG)	Series II L	S114.76		<u>lization %</u> NA		
Operating Cost/Ho	ur:		\$91.98		100		
Ripper own. Cost/Ho			\$0.00		NA 25		
Ripper op. Cost/Ho Operator Cost/Ho			\$0.00 \$41.30		25 NA		
MATERIAL OUA	NTITIES						
Swell factor:	67,115 1.215		_				
Initial Volume: Swell factor:	67,115						
Initial Volume: Swell factor:	67,115 1.215 81,545 LCY	2022 CC Cat Hand	&V Providec	l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated v	67,115 1.215 81,545 LCY volume:			l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s	67,115 1.215 81,545 LCY volume: swell factor: UCTION pe:		lbook	l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated v Source of estimated s HOURLY PRODU	67,115 1.215 81,545 LCY volume: swell factor: UCTION ee: oduction:	Cat Hand 400 feet 180.4 LCY	lbook				
Initial Volume: Swell factor: Loose volume: Source of estimated volume of estimated setimated se	67,115 1.215 81,545 LCY volume: twell factor: UCTION tee: oduction: v description: nt:30 %	Cat Hand 400 feet 180.4 LCY	/hr				
Initial Volume: Swell factor: Loose volume: Source of estimated volumes of estimated selections. HOURLY PRODUCTION Average push distance Unadjusted hourly productions. Average push gradient	67,115 1.215 81,545 LCY volume: swell factor: UCTION re: oduction: description: nt: -30 % 9,500	Cat Hand 400 feet 180.4 LCY	/hr				
Initial Volume: Swell factor: Loose volume: Source of estimated volumes of estimated volumes HOURLY PRODITION Average push distance Unadjusted hourly promote the series of the series	67,115 1.215 81,545 LCY volume: swell factor: UCTION re: oduction: description: nt: -30 % 9,500	Cat Hand 400 feet 180.4 LCY Loose Feet bs/LCY	/hr				
Initial Volume: Swell factor: Loose volume: Source of estimated volume of estimated volume of estimated source of estimated so	67,115 1.215 81,545 LCY volume: swell factor: UCTION re: oduction: 1,600 1 Top So	Cat Hand 400 feet 180.4 LCY Loose Feet bs/LCY bil	/hr stockpile 1.2		Source (AVG)		
Initial Volume: Swell factor: Loose volume: Source of estimated volume of estimated volume of estimated source of estimated so	67,115 1.215 81,545 LCY volume: swell factor: UCTION ee: oduction: 1: -30 % -3,500 : 1,600 : Top So	Cat Hand 400 feet 180.4 LCY Loose Feet bs/LCY oil	/hr		Source (AVG.) (CAT HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 248.19 LCY/hr
Adjusted fleet production: 248.19 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.999/LCY

Total job time: 328.56 Hours \$1,496

BULLDOZER RIPPING WORK

	Task description:	_ M. C	resson Mine Area - Top	soil - 10185 - F	Ripping			
Site:	Cresson Projec	t	Permit Action:	2023	Per	mit/Job#:	M1980	244
	PROJECT IDE	NTIFICATION	<u>ON</u>					
	Task #: A050	06	State: Colorado		Abbre	viation:	None	
	Date: 11/2	1/2023 :36 PM	County: Teller			lename:	M244-A	0506
	User: ZTT							
		· ·	name: DRMS					<u></u>
	HOURLY EQU							
	Basic M		D7R DS Series II LGP		Horsepower:		240	
	Ripper Attac	chment: 3-S	nank Ripper		Shift Basis:		per day	
					Data Source: _	((CRG)	
	Cost Breakdown:			1	Utilization %			
		Ownership Co	st/Hour	\$114.76	NA			
		Operating Co		\$91.98	100			
	Ripper	Ownership Co		\$9.06	NA			
	Rippe	er Operating Co	st/Hour:	\$5.02	100			
		Operator Co		\$41.30	NA			
		Total Unit Co	st/Hour:	\$262.12				
		Total Fleet Co	st/Hour: \$262	2.12				
	MATERIAL QU	IANTITIES	Solo	ected estimating	method: Area			
	Alternate Methods		SCIC	cted estimating	method. Area			
		=	Bank Volume:	NT A	BCY		NIA	
smic: Area:	NA 83.20	acres	Rip Depth (ft):	NA 2.50		35,573	NA	BCY or C
neu.	-					,5,575		_ Der or e
		Source of estin	nated quantity: 2022 C	C&V Provided	Estimate			
	HOURLY PRO	DUCTION						
	Seismic:							
		S	Seismic Velocity:	NA	feet/secon	nd		
	Area:							
	<u>Hou.</u>	Average	e Ripping Depth:	2.45	feet/pass			
			e Ripping Width:	6.50	feet/pass			
			Ripping Length:	400.00	feet/pass			
			ige Dozer Speed:	88.00	feet/minu			
		_	Maneuver Time:	0.25	minutes/p			
			ion per unit area:	0.747	acres/hou	r		
	Job Condition Cor	_						
	Unac	djusted Hourly	Unit Production:	0.747	Acres/hr			
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HE	*		
		Job Efficiency:		0.83	(1 shift/d	•		
			Net Correction:	0.83	multiplie	L		
			Hourly Unit Production:	0.62	Acres/hr			
		· ·	Hourly Fleet Production:	0.62	Acres/hr			
	JOB TIME ANI	D COST						
	Fleet size:	1	Grader(s)	Total job tim	ne: 134	4.23	Н	ours
	Unit cost:	\$422.878	Per acre	Total job cos	st: \$35	,183		

TRUCK/LOADER TEAM WORK

Task description:	M. Cres	sson Mine Area -	Topsoil - Ruby I	Rd - Transport		
Site: Cresson Project	;	Permit Action	on: 2023	1	Permit/Job#: M	1980244
PROJECT IDEN	NTIFICATION	1				
Task #: A050 Date: 11/22	07	State: Colora County: Teller	ado	Ab	breviation: No Filename: M2	ne 244-A0507
	r organization na	me: DRMS				
HOURLY EQUI	IPMENT COS	<u>Γ</u>		Shift bas	is: 1 per day	
	Fruck Loader Tea		Equipment Descri 777F	ption		
	Truck Loader Tea		777F Г 992K			
Supp	oort Equipment -I		D10T - 10SU			
Pood M	-D Iaintenance –Mot	ump Area: NA	Г 16М			
Koau W			er Tanker, 7,000	Gal.		
-						
Cost Breakdown:	Truck/Lo Truck	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenan Motor Grader	ce Equipment Water Truck
0/11/11				•		
%Utilization-machine:	100 \$206.48	100	100	NA NA	\$212.21	25
Ownership cost/hour: Operating cost/hour:	\$206.48 \$160.10	\$229.24 \$200.29	\$178.69 \$160.22	NA NA	\$212.21 \$31.22	\$86.29 \$28.44
%Utilization-riper:	\$100.10 NA	\$200.29	\$160.22 NA	NA NA	\$31.22 NA	\$28.44 NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co		<u> 17 </u>				
MATERIAL QU		CCV	G 11	6 . 1015		
Initial volume Loose volume		CCY LCY		factor: 1.215		
	ource of estimated e of estimated swe Material Purch To	ell factor: Cat H		Estimate		
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity: Truck Payload (we	ight) Basis:					
	ription: Top So		Pounds/LCY			
Rated Pa	ayload: 200,00	00	Pounds			

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity			Buck	ket Size Class: N	ΙA	
Rated Capacity:	16.000	LCY (heaped)			12.1	
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100	0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	<u>s:</u>	Sit	e Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	3)		
Job Efficiency:	0.830	0.830	(CAT HB	3)		
voe Emerency:						
Net Correction:	0.830	0.813				
		0.813	ses Required to	Fill Truck:	4 1	passes
Net Correction:	: Numbe	1	ses Required to	Fill Truck:	1	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time	: Numbe	er of Loading Tool Pas	ses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	Numbe rels: vs. Job Conditio	on Rating: NA	ses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	vels: vs. Job Condition within this Basin Material Description	on Rating: NA	ses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	Numberels: vs. Job Condition within this Basin Material Descript:	on Rating: NA	ses Required to	Fill Truck: Dump:0.100		passes
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	Numberels: vs. Job Condition within this Basin Material Descript:	on Rating: In Rating: NA NA In NA		Dump: 0.100		
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vs. Job Condition within this Basis Material Descript: Material D	on Rating: In Rating: NA NA In NA		Dump: 0.100)	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material:	vs. Job Condition within this Basis Material Descript: Material D	on Rating: In Rating: NA In Rating: NA In NA	ne (load, dump, r	Dump: 0.100 maneuver): 0)	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	vs. Job Condition within this Basis Material Descript: Material D	on Rating: NA	ne (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000) Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vs. Job Condition within this Basis Material Description - Material Descripti	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate the reship of trucks and	ne (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Basis Material Description - Material Description - Unadjusted Basis Mixed material No adjustment Common ow Constant ope	on Rating: On Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Time ial 0.02 nt - factor not applicate mership of trucks and icration -0.04	ne (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vs. Job Condition within this Basis Material Description - Material Description - Unadjusted Basis Mixed material No adjustment Common ow Constant ope	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate mership of trucks and ic ration -0.04 get 0.00	ne (load, dump, roble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Basis Material Description - Material Description - Unadjusted Basis Mixed material No adjustment Common ow Constant ope	on Rating: On Rating: NA NA ription: Maneuver: NA asic Loader Cycle Time ial 0.02 nt - factor not applicate the reship of trucks and interesting of trucks and intere	ne (load, dump, roble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Basis Material Description - Material Description - Unadjusted Basis Mixed material No adjustment Common ow Constant ope	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Time and the control of trucks and the cration -0.04 get 0.00 Net Cycle Time Adjusted Loader	ne (load, dump, roble 0.00 loaders -0.04 loa	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Basis Material Description - Material Description - Unadjusted Basis Mixed material No adjustment Common ow Constant ope	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Time and the control of trucks and the cration -0.04 get 0.00 Net Cycle Time Adjusted Loader	ne (load, dump, roble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vs. Job Condition within this Basis Material Description - Material Description - Unadjusted Basis Mixed mater No adjustment Common ow Constant ope Nominal targ	on Rating: On Rating: NA Ic Rating: NA Iniption: Maneuver: NA Is asic Loader Cycle Time and the control of trucks and the cration -0.04 Is asic Loader Cycle Time and the cration -0.04 Is asic Loader Cycle Time and the cration -0.04 Is asic Loader Cycle Time and the cration -0.04 Is a Cycle Time Adjusted Loader Cycle Time Adjusted L	ne (load, dump, roble 0.00 loaders -0.04 loa	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vs. Job Condition within this Basis Material Description - Material Description - Unadjusted Basis Mixed mater No adjustment Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Time and the control of trucks and the cration -0.04 get 0.00 Net Cycle Time Adjusted Loader	ne (load, dump, roble 0.00 loaders -0.04 loa	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vs. Job Condition within this Basis — Material Describing: Material Describing: Mixed material No adjustment Common ow Constant open Nominal targetter. Modern Mixed material No adjustment Common ow Constant open Nominal targetter.	on Rating: On Rating: NA Ic Rating: NA Iniption: Maneuver: NA Is asic Loader Cycle Time and the control of trucks and the cration -0.04 Is asic Loader Cycle Time and the cration -0.04 Is asic Loader Cycle Time and the cration -0.04 Is asic Loader Cycle Time and the cration -0.04 Is a Cycle Time Adjusted Loader Cycle Time Adjusted L	ne (load, dump, roble 0.00 loaders -0.04 loaders -Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

5001.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5001.00	-3.00	3.00	0.00	3503	1.806

Haul Time: **1.806** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min)

3.00

3.00

Return Time: 2.048 minutes
Total Truck Cycle Time: 7.686 minutes

2853

2.048

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

549.60 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour

Adjusted for job efficiency: 456.17 LCY/Hour

Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,368.50 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

6.00

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 74.31
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$182,745

Task description:	M. (Cresson Min	e Area -Top	soil - Rul	y Rd - Dozer S	Spreading	
Cresson Project		Per	mit Action:	2023		Permit/Job#:	M1980244
PROJECT IDEN	TIFICATI	ON					
Task #: A0508	3	State:	Colorado			Abbreviation:	None
Date: 11/20/		County:	Teller			Filename:	M244-A0508
10:12:	06 PM	·				_	
User: ZTT							
Agency or	organization	name: DI	RMS				
HOURLY EQUI	PMENT CO	<u>OST</u>					
Basic Machine:	Cat D7R D	S Series II L	GP				
Horsepower:	240						
Blade Type:	Straight						
Attachment:	NA						
Shift Basis:	1 per day			_			
Data Source:	(CRG)			<u></u>			
Cost Breakdown:							
				<u>U</u>	tilization %		
Ownership Cost/H			\$114.76		NA		
Operating Cost/H			\$91.98		100		
Ripper own. Cost/H			\$0.00		NA 25		
Ripper op. Cost/H			\$0.00		25		
Operator Cost/H	our:		\$41.30		NA		
MATERIAL QU. Initial Volume:	81,481	<u> </u>					
Swell factor: _ Loose volume:	1.215 98,999 LCY	7					
Source of estimated			— &V Provided	l Estimate	;		
Source of estimated	swell factor:	Cat Hand	lbook				
HOURLY PROD	UCTION						
Average push distan	ce:	220 feet					
Unadjusted hourly p		266.4 LCY	/hr				
Materials consistence	y description	n: Loose	stockpile 1.2				
			stockpile 1.2				
Materials consistence Average push gradie Average site altitude	ent:30 %	6	stockpile 1.2				
Average push gradie	ent:30 % e:9,500	6	stockpile 1.2				
Average push gradie Average site altitude	ent:30 % e:9,500	6) feet	stockpile 1.2				
Average push gradic Average site altitude Material weight: Weight description: Job Condition Corre	ent:30 % e:9,500	6 0 feet 1 lbs/LCY Soil			Source (AVC)		
Average push gradic Average site altitude Material weight: Weight description: Job Condition Corre	ent:30 % e:9,500 1,600 	6 0) feet 0) lbs/LCY Soil 0	.750 .200		Source (AVG.) (CAT HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 366.51 LCY/hr
Adjusted fleet production: 366.51 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.677/LCY

Total job time: 270.11 Hours
Total job cost: \$67,000

BULLDOZER RIPPING WORK

Task description:	M. Cresson Mine Area - To	psoil - Ruby Rd	l - Ripping	
Site: Cresson Project	Permit Action:	2023	Permit/Jo	b#: M1980244
PROJECT IDE	NTIFICATION _			
Task #: A05	09 State: Colorado		Abbreviation	n: None
Date: 11/2 2:03	1/2023 County: Teller :18 PM		Filenam	
User: ZTT				
	or organization name: DRMS			
•	IPMENT COST		**	2.10
	Machine: Cat D7R DS Series II LGP		Horsepower:	240
Ripper Atta	chment: 3-Shank Ripper		Shift Basis: Data Source:	1 per day (CRG)
Cost Breakdown:				<u> </u>
			Utilization %	
	Ownership Cost/Hour:	\$114.76	NA NA	
D.	Operating Cost/Hour:	\$91.98	100	
	r Ownership Cost/Hour:	\$9.06 \$5.02	NA 100	
кірре	er Operating Cost/Hour: Operator Cost/Hour:	\$41.30	100 	
	Total Unit Cost/Hour:	\$262.12	IVA	
	Total Fleet Cost/Hour: \$26	62.12		
MATERIAL Q				
Alternate Methods		lected estimating	g method: Area	
		37.	D CVV	374
mic: NA	Bank Volume:	NA 250	BCY 205 642	NA DCV
rea: 73.30	acres Rip Depth (ft):	2.50	Volume: 295,643	BCY or
	Source of estimated quantity: 2022	CC&V Provided	Estimate	
HOURLY PRO	<u>DUCTION</u>			
Seismic:				
	Seismic Velocity:	NA	feet/second	
A	·			
Area:	Average Ripping Depth:	2.45	feet/pass	
	Average Ripping Depth. Average Ripping Width:	6.50	feet/pass	
	Average Ripping Length:	300.00	feet/pass	
	Average Dozer Speed:	88.00	feet/minute	
	Average Maneuver Time:	0.25	minutes/pass	
	Production per unit area:	0.734	acres/hour	
Job Condition Cor	rection Factors			
Una	djusted Hourly Unit Production:	0.734	Acres/hr	
	Site Altitude:	9,500	feet	
	Altitude Adj:	1.00	(CAT HB)	
	Job Efficiency:	0.83	(1 shift/day)	
	Net Correction:	0.83	multiplier	
	Adjusted Hourly Unit Production:		Acres/hr	
	Adjusted Hourly Fleet Production:	0.61	Acres/hr	
JOB TIME AN	<u>D COST</u>			
Fleet size:	1 Grader(s)	Total job tim	ne: 120.31	Hours
Unit cost:	\$430.227 Per acre	Total job co	st: \$31,536	

TRUCK/LOADER TEAM WORK

Task description:	M. Cres	sson Mine Area -	Topsoil - AJAX	- Transport		
Site: Cresson Projec	<u>t</u>	Permit Action	on: <u>2023</u>		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	1				
Task #: A05		State: Colora County: Teller	ndo	Ab	breviation: No Filename: M2	one 244-A0510
2:08	:50 PM					
User: ZTT		DDMC				
Agency o	r organization nai	me: DRMS				
HOURLY EQU	IPMENT COS	<u>T</u>		Shift bas	is: 1 per day	
	Truck Loader Tea		Equipment Descri	ption		
	Truck Loader Tea		777F Γ992K			
Sup	port Equipment -I		D10T - 10SU			
Road N	ם- Maintenance –Mot	1	Г 16М			
	-Wa	ater Truck: Wat	er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support I	Equipment	Maintenar	nce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA NA	\$0.00	NA \$0.00	NA NA	NA \$0.00	NA \$0.00
Ripper own. cost/hour: Ripper op. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,459.	17				
MATERIAL OI	TA NITTTITE					
MATERIAL QU		COV	a			
Initial volume Loose volume		CCY 14 LCY	Swell	factor: 1.215		
	ource of estimated		CC&V Provided	Estimate		
	e of estimated swe		Iandbook	Littilate		
	Material Purch					
	T	otal Cost: \$0.00)			
HOURLY PRO	<u>ODUCTION</u>					
Truck Capacity:						
Truck Payload (we						
Material		~i1	Pounds/LCY			
Rated P	eription: Top So Payload: 200,00		Pounds			

Payload Capacity:	125.00	LC	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	r of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
D . 10	4.5.000			ket Size Class:	NA	_
Rated Capacity:	16.000	LCY (heaped		1000() 1 100		_
Bucket Fill Factor:	1.100		dirt mixtures (100	0-120%) 1.100		=
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	ns:		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:		1	Passes Required to	Fill Truck	4	naccec
Loading Tool Cycle Time	e: Numbe	1	Passes Required to	Fill Truck:	41	passes
	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base — Material Desc	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Base Material Desc .):	on Rating: NA sic Rating: NA rription:	Passes Required to			passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc .):	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to		100	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Bas Material Desc):	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA		Dump: 0.		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Base Material Desc i): S - Unadjusted B	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Bas — Material Desc :): S - Unadjusted B	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA sasic Loader Cycle		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors	vels: vs. Job Condition within this Bas — Material Desc a): y s - Unadjusted B Mixed material	er of Loading Tool on Rating: NA sic Rating: NA rription: Maneuver: NA sasic Loader Cycle	Time (load, dump, 1	Dump: 0. maneuver): Factor (min.)	100 0.625 min Source	
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Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed material No adjustme Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA State Loader Cycle Strial 0.02 Sent - factor not apple whership of trucks a seration -0.04 Set 0.00 Set Cycle Net Loader Loader Loader Loader Loader Loader Loader Loader Net Loader	Time (load, dump, ricable 0.00 and loaders -0.04 Time Adjustment: bader Cycle Time: d Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Tiuui Itou	ic.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2525.00	5.00	3.00	8.00	985	2.654

Haul Time: **2.654** minutes

Return Ro	oute:			-		
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2525.00	-5.00	3.00	-2.00	3503	0.759

Return Time: 0.759 minutes Total Truck Cycle Time: 7.245 minutes

Loading Tool unit

Adjusted for job efficiency: 1,332.22 LCY/Hour Production 1,605.09 LCY/Hour Truck Unit Production 583.05 LCY/Hour Adjusted for job efficiency: 483.93 LCY/Hour Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 3 Truck(s)

> Adjusted hourly truck team production: 1,451.80 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 44.59 Hours Unit cost: \$1.846 /LCY Total job cost: **\$109,654**

BULLDOZER WORK

Task description:	M. C	resson Min	e Area -Top	soil - AJA	X - Dozer Spi	reading	
Cresson Project		Per	mit Action:	2023		Permit/Job#:	M1980244
PROJECT IDEN	TIFICATIO	<u>ON</u>					
		State: County:	Colorado Teller			Abbreviation: Filename:	None M244-A0511
User: ZTT	• .•	. DI	NAC				
Agency or	organization	name: DF	RMS				
HOURLY EQUI	PMENT CO	<u>OST</u>					
Basic Machine:	Cat D7R D5	S Series II L	GP				
Horsepower:	240						
Blade Type:	Straight						
Attachment:	NA						
Shift Basis:	1 per day			<u> </u>			
Data Source:	(CRG)			_			
Cost Breakdown:							
				<u>U</u>	<u>tilization %</u>		
Ownership Cost/H			\$114.76		NA		
Operating Cost/H			\$91.98		100		
Ripper own. Cost/H	our:		\$0.00		NA		
Ripper op. Cost/H	our:		\$0.00		25		
Operator Cost/H	our:		\$41.30		NA		
MATERIAL QU Initial Volume: Swell factor:	48,892 1.215		_				
Loose volume:	59,404 LCY						
Source of estimated Source of estimated		2022 CCc Cat Hand	&V Provided book	Estimate			
HOURLY PROD	<u>UCTION</u>						
Average push distan Unadjusted hourly p		50 feet 800.0 LCY/	/hr				
Materials consistence	y description:	Loose	stockpile 1.2				
Average push gradie	ent: -30 %						
Average site altitude		feet					
Material weight:	_1,600	lbs/LCY				<u> </u>	
Weight description:	Top S	oil					
Job Condition Corre					Source		
	rator Skill:		750		(AVG.)		
Material co	onsistency:	1.	200		(CAT HB)		
Dozin	g method:	1.	000		(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 1,100.64 LCY/hr
Adjusted fleet production: 1100.64 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.225/LCY

Total job time: 53.97 Hours
Total job cost: \$13,387

BULLDOZER RIPPING WORK

Task description:	M. Cresson Mine Area - To	psoil - AJAX - R	Ripping			_
Site: Cresson Project	Permit Action:	2023	Permi	t/Job#:	M1980244	
PROJECT IDENTIFI	<u>CATION</u>					
Task #: A0512	State: Colorado		Abbrevia	ition:	None	
Date: 11/21/2023 2:03:56 PM	County: Teller		Filen		M244-A0512	
User: ZTT	ization name: DRMS					
HOURLY EQUIPME						
•			11	2	40	
Basic Machine:			Horsepower: Shift Basis:		40	
Ripper Attachment:	3-Shank Ripper		Data Source:		er day RG)	
Cost Breakdown:						
_			Utilization %			
	ship Cost/Hour:	\$114.76	NA NA			
	ating Cost/Hour:ship Cost/Hour:	\$91.98	100 N A			
	ating Cost/Hour:	\$9.06 \$5.02	NA 100			
	rator Cost/Hour:	\$41.30	NA			
-	Unit Cost/Hour:	\$262.12				
Total I	Fleet Cost/Hour: \$26	52.12				
MATERIAL QUANTI			mathad. Ama			
Alternate Methods:	Sei	lected estimating	method: Area			=
	D 1 1/1	N. A.	DOM		T.A.	
mic: $\frac{NA}{33.31}$ acro	Bank Volume: es Rip Depth (ft):	NA 2.50	BCY Volume: 134,3		NA P.C.	Y or (
				550	вс	1 01 (
Source	of estimated quantity: 2022	CC&V Provided	Estimate			
HOURLY PRODUCT	<u>'ION</u>					
Seismic:						
	Seismic Velocity:	NA	feet/second			
Aras						
Area:	Average Ripping Depth:	2.45	feet/pass			
	Average Ripping Width:	6.50	feet/pass			
	Average Ripping Length:	100.00	feet/pass			
	Average Dozer Speed:	88.00	feet/minute			
	Average Maneuver Time:	0.25	minutes/pas	S		
]	Production per unit area:	0.646	acres/hour			
Job Condition Correction	Factors					
Unadjusted	Hourly Unit Production:	0.646	Acres/hr			
	Site Altitude:	9,500	feet (CAT HB)			
			(CATHR)			
	Altitude Adj:	1.00				
	Job Efficiency:	0.83 0.83	(1 shift/day)			
Δι	Job Efficiency: Net Correction:	0.83 0.83	(1 shift/day) multiplier			
	Job Efficiency:	0.83 0.83 0.54	(1 shift/day)			
	Job Efficiency: Net Correction: djusted Hourly Unit Production: justed Hourly Fleet Production:	0.83 0.83 0.54	(1 shift/day) multiplier Acres/hr			
Ad	Job Efficiency: Net Correction: djusted Hourly Unit Production: justed Hourly Fleet Production:	0.83 0.83 0.54	(1 shift/day) multiplier Acres/hr Acres/hr		Hours	

TRUCK/LOADER TEAM WORK

Task description:	M. Cres	sson Mine Area -	Topsoil - Crushe	er - Transport		
Site: Cresson Project	,	Permit Action	on: 2023	1	Permit/Job#: M	1980244
PROJECT IDEN	NTIFICATION	I				
Task #: A051 Date: 11/22 2:09:	3	State: Colora County: Teller	ado	Ab	breviation: No M2	ne 244-A0513
User: ZTT		DDMG				
Agency of	r organization nai	ne: DRMS				
HOURLY EQUI	IPMENT COS	<u>r</u>		Shift bas	is: <u>1 per day</u>	
	Fruck Loader Tea		Equipment Descri 777F	ption		
		-Loader: CA	Г 992К			
Supp	oort Equipment -I	Load Area: Cat ump Area: NA	D10T - 10SU			
Road M	Iaintenance –Mot	1	Г 16М			
	-Wa	ater Truck: Wat	er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support I	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper: Ripper own. cost/hour:	NA NA	\$0.00	NA \$0.00	NA NA	NA \$0.00	NA \$0.00
Ripper op. cost/hour:	NA NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$1,270.82	Support:	\$380.21	Maint:	\$407.85
Total work team co	est/hour: \$2,058.	88				
MATERIAL QU	JANTITIES					
Initial volume	,	CCY		factor: 1.215		
Loose volume	59,40	LCY				
	ource of estimated		CC&V Provided Iandbook	Estimate		
Source	e of estimated swe Material Purch					
		otal Cost: \$0.00				
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (wei						
Material	weight: $\frac{1,600}{\text{Top So}}$	ail	Pounds/LCY			
Rated Pa	<u> </u>		Pounds			

Payload Capacity	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fi	nal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: 1	NA	_
Rated Capacity	16.000	LCY (heaped)				
Bucket Fill Factor		Other - rock/di		0-120%) 1.100		_
Adjusted Capacity	17.600	LCY	,	,		_
Job Condition Correction	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HE	,		
Net Correction:	0.830	0.912				
		0.813				
Loading Tool Cycle Tin		per of Loading Tool P	asses Required to	Fill Truck:	4 1	passes
	ne: Numb	1	asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim	ne: Numb	per of Loading Tool P	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi ue within this Ba	oer of Loading Tool Planting: NA Sic Rating: NA	asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc	oer of Loading Tool Planting: NA Sic Rating: NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader	ne: Numbovels: e vs. Job Conditi ue within this Ba s – Material Desc	oer of Loading Tool Planting: NA Sic Rating: NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi	ne: Numbovels: e vs. Job Conditing within this Bases – Material Descent.):	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.10		
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade	ne: Numbovels: e vs. Job Conditiue within this Bas – Material Descent): rs - Unadjusted F	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.10	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted E	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle T	· 	Dump: 0.10	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F ss l: Mixed mate	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle T	ime (load, dump, 1	Dump: 0.10 maneuver): 0 Factor (min.)	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustme	per of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Terrial 0.02	ime (load, dump, nable 0.00	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020	00 0.625 minus Source (Cat HB)	
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Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustm o: Common ov n: Constant op	per of Loading Tool Project of Loading Tool Project of Loading: NA Sic Rating: Maneuver: Maneuver: NA Sasic Loader Cycle Transled 0.02 Perial 0.02 Perial 0.04 Perial 0.04 Perial 0.00 Net Cycle Ti	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
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Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ti erial 0.02 ent - factor not applic wnership of trucks and beration -0.04 rget 0.00 Net Cycle Ti Adjusted Load	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ti erial 0.02 ent - factor not applic wnership of trucks and beration -0.04 rget 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (minor Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targer	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F rs l: Mixed mate e: No adjustm o: Common ov n: Constant op t: Nominal tar	ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ti erial 0.02 ent - factor not applic wnership of trucks and beration -0.04 rget 0.00 Net Cycle Ti Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpill Truck Ownership Operation Dump Targe	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustm o: Common ov n: Constant op t: Nominal tar me: 0.80	ion Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Telephone Erial 0.02 Sent - factor not applice wnership of trucks and peration -0.04 rget 0.00 Net Cycle Ti Adjusted Load Net Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

1308.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1308.00	3.70	3.00	6.70	1160	1.246

Haul Time: **1.246** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min)

3.00

-3.70

Return Time: 0.428 minutes
Total Truck Cycle Time: 5.506 minutes

3503

0.428

Loading Tool unit

Optimal No. of Trucks: _____ 2 ___ Truck(s) Selected Number of Trucks: ____ 2 ___ Truck(s)

Adjusted hourly truck team production: 1,273.58 LCY/Hour Adjusted single truck/loader team production: 1,273.58 LCY/Hour Adjusted multiple truck/loader team production: 1,273.58 LCY/Hour

-0.70

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 46.64
 Hours

 Unit cost:
 \$1.617
 /LCY
 Total job cost:
 \$96,033

BULLDOZER WORK

Cresson Project		Peri	mit Action:	2023		Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION	<u>ON</u>					
Task #: A0514	4	State:	Colorado			Abbreviation:	None
	/2023	County:	Teller			Filename:	M244-A0514
	:11 PM	County.	Tener			Pilename.	W1244-A0314
User: $\frac{10.14}{ZTT}$.11 1 1/1					=	
Agency or	organization	name: DR	RMS				
HOURLY EQUI	PMENT CO	<u>OST</u>					
Basic Machine:	Cat D7R D	S Series II Lo	GP				
Horsepower:	240						
Blade Type:	Straight						
Attachment:	NA						
Shift Basis:	1 per day						
Data Source:	(CRG)						
Cost Breakdown:							
COSt DICARGOWII.				<u>Utilizat</u>	ion %		
Ownership Cost/H	lour		\$114.76	N/			
Operating Cost/H			\$91.98	10			
Ripper own. Cost/H			\$0.00	N/			
Ripper op. Cost/H			\$0.00	25			
Tripper op. Cosum	ioui.		Ψ0.00	2.	,		
	Lour		\$41.20	3.7	A		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Ho	sr: \$248.0		\$41.30	N2	Α	_	
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU	\$248.0 sur: \$248.0		\$41.30	N2	A		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU Initial Volume:	\$248.0 \$2		\$41.30	N2	A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor:	\$248.0 \$2		\$41.30	N2	A		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU Initial Volume:	\$248.0 \$2		\$41.30	N	A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor:	\$248.0 \$2	04	\$41.30		A		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume:	\$248.0 \$2	04	 &V Provided		A		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	\$248.0 \$2	2022 CC&	 &V Provided		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated	\$248.0 \$2	2022 CCa Cat Hand	 &V Provided		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distar	### \$248.0 ### \$248.0	2022 CCa Cat Hand	 &V Provided book		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	### \$248.0 ### \$248.0	2022 CCa Cat Hand	 &V Provided book		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Loose volume: Source of estimated Source of estimated HOURLY PROD	## \$248.0 ## \$248.0	2022 CCa Cat Hand 75 feet 594.6 LCY/	 &V Provided book		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distar Unadjusted hourly pu	### \$248.0 ### \$2	2022 CCa Cat Hand 75 feet 594.6 LCY/ : Loose s	&V Provided book		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distar Unadjusted hourly p	### \$248.0 ### ### \$248.0 ### ### ### ### ### ### ### ### ### #	2022 CCa Cat Hand 75 feet 594.6 LCY/ : Loose s	&V Provided book		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distar Unadjusted hourly publication Materials consistence Average push gradie	### \$248.0 ### \$248.0	2022 CCa Cat Hand 75 feet 594.6 LCY/ : Loose s	&V Provided book		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distar Unadjusted hourly publicated Materials consistence Average push gradic Average site altitude	### \$248.6 ### \$248.6 ### \$248.6 ### \$248.6 ### \$248.6 ### \$248.6 ### \$248.6 ### \$248.6 ### \$248.6 ### ### \$248.6 ### ### ### ### ### ### ### ### ####	2022 CCa Cat Hand 75 feet 594.6 LCY/ : Loose s feet lbs/LCY	&V Provided book		A		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distar Unadjusted hourly published hourly published Average push gradic Average push gradic Average site altitude Material weight: Weight description: Job Condition Corre	### \$248.6 ### \$2	2022 CCa Cat Hand 75 feet 594.6 LCY/ : Loose s feet lbs/LCY oil	&V Provided book	Estimate	Source		
Operator Cost/Hou Total unit Cost/Hou Total Fleet Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distar Unadjusted hourly published hourly published Average push gradic Average push gradic Average site altitude Material weight: Weight description: Job Condition Corre	### \$248.6 ### \$2	2022 CC2 Cat Hand 75 feet 594.6 LCY/ : Loose s feet lbs/LCY oil 0.	&V Provided book	Estimate			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 818.05 LCY/hr
Adjusted fleet production: 818.05 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.303/LCY

Total job time: 72.62 Hours
Total job cost: \$18,012

BULLDOZER RIPPING WORK

	Task description:	M. (Cresson Mine Area - Top	soil - Crusher	- Ripping			
Site:	Cresson Projec	t	Permit Action:	2023	Per	mit/Job#:	M198024	14
	PROJECT IDE	NTIFICATI	<u>ON</u>					
	Task #: A05	15	State: Colorado		Abbre	viation:	None	
	Date: 11/2 2:04	1/2023 :32 PM	County: Teller			lename:	M244-A0:	515
	User: ZTT		name: DRMS					
	HOURLY EQU	C						
	Basic M		D7R DS Series II LGP		Horsopower		240	
	Ripper Atta		hank Ripper	 ;	Horsepower: Shift Basis:		er day	
	Kippei Atta		нанк киррег		Data Source:		CRG)	
	Cost Breakdown:							
			~~	****	Utilization %			
		Ownership Co		\$114.76	NA 100			
	Dinnar	Operating Co		\$91.98	100 N A			
		Ownership Cor Operating Co		\$9.06 \$5.02	NA 100			
	Кіррс	Operating Co		\$41.30	NA			
		Total Unit Co		\$262.12	1111			
		Total Fleet Co	ost/Hour: \$262	2.12				
	MATERIAL QU			cted estimating	mathod: Aras			
	Alternate Methods		Sele	cted estimating	method: Area			
		<u>.</u>	Daula Walama	NI A	DCV		NI A	
mic: Area:	NA 60.61	acres	Bank Volume: _ Rip Depth (ft):	NA 2.50	BCY Volume: 24	4,460	NA	BCY or
nca.						14,400		DC 1 OI
			nated quantity: 2022 C	C&V Provided	Estimate			
	HOURLY PRO	<u>DUCTION</u>						
	Seismic:		~					
			Seismic Velocity:	NA	feet/secon	nd		
	Area:							
		Averag	e Ripping Depth:	2.45	feet/pass			
			e Ripping Width:	6.50	feet/pass			
			Ripping Length:	100.00	feet/pass			
			age Dozer Speed:	88.00	feet/minu			
			Maneuver Time:	0.25	minutes/p			
			tion per unit area:	0.646	acres/hou	r		
	Job Condition Cor							
	Una	djusted Hourly	Unit Production:	0.646	Acres/hr			
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HE	*		
			Job Efficiency:	0.83	(1 shift/da	•		
			Net Correction:	0.83	multiplier	Γ		
			Hourly Unit Production:	0.54	Acres/hr			
	IOD DIE CO	·	Hourly Fleet Production:	0.54	Acres/hr			
	JOB TIME ANI	<u>J COST</u>		m . 1: 1 .:			**	
	Fleet size:	1	Grader(s)	Total job tim	e: <u>113</u>	3.08	Hou	rs
	Unit cost:	\$489.015	Per acre	Total job cos	st: \$29	,639		

TRUCK/LOADER TEAM WORK

Task description:		Sson Mine Area -			Downit/Icl-#: N/	1000244
Site: Cresson Project	:	Permit Action	on: 2023		Permit/Job#: M	.1980244
PROJECT IDEN	NTIFICATION	1				
Task #: A051	6	State: Colora	ado	Ab	breviation: No	ne
		County: Teller				244-A0516
	10 PM					
User: ZTT						
Agency or	r organization nai	me: DRMS				
HOURLY EQUI	PMENT COS	Т		Shift bas	is: <u>1 per day</u>	
HOURET EQUI		<u>——</u>	Equipment Descri		is. <u>i per day</u>	
r	Fruck Loader Tea		<i>777</i> F	ption		
		-Loader: CA	Т 992К			
Supp	oort Equipment -I		D10T - 10SU			
Road M	ם- Iaintenance –Mot	ump Area: NA	Т 16М			
Roud IV.			ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo Truck	ader Team Loader	Support l Load Area	Equipment	Maintenan Motor Grader	nce Equipment Water Truck
	Truck	Loader	Load Area	Dump Area	Motor Grader	water fruck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA NA	\$0.00	NA \$0.00	NA NA	NA \$0.00	NA \$0.00
Ripper own. cost/hour: Ripper op. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	8	1	1	0	1	1
Group Subtotals:	Work:	\$3,672.56	Support:	\$380.21	Maint:	\$407.85
-			11		<u>l</u>	
Total work team co	st/nour: \$4,460.	02				
MATERIAL QU	JANTITIES					
Initial volume		CCY	Swall	factor: 1.215		
Loose volume				1actor. 1.213		
	ource of estimated		CC&V Provided	Estimata		
	e of estimated swe		Handbook	Estimate		
	Material Purch					
	T	otal Cost: \$0.00)			
HUIDI A DD	DUCTION					
HOURLY PRO	DUCTION					
Truck Capacity:	Catal Design					
<u>Truck Payload (wei</u> Material v			Pounds/LCY			
	ription: Top So	oil	rounds/LC1			
Rated Pa			Pounds			

Payload Capacity:	125.00	LCY	•			
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY LCY				
Average Volume: Adjusted Volume:	69.70 78.80	LCY				
Adjusted Volume.	78.80	LC I				
Fii	nal Truck Volume	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			n.	1 C' Cl	NT A	
Rated Capacity:	16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:		Other - rock/d)-120%) 1.100		
Adjusted Capacity:	17.600	LCY				
Job Condition Correctio	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HI			
Net Correction:	0.830	0.813				
Net Correction:			assas Raquirad to	Fill Truck	4	nassas
Net Correction: Loading Tool Cycle Time	ne: Numbe	0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	ne: Number ovels: e vs. Job Condition this Bases — Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	ne: Number ovels: e vs. Job Condition this Bases — Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA cription:	asses Required to			passes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	ne: Number ovels: e vs. Job Condition this Bases — Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to		.100	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	ne: Number ovels: e vs. Job Condition within this Bases — Material Description.):	on Rating: NA		Dump: 0	.100	passes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute) Load: NA	ne: Number ovels: e vs. Job Condition us within this Bases – Material Descent.): Mars - Unadjusted B	on Rating: NA		Dump: 0	.100 0.625 mi	
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Mars - Unadjusted Bases	er of Loading Tool P on Rating: NA sic Rating: NA rription: NA Maneuver: NA sasic Loader Cycle T		Dump: 0	.100 0.625 mi	
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Materia Stockpile	ne: Number ovels: e vs. Job Conditions within this Bases – Material Descent.): press - Unadjusted Bases –	on Rating: NA Sic Rating: NA Pription: NA Sasic Loader Cycle T Striat 0.02 Ent - factor not applic	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.625 mi Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition the within this Bases – Material Descent.): More - Unadjusted Bases – Unadjusted Bases	on Rating: NA sic Rating: NA ription: NA sasic Loader Cycle T rial 0.02 ent - factor not applic	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040	.100	
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Mars - Unadjusted Bases: It is Mixed material in Mixed ma	on Rating: NA sic Rating: NA ription: NA Maneuver: NA sasic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100	
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Mars - Unadjusted Bases: It is Mixed material in Mixed ma	on Rating: NA	ime (load, dump, rable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Mars - Unadjusted Bases: It is Mixed material in Mixed ma	on Rating: NA Sic Rating: NA Waneuver: NA Frial 0.02 Ent - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti	ime (load, dump, sable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
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Net Correction: Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targer	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Mars - Unadjusted Bases: It is Mixed material in Mixed ma	on Rating: NA sic Rating: NA ription: NA rating: NA ription: NA rating: NA rating: NA ription: NA rating: NA r	ime (load, dump, sable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targer	ne: Number ovels: e vs. Job Condition in this Bases — Material Descent.): Mars - Unadjusted Bases: It: Mixed material: No adjustment in Constant opent: Nominal target.	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not application -0.04 Reget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, stable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe Truck Cycle Time: Truck Exchange Time	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Mars - Unadjusted Bases It is Mixed material Mixed material Common own in Constant open in Constant open in Nominal target in N	er of Loading Tool P on Rating: NA Nic Rating: Maneuver: Maneuver: NA Pription: Massic Loader Cycle T rial 0.02 ent - factor not applic vership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load Minutes	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targer	ne: Number ovels: e vs. Job Condition is within this Bases – Material Descent.): Mars - Unadjusted Buses: It: Mixed material: No adjustmes: No adjustmes: Common own: Constant operit: Nominal targetimes: Nominal targetimes: 0.80 me: 0.80 me: 1.795	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not application -0.04 Reget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, stable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

LCY/Hour

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	11669.00	6.60	3.00	9.60	795	14.733

Haul Time: 14.733 minutes

Return Route:

recturn re	Return Route.								
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)			
1	11669.00	-6.60	3.00	-3.60	3450	3.487			

Return Time: 3.487 minutes
Total Truck Cycle Time: 22.052 minutes

Adjusted for job efficiency: 158.99

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production

Optimal No. of Trucks: 8 Truck(s) Selected Number of Trucks: 8 Truck(s)

191.55 LCY/Hour

Adjusted hourly truck team production: 1,271.89 LCY/Hour Adjusted single truck/loader team production: 1,271.89 LCY/Hour Adjusted multiple truck/loader team production: 1,271.89 LCY/Hour LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 53.23
 Hours

 Unit cost:
 \$3.507
 /LCY
 Total job cost:
 \$237,449

BULLDOZER WORK

Task description:	M. Cres						
Cresson Project		Per	mit Action:	2023		_ Permit/Job#:	M1980244
PROJECT IDENT	TFICATION	[
Task #: A0517 Date: 11/20/20 10:15:17 User: ZTT	023	State: County:	Colorado Teller			Abbreviation: Filename:	None M244-A0517
Agency or or	rganization naı	ne: DI	RMS				
HOURLY EQUIP	MENT COS	<u>r</u>					
Horsepower: Blade Type: Attachment: Shift Basis: Data Source: Cost Breakdown:	Cat D7R DS S 240 Straight NA 1 per day (CRG)	eries II L			<u>lization %</u>		
Ownership Cost/Hou Operating Cost/Hou			\$114.76 \$91.98		NA 100		
Ripper own. Cost/Hot			\$0.00		NA		
			\$0.00		25		
Ripper op. Cost/Hou	ır:		\$0.00		23		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour	\$248.04 \$248.04		\$41.30		NA NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6	\$248.04 \$248.04 \$248.04 NTITIES 5,725 .215 7,706 LCY	2022 CG	\$41.30	I Fotimata			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1	\$248.04 \$248.04 \$248.04 NTITIES 5,725 .215 7,706 LCY polume:	2022 CC Cat Hand	\$41.30 &V Provided	I Estimate			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volumes	\$248.04 \$248.04 NTITIES 5,725 .215 7,706 LCY olume: well factor:		\$41.30 &V Provided	1 Estimate			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volumes of estimated systems.	\$248.04 \$248.04 \$248.04 NTITIES 5,725 .215 7,706 LCY olume: well factor:		\$41.30	l Estimate			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volumes of estimated swell factor. HOURLY PRODU	\$248.04 \$248.04 \$248.04 NTITIES 5,725 .215 7,706 LCY olume: well factor:	feet 3.3 LCY	\$41.30				
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volume: 5 Source of estimated sw. HOURLY PRODU Average push distance Unadjusted hourly pro	\$248.04 \$248.04 \$248.04 NTITIES 5,725 .215 7,706 LCY olume: well factor: UCTION e:	feet 3.3 LCY Loose	\$41.30 &V Provided lbook				
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volumes of estimated swell factor: HOURLY PRODU Average push distance Unadjusted hourly production of the producti	\$248.04 \$248.04 \$248.04 NTITIES 5,725 .215 7,706 LCY colume: well factor:	feet 3.3 LCY Loose	\$41.30 &V Provided lbook				
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volume: 6 Source of estimated sw. HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien Average site altitude:	\$248.04 \$248.04 \$248.04 \$5,725 .215 7,706 LCY olume: well factor: CCTION e:	feet 3.3 LCY Loose	\$41.30 &V Provided lbook				
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volume: 6 Source of estimated sw. HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien Average site altitude: Material weight: Weight description: Job Condition Correct	### ### #### #########################	feet 3.3 LCY Loose t	\$41.30 &V Provided blook /hr stockpile 1.2		NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour MATERIAL QUA Initial Volume: 5 Swell factor: 1 Loose volume: 6 Source of estimated volume: 6 Source of estimated sw. HOURLY PRODU Average push distance Unadjusted hourly pro Materials consistency Average push gradien Average site altitude: Material weight: Weight description: Job Condition Correct	\$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$248.04 \$25.725 \$215 \$7,706 LCY \$215 \$7,706 LCY \$215 \$	feet 3.3 LCY Loose t /LCY	\$41.30 &V Provided lbook		NA		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.0527

Adjusted unit production: 645.62 LCY/hr
Adjusted fleet production: 645.62 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.384/LCY

Total job time: 104.87 Hours
Total job cost: \$26,012

BULLDOZER RIPPING WORK

	Task description:	_M. C	resson Mine Area - Top	soil - Pit Botto	om - Ripping			
Site:	Cresson Project	t	Permit Action:	2023	Per	mit/Job#:	M198024	4
	PROJECT IDE	NTIFICATION	<u>ON</u>					
	Task #: A051	18	State: Colorado		Abbre	eviation:	None	
	Date: 11/2 2:05:	1/2023 :18 PM	County: Teller			lename:	M244-A05	518
	User: ZTT	r organization	name: DRMS					
	HOURLY EQU	C						
							240	
	Basic M		D7R DS Series II LGP		Horsepower: _ Shift Basis:		240	_
	Ripper Attac	5-5	hank Ripper	<u> </u>	Data Source:		er day CRG)	<u>—</u>
	Cost Breakdown:				_			
				= .	Utilization %			
		Ownership Co		\$114.76	NA 100			
	Dinnon	Operating Co		\$91.98	100 NA			
		Ownership Cor r Operating Co		\$9.06 \$5.02	NA 100			
	Кіррс	Operator Co		\$41.30	NA			
		Total Unit Co		\$262.12	1111			
		Total Fleet Co	ost/Hour: \$262	2.12				
	MATERIAL QU		<u></u>					
			Sele	ected estimating	g method: Area			
	Alternate Methods:	<u>-</u>						
smic:	NA	_	Bank Volume:	NA 2.50	BCY		NA	DCW
Area:	69.10	acres	Rip Depth (ft):	2.50	Volume: 27	78,703	·	BCY or C
		Source of estin	nated quantity: 2022 C	C&V Provided	Estimate			
	HOURLY PRO	DUCTION						
	Seismic:							
		S	Seismic Velocity:	NA	feet/seco	nd		
	Aron		-					
	Area:	Averag	e Ripping Depth:	2.45	feet/pass			
			e Ripping Width:	6.50	feet/pass			
			Ripping Length:	300.00	feet/pass			
		Avera	age Dozer Speed:	88.00	feet/minu	ite		
			Maneuver Time:	0.25	minutes/j			
		Product	ion per unit area:	0.734	acres/hou	ır		
	Job Condition Corr	rection Factors						
	Unac	djusted Hourly	Unit Production:	0.734	Acres/hr			
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HI	*		
			Job Efficiency:	0.83	(1 shift/d	•		
			Net Correction:	0.83	multiplie	ľ		
			Hourly Unit Production:	0.61	Acres/hr			
		v	Hourly Fleet Production:	0.61	Acres/hr			
	JOB TIME ANI	O COST						
	Fleet size:	1	Grader(s)	Total job tim	ne: 11	3.42	Hou	rs
	Unit cost:	\$430.227	Per acre	Total job co	st: \$29	,729		

TRUCK/LOADER TEAM WORK

Task description:		sson Mine Area -	•	•		4000011
Site: Cresson Project	;	Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDEN	NTIFICATION	1				
Task #: A051		State: Colora	ado	Δh	breviation: No	ne
		County: Teller				244-A0519
	01 PM					
User: ZTT						
Agency or	r organization nai	ne: DRMS				
HOURLY EQU	IPMENT COS	Г		Shift has	is: <u>1 per day</u>	
HOURET EQUI	HIVILIVI COS		Equipment Descri		is. I per day	
	Truck Loader Tea		<i>777</i> F	puon		
		-Loader: CA	Т 992К			
Supp	oort Equipment -I		D10T - 10SU			
Road M	Iaintenance –Mot		Т 16М			
			ter Tanker, 7,000	Gal.		
			_			
Cost Breakdown:	Truck/Lo Truck	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenan Motor Grader	ce Equipment Water Truck
				•		
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour: %Utilization-riper:	\$160.10 NA	\$200.29 0	\$160.22 NA	NA NA	\$31.22 NA	\$28.44 NA
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	4	1	1	0	1	1
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85
Total work team co	st/hour: \$2.859	46	1			
Total work team co	φ 2,00 7.	-10				
MATERIAL QU	JANTITIES					
Initial volume	e: 24,265	CCY	Swell	factor: 1.215		
Loose volume						
Sc	ource of estimated	l volume: 2022	CC&V Provided	Estimate		
	e of estimated swe		Handbook			
	Material Purch					
	To	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
·	22011011					
Truck Capacity: Truck Payload (we	ight) Basis:					
Material	weight: 1,600		Pounds/LCY			
	ription: Top So		D 1			
Rated Pa	ayload: 200,00	00	Pounds			

Payload Capacity: _	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			Ruel	ket Size Class: N	JA	
Patad Canacity	16.000	LCV (baspad)	Duck	tet Size Class. N	A	=
Rated Capacity: _ Bucket Fill Factor:	1.100	LCY (heaped) Other - rock/di	rt mixtures (100	-120%) 1.100		=
Adjusted Capacity:	17.600	LCY	It illixtures (100-	-120%) 1.100		_
Adjusted Capacity	17.000					
Job Condition Corrections:	_	S	Site Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB			
	0.830	0.830	(CAT HB	5)		
Job Efficiency:			\ -			
Job Efficiency: Net Correction:	0.830	0.813				
		0.813		Fill Truck:	4 F	oasses
Net Correction:	Numbe	1		Fill Truck:	4 F	oasses
Net Correction: Loading Tool Cycle Time:	Numbe ls: s. Job Conditio	er of Loading Tool Pa		Fill Truck:	4F	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v	Numbe ls: s. Job Conditio within this Basi	on Rating: NA ic Rating: NA		Fill Truck:	4 p	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time very Selected Value very selected Value very selected very select	Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA ic Rating: NA		Fill Truck:	4 r	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v Selected Value v Track Loaders –	Numbe ls: s. Job Conditio within this Basi Material Desci	on Rating: NA ic Rating: NA		Fill Truck: Dump:0.100		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove! Machine Cycle Time v. Selected Value v. Track Loaders – Cycle Time Elements (min.):	Numbe ls: s. Job Conditio within this Basi Material Desci	on Rating: NA ic Rating: NA ription: NA	asses Required to I	Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v. Selected Value v. Track Loaders — Cycle Time Elements (min.): Load: NA	Numbe ls: s. Job Conditio within this Basi Material Desci	on Rating: NA ic Rating: NA ription: NA	asses Required to I	Dump: 0.100)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v. Selected Value v. Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material:	Numbe ls: s. Job Condition within this Basi Material Descript M Unadjusted Basi	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti	asses Required to I	Dump: 0.100 naneuver): 0 Factor (min.) 0.020).625 minu Source (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile:	Numbe ls: s. Job Condition within this Basis Material Descript Unadjusted Basis Mixed mater No adjustments	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti	asses Required to I	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000	Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbe S:	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: Sistem	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic vership of trucks and eration -0.04	asses Required to I	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbe S:	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Ti rial 0.02 nt - factor not applic reship of trucks and eration -0.04 get 0.00	asses Required to I	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: Sistem	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Ti rial 0.02 nt - factor not applic resthip of trucks and eration -0.04 get 0.00 Net Cycle Ti	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: Sistem	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	asses Required to I	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: Sistem	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v. Selected Value v. Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Numbe S: S. Job Condition	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v. Selected Value v. Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Number	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic rership of trucks and reration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

3917.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3917.00	9.30	3.00	12.30	675	5.861

Return Route:

Seg # Haul Distance (Ft) Grade (%) Roll. Res (%) (%) (%) Travel (fpm) Time (fpm)

3.00

-9.30

388.86 LCY/Hour

Return Time: 1.170 minutes
Total Truck Cycle Time: 10.863 minutes

3450

(min)

1.170

Adjusted for job efficiency: 322.75 LCY/Hour

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production

-6.30

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,291.00 LCY/Hour Adjusted single truck/loader team production: 1,291.00 LCY/Hour Adjusted multiple truck/loader team production: 1,291.00 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 22.84 Hours

Unit cost: \$2.215 /LCY Total job cost: **\$65,300**

BULLDOZER WORK

Task description:	M. Cresson Mine	Cresson Mine Area -Topsoil - S. CressHR - Dozer Spreading				
Cresson Project	Pern	nit Action:	2023	Permit/Job#:	M1980244	
PROJECT IDENTIFIC	CATION					
Task #: A0520 Date: 11/20/2023 10:16:23 PM	State: County:	Colorado Teller		Abbreviation: Filename:	None M244-A0520	
User: ZTT						
Agency or organiz	zation name: DR	MS				
HOURLY EQUIPMEN	VT COST					
Basic Machine: Cat I	D7R DS Series II LC	θP				
Horsepower: 240						
Blade Type: Straig	ght					
Attachment: NA						
Shift Basis: 1 per Data Source: (CRO			_			
Data Source: (CRC	J)					
Cost Breakdown:						
O		¢11476	<u>Utilization %</u>			
Ownership Cost/Hour: Operating Cost/Hour:		\$114.76	NA 100			
Ripper own. Cost/Hour:		\$91.98 \$0.00	NA			
Ripper op. Cost/Hour:		\$0.00	25			
Operator Cost/Hour:		\$41.30	NA			
MATERIAL QUANTI' Initial Volume: 24,265 Swell factor: 1.215		_				
Loose volume: 29,482	2 LCY	<u> </u>				
Source of estimated volume Source of estimated swell f		v Provided oook	l Estimate			
HOURLY PRODUCTI	ON					
Average push distance: Unadjusted hourly producti	65 feet 650.0 LCY/h	ır				
Materials consistency descr	ription: Loose s	tockpile 1.2				
Average push gradient:Average site altitude:	-30 % 9,500 feet					
Material weight:	1,600 lbs/LCY			_		
Weight description:	Top Soil					
Job Condition Correction F			Source			
Operator Sk		750	(AVG.)			
Material consisten		200	(CAT HB)			
Dozing meth	od: 1.0	000	(GEN.)			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 894.27 LCY/hr
Adjusted fleet production: 894.27 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.277/LCY

Total job time: 32.97 Hours
Total job cost: \$8,177

BULLDOZER RIPPING WORK

	Task description:	_M. C	resson Mine Area - To	opsoil - S. Cress	on HR - Ripping			
Site:	Cresson Project	· ·	Permit Action:	2023	Pe	ermit/Job#:	M198024	4
	PROJECT IDEN	NTIFICATION OF THE PROPERTY OF	<u>ON</u>					
	Task #: A052	1	State: Colorado)	Abbr	eviation:	None	
	Date: 11/21 2:06:	1/2023 07 PM	County: Teller			ilename:	M244-A05	521
	User: ZTT		noma: DDMC					
		r organization						
	HOURLY EQUI				11	,	240	
	Basic Ma		D7R DS Series II LGP		Horsepower: Shift Basis:		240	
	Ripper Attac	IIIIeiii: <u>3-3</u>	hank Ripper		Data Source:		er day CRG)	
	Cost Breakdown:				-			
					Utilization %			
		Ownership Co		\$114.76	NA			
	D:	Operating Co		\$91.98	100			
		Ownership Cor Operating Co		\$9.06 \$5.02	NA 100			
	Кіррсі	Operator Co		\$41.30	NA			
		Total Unit Co		\$262.12	1121			
		Total Fleet Co	ost/Hour: \$2	62.12				
	MATERIAL QU				.1 1 A			
			Se	elected estimating	g method: Area			
	Alternate Methods:							
mic:	NA 20.10	_	Bank Volume:	NA 2.50	BCY		NA	DCV
Area:	30.10	acres	Rip Depth (ft):	2.50	Volume: 1	21,403		BCY or
			nated quantity: 2022	CC&V Provided	1 Estimate			_
	HOURLY PROI	<u>JUCTION</u>						
	Seismic:	(Paigmia Valagitus	NT A	fact/gaar	and.		
			Seismic Velocity:	NA	feet/seco	ona		
	Area:							
			e Ripping Depth:	2.45	feet/pass			
			e Ripping Width:	6.50	feet/pass			
			Ripping Length:age Dozer Speed:	300.00 88.00	feet/pass feet/min			
			Maneuver Time:	0.25	minutes			
		_	ion per unit area:	0.734	acres/ho	-		
	Job Condition Corr	ection Factors						
	Unad	justed Hourly	Unit Production:	0.734	Acres/hi	•		
		-	Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT H	B)		
			Job Efficiency:	0.83	(1 shift/o	•		
			Net Correction:	0.83	multipli	er		
			Hourly Unit Production		Acres/hr			
		· ·	Hourly Fleet Production	: 0.61	Acres/hr			
	JOB TIME AND	COST		_				
	Fleet size:	1	Grader(s)	Total job tin	ne: 4	9.40	Hou	rs
	Unit cost:	\$430.227	Per acre	Total job co	ost: \$1	2,950		

TRUCK/LOADER TEAM WORK

Task description:	M. Cres	sson Mine Area -	Topsoil - Cresso	n HR - Transpor	t					
Site: Cresson Project	;	Permit Actio	on: 2023	1	Permit/Job#: M	1980244				
PROJECT IDEN	NTIFICATION	I								
Task #: A052 Date: 11/22	22	State: Colora County: Teller	ado	Ab	breviation: No Filename: M2	ne 244-A0522				
·	r organization na	ne: DRMS								
HOURLY EQUIPMENT COST Shift basis: 1 per day Fauirment Description										
Equipment Description Truck Loader Team -Truck: Cat 777F										
-Loader: CAT 992K										
Supp	oort Equipment -I	Load Area: Cat ump Area: NA	D10T - 10SU							
Road M	Iaintenance –Mot	1	Г 16М							
	-Wa	ater Truck: Wat	er Tanker, 7,000	Gal.						
Cost Breakdown:	Truck/Lo	ader Team	Support I	Equipment	Maintenan	ce Equipment				
Cost Bicardown.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck				
%Utilization-machine:	100	100	100	NA	25	25				
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29				
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44				
%Utilization-riper:	NA	0	NA	NA	NA	NA				
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00				
Ripper op. cost/hour:	NA \$33.71	\$0.00	\$0.00	NA NA	\$0.00	\$0.00 \$21.12				
Operator cost/hour: Unit Subtotals:	\$400.29	\$40.71 \$470.24	\$41.30 \$380.21	NA NA	\$28.56 \$271.99	\$135.86				
Number of Units:	7	3470.24	\$380.21 1	0	\$271.99 1	1				
Group Subtotals:	Work:	\$3,272.27	Support:	\$380.21	Maint:	\$407.85				
Total work team co		·	S SPF SS	7000.20		7 101100				
Total Work team co	st/110u1. <u>\$4,000.</u>	<u> </u>								
MATERIAL QU	JANTITIES									
Initial volume	e: 24,265	CCY	Swell	factor: 1.215						
Loose volume	29,48	LCY								
	ource of estimated		CC&V Provided	Estimate						
Source	e of estimated swe		Handbook							
	Material Purch	tase Cost: $\frac{\$0.00}{\$0.00}$								
	_									
HOURLY PRO	<u>DDUCTION</u>									
Truck Capacity:										
Truck Payload (we			D							
Material Desc	weight: $1,600$ ription: Top So	oil	Pounds/LCY							
Rated P	<u> </u>		Pounds							

Payload Capacity:	125.00	LC	Y			
Truck Bed (volume) Basis	<u>.</u>					
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fir	nal Truck Volume	e Based on Number	r of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Bucl	ket Size Class:	NA	
Rated Capacity:	16.000	LCY (heaped	d)			
Bucket Fill Factor:	1.100	Other - rock/	dirt mixtures (100	-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	ns:		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Tiet Cometion.	0.000	0.015				
			Passas Paguired to	Fill Truck:	1 .	20000
Loading Tool Cycle Tim	e: Numbe		Passes Required to	Fill Truck:	4 I	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	e: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Number vels: e vs. Job Condition e within this Bas	on Rating: NA	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	e: Number vels: e vs. Job Condition within this Base — Material Desc	on Rating: NA	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Number vels: e vs. Job Condition e within this Base - Material Desc h.):	on Rating: NA	Passes Required to		100	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute) Load: NA	e: Number vels: e vs. Job Condition within this Base — Material Descent.):	on Rating: NA		Dump:0.	100	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader	e: Number vels: e vs. Job Condition within this Base — Material Descent.): Note: National Process of the Number 1 of the Number 2 of the Numb	on Rating: NA		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute of the cycle Time Track Loaders) Wheel and Track Loader Cycle Time Factors	e: Number vels: e vs. Job Condition e within this Base — Material Descent.): Second Process Number 1 Number 2 Number 3 Number 3 Number 4 Number 4 Number 4 Number 4 Number 5 Number 5 Number 6 Number 6 Number 7 Number 7 Number 7 Number 8 Number 9 Nu	on Rating: NA Sic Rat		Dump: 0. maneuver): Factor (min.)	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute of the cycle Time Track Loaders) Wheel and Track Loader Cycle Time Factor Material	e: Number vels: e vs. Job Condition within this Base — Material Description.): s - Unadjusted Base — Mixed material material base — Mixed material base —	on Rating: NA	Time (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020	100 0.625 minum Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile	e: Number vels: e vs. Job Condition within this Base — Material Descent.): S - Unadjusted Base — Mixed material Mixed material Mixed material Mixed material Monadjustme	on Rating: NA	Time (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000	100 0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership	e: Number vels: e vs. Job Condition within this Base — Material Description.): S - Unadjusted Base : Mixed material common ow	on Rating: NA	Time (load, dump, r	Dump: _0. maneuver): Factor (min.)	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Description.): S - Unadjusted Bese : Mixed material in No adjustme : Common ow : Constant ope	on Rating: NA	Time (load, dump, r	Dump: 0. maneuver):	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership	e: Number vels: e vs. Job Condition within this Base — Material Description.): S - Unadjusted Bese : Mixed material in No adjustme : Common ow : Constant ope	on Rating: NA	Time (load, dump, ricable 0.00 and loaders -0.04	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 minum Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Description.): S - Unadjusted Bese : Mixed material in No adjustme : Common ow : Constant ope	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prial 0.02 Prial 0.02 Pont - factor not appliance of trucks a peration -0.04 get 0.00 Net Cycle 7	Time (load, dump, r	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	100 0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Description.): S - Unadjusted Bese : Mixed material in No adjustme : Common ow : Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rasic Loader Cycle ration -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 Γime Adjustment:	Dump:0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Description.): S - Unadjusted Bese : Mixed material in No adjustme : Common ow : Constant ope	on Rating: NA sic Rating: NA ription: NA ription: NA rasic Loader Cycle ration -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 lime Adjustment: pader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Descent.): S - Unadjusted Base: Mixed material Mixed material Common ow Constant opers: Nominal target	on Rating: NA sic Rating: NA ription: NA ription: NA rasic Loader Cycle ration -0.04 get 0.00 Net Cycle 7 Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 lime Adjustment: loader Cycle Time: di Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Descrit.): S - Unadjusted Bese : Mixed material in No adjustme : Common ow : Constant ope : Nominal targetime: 0.80	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Principle of trucks a content	Time (load, dump, ricable 0.00 and loaders -0.04 Time Adjustment: bader Cycle Time: d Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

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Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9024.00	7.40	3.00	10.40	795	11.424

Haul Time: **11.424** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 9024.00 -7.40 3.00 -4.40 3450 2.697

Return Time: 2.697 minutes
Total Truck Cycle Time: 17.953 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

235.29 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 195.29 LCY/Hour Optimal No. of Trucks: 7 Truck(s)

Selected Number of Trucks: 7 Truck(s)

Adjusted hourly truck team production: 1,367.01 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 22.13
 Hours

 Unit cost:
 \$3.048
 /LCY
 Total job cost:
 \$89,855

BULLDOZER WORK

Task description:	M. Cresson Mine Area -Topso	oil - Cresson HR - Doze	er Spreading	
Cresson Project	Permit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIFICA	ATION			
Task #: A0523	State: Colorado		Abbreviation:	None
Date: 11/20/2023	County: Teller		Filename:	M244-A0523
10:17:32 PM	County. Tener		i nename.	W1244-A0323
User: ZTT			-	
Agency or organiza	tion name: DRMS			
HOURLY EQUIPMENT	COST			
	R DS Series II LGP			
Horsepower: 240	R DS Series II EGI	_		
Blade Type: Straigh	t	_		
Attachment: NA		=		
Shift Basis: 1 per d	ay	=		
Data Source: (CRG)	→	=		
Cost Breakdown:		_		
Cost Breakdo wii.		Utilization %		
Ownership Cost/Hour:	\$114.76	NA		
Operating Cost/Hour:	\$91.98	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	25		
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANTITI Initial Volume: 24,265	<u>IES</u>			
Swell factor: 1.215				
Loose volume: 29,482 I	CY			
		.		
Source of estimated volume: Source of estimated swell fac	tor: 2022 CC&V Provided Cat Handbook	Estimate		
HOURLY PRODUCTIO	N			
Average push distance:	65 feet			
Unadjusted hourly production	n: 650.0 LCY/hr			
Materials consistency descrip	tion: Loose stockpile 1.2			
	80 %			
Average site altitude: 9.				
	500 feet			
			_	
Material weight: 1	500 feet			
Material weight: 1 Weight description: T Job Condition Correction Fac	,500 feet ,600 lbs/LCY op Soil	Source (AVG)	_	
Material weight: 1 Weight description: T	,500 feet ,600 lbs/LCY op Soil ctor l: 0.750	Source (AVG.) (CAT HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 894.27 LCY/hr
Adjusted fleet production: 894.27 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.277/LCY

Total job time: 32.97 Hours
Total job cost: \$8,177

BULLDOZER RIPPING WORK

Task de	scription:	M. Cresson Min	e Area - Top	soil - Cresson I	HR - Ripping			
Site: Cress	son Project	Per	mit Action:	2023	Perr	nit/Job#:	M198	0244
PROJI	ECT IDENTIFIC	<u>CATION</u>						
Task	Task #: A0524 State: Colorado				Abbrev	viation:	None	
Da	te: 11/21/2023 2:07:25 PM	County:	Teller		File	ename:	M244-	A0524
Us	er: ZTT					-		
	Agency or organiz	zation name: DF	RMS					
HOUR	LY EQUIPMEN	T COST						
	Basic Machine:	Cat D7R DS Ser	ries II LGP		Horsepower:	2	240	
R	ipper Attachment:	3-Shank Ripper		<u> </u>	Shift Basis:		er day	
					Data Source:	(C	CRG)	
Cost Bro	eakdown:				Utilization %			
	Owners	hip Cost/Hour:		\$114.76	NA			
		ing Cost/Hour:		\$91.98	100			
	Ripper Owners			\$9.06	NA			
		ing Cost/Hour:		\$5.02	100			
	•	ator Cost/Hour:		\$41.30	NA			
	Total U	Init Cost/Hour:		\$262.12				
	Total F	leet Cost/Hour:	\$262	2.12				
MATE	RIAL QUANTI	<u>TIES</u>	Sele	cted estimating	method: Area			
Alternat	e Methods:							
smic: NA		Ban	k Volume:	NA	BCY		NA	
Area: 30.10	acre	s Rip	Depth (ft):	2.50	Volume: 12	1,403		BCY or C
	Source of	of estimated quantit	y: 2022 C	C&V Provided	Estimate			
HOUR	LY PRODUCTI	ON						
Seismic								
<u> 501511110</u>	<u>-</u>	Seismic Velo	city:	NA	feet/secon	d		
A			·					
<u>Area:</u>	,	Vorago Pinning D	anth	2.45	feet/pass			
		Average Ripping Do		6.50	feet/pass			
		verage Ripping Lei		300.00	feet/pass			
		Average Dozer Sp		88.00	feet/minut	e		
	Av	verage Maneuver T		0.25	minutes/pa			
	P	roduction per unit	area:	0.734	acres/hour			
Job Con	dition Correction F	<u>actors</u>						
	Unadjusted I	Hourly Unit Produc	tion:	0.734	Acres/hr			
		Site Alti		9,500	feet			
		Altitude		1.00	(CAT HB			
		Job Efficie	-	0.83	(1 shift/da	y)		
		Net Correc	tion:	0.83	multiplier			
	Ad	justed Hourly Unit	Production:	0.61	Acres/hr			
	Adj	usted Hourly Fleet	Production:	0.61	Acres/hr			
JOB T	IME AND COST	<u>r</u>						
Flee	t size: 1	Grader(s)		Total job time	e: 49.	40	F	Iours

Task description:	Crus	her Mine A	rea - Pile Le	veling - Mass Grading		
Cresson Project		Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION	<u>ON</u>				
Task #: A060	0	State:	Colorado		Abbreviation:	None
Date: 11/20		County:	Teller		Filename:	M244-A0600
	:35 PM				-	
User: ZTT						
Agency or	organization	name: DF	RMS			
HOURLY EQUI	PMENT CO	<u>OST</u>				
Basic Machine:	Cat D10T -	10SU				
Horsepower:	574			<u>—</u>		
Blade Type:	Semi-Unive	ersal		<u></u>		
Attachment:	NA					
Shift Basis:	1 per day			<u> </u>		
Data Source:	(CRG)			<u> </u>		
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/H	our:		\$178.69	NA		
Operating Cost/H			\$160.22	100		
Ripper own. Cost/H	our:		\$0.00	NA		
Ripper op. Cost/H	our:		\$0.00	0		
Operator Cost/H	our:		\$41.30	NA		
MATERIAL QU Initial Volume: Swell factor:	75,737 1.000					
Loose volume:	75,737 LCY					
Source of estimated Source of estimated		2022 CCc Cat Hand	&V Provided book	l Estimate		
HOURLY PROD	<u>OUCTION</u>					
Average push distar Unadjusted hourly p		165 feet 1,141.9 LC	Y/hr			
Materials consistence	cy description	: Rock, p	poorly ripped	or blasted 0.6		
Average push gradio	ent: -30 %					
Average site altitude			<u>—</u> —			
Material weight:	2,800	lbs/LCY				
Weight description:	Grani	te - Broken				
Job Condition Corre				Source		
	rator Skill:		750	(AVG.)		
Material co			600	(CAT HB)		
Dozir	ng method:	1.	200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4713

Adjusted unit production: 538.18 LCY/hr
Adjusted fleet production: 1076.36 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.706/LCY

Total job time: 70.36 Hours
Total job cost: \$53,507

Task description:	Crusher Mine A	Area - Pile Le	veling - Fine Grading		
: Cresson Project	Pe	rmit Action: _	2023	Permit/Job#:	M1980244
PROJECT IDENTI	FICATION				
Task #: A0601 Date: 11/20/202 10:20:53 User: ZTT	•	Colorado Teller		Abbreviation: Filename:	None M244-A0601
Agency or org	ganization name:D	RMS			
HOURLY EQUIPM	IENT COST				
Horsepower: 2 Blade Type: S Attachment: N Shift Basis: 1	Cat D7R DS Series II I 40 traight IA per day CRG)	_GP			
Cost Breakdown:		01147 6	<u>Utilization %</u>		
Ownership Cost/Hour Operating Cost/Hour Ripper own. Cost/Hour	:	\$114.76 \$91.98 \$0.00	NA 100 NA		
Ripper op. Cost/Hour Operator Cost/Hour		\$0.00 \$41.30	0 NA		
Swell factor: 1.0	415 000				
Loose volume: <u>8,4</u> Source of estimated vol Source of estimated swo		C&V Provided dbook	Estimate		
HOURLY PRODUC	<u>CTION</u>				
Average push distance: Unadjusted hourly prod		//hr			
Materials consistency d	escription: Rock,	poorly ripped	or blasted 0.6		
Average push gradient: Average site altitude:	-30 % 9,500 feet				
Material weight:	2,800 lbs/LCY			<u></u>	
Weight description:	Granite - Broken				
Job Condition Correction Operator	or Skill: (0.750	Source (AVG.)		
Material consi Dozing n		0.600	(CAT HB) (GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3927

Adjusted unit production: 135.05 LCY/hr
Adjusted fleet production: 135.05 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.837/LCY

Total job time: 62.31 Hours
Total job cost: \$15,456

TRUCK/LOADER TEAM WORK

Site Cresson Project Permit Action: 2023 Permit Jobhy M1980244	Task description:	Crushe	r Mine Area	ı - Toj	psoil - Transport	,		
Task #: A0602	Site: Cresson Project	·	Permit	Actio	on: 2023		Permit/Job#: _	M1980244
Task #: A0602	PROJECT IDEN	NTIFICATION	I					
Date: 1/12/2023 County: Teller Filename: M244-A0602			_	Colora	ndo	Ab	breviation:	None
User: ZTT								
Agency or organization name: DRMS		26 PM					_	
Equipment Description		organization nar	ne: DRM	S				
Equipment Description	HOURLY FOU	PMENT COS				Shift has	is: 1 ner dav	
Truck Loader Team - Truck:	HOCKET EQUI	TWILLTT COD	<u> </u>	I	Equipment Descri		15. <u>1 per day</u>	
Support Equipment - Load Area: -Dump Area: -Water Truck: -Wate		Fruck Loader Tea	ım -Truck:	Cat	777F	puon		
Cost Breakdown: Truck/Loader Team: CAT 16M CAT 1								
Road Maintenance - Motor Grader: - Water Truck: CAT 16M	Supp	* *	H		D101 - 10SU			
Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment	Road M				Г 16М			
Truck Loader Load Area Dump Area Motor Grader Water Truck		-Wa	ater Truck:	Wat	er Tanker, 7,000	Gal.		
Truck Loader Load Area Dump Area Motor Grader Water Truck		T 1.7	1		G		361.	.
## Mutilization-machine:	<u>Cost Breakdown</u> :							
Ownership cost/hour: \$206.48 \$229.24 \$178.69 NA \$212.21 \$86.29				100		_		
Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$28.44								
Wutilization-riper:	•	•			•			· ·
Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$21.12 Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$135.86 Number of Units: 4 1 1 0 1 1 Group Subtotals: Work: \$2,071.40 Support: \$380.21 Maint: \$407.85 MATERIAL QUANTITIES Initial volume: 34,759 CCY Swell factor: 1.215 Loose volume: 42,232 LCY LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Waterial Purchase Cost: \$0.00 Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY <td></td> <td></td> <td>\$200</td> <td></td> <td></td> <td></td> <td></td> <td>· ·</td>			\$200					· ·
Ripper op. cost/hour: NA	•		\$0					
Operator cost/hour: \$33.71	**							· · ·
Unit Subtotals: \$400.29					,		•	,
Number of Units: 4 1 1 0 1 1 Group Subtotals: Work: \$2,071.40 Support: \$380.21 Maint: \$407.85 Total work team cost/hour: \$2,859.46 MATERIAL QUANTITIES Initial volume: 34,759 CCY Swell factor: 1.215 Loose volume: 42,232 LCY Source of estimated volume: 2022 CC&V Provided Estimate Cat Handbook \$0.00 \$0.00 HOURLY PRODUCTION Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil Pounds/LCY	*							· ·
Group Subtotals: Work: \$2,071.40 Support: \$380.21 Maint: \$407.85 Total work team cost/hour: \$2,859.46 MATERIAL QUANTITIES Initial volume: 34,759 CCY Swell factor: 1.215 Loose volume: 42,232 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook Material Purchase Cost: Total Cost: \$0.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil			7					
Total work team cost/hour: \$2,859.46 MATERIAL QUANTITIES Initial volume: 34,759			\$2,071.40					
MATERIAL QUANTITIES Initial volume: 34,759	-	st/hour: \$2,859.			11			·
Initial volume: 34,759								
Loose volume: Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: Source of estimated swell factor: Cat Handbook \$0.00 Total Cost: Source of estimated swell factor: Cat Handbook \$0.00 Total Cost: Source of estimated swell factor: Cat Handbook \$0.00 Total Cost: Pounds/LCY Description: Truck Payload (weight) Basis: Material weight: Description: Top Soil	MATERIAL QU	<u>IANTITIES</u>						
Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: Source of estimated swell factor: Cat Handbook \$0.00	Initial volume	: 34,759		CCY	Swell	factor: 1.215		
Source of estimated swell factor: Material Purchase Cost: Total Cost: When the state of the st	Loose volume	42,23	32	LCY				
Material Purchase Cost: \$0.00 Total Cost: \$0.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Description: Top Soil Pounds/LCY	So	ource of estimated				Estimate		
Total Cost: \$0.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Description: Top Soil Pounds/LCY	Source							
HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil			_					
Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil		10	otai CUSI	φυ.υι	,			
Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil	HOURLY PRO	DUCTION						
Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil	Truck Capacity:							
Description: Top Soil	Truck Payload (wei							
			*1		Pounds/LCY			
Rated Payload: 200 000 Polinds	Desci Rated Pa				Pounds			

Payload Capacity: _	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity			Duals	et Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)	Buck	et Size Class. N	(A	_
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100-	120%) 1.100		_
Adjusted Capacity:	17.600	LCY	(2 2			_
Job Condition Corrections			e Altitude (ft.): 9	500 feet		
Job Condition Corrections.	- Truck	Loader	Source	<u>300</u> icet		
Altitude Adj:	1.000	0.980	(CAT HB))		
	0.830	0.830	(CAT HB)			
Ioh Efficiency:	0.050	0.050	(CITI IID)	,		
Job Efficiency:						
		0.813 r of Loading Tool Pas	ses Required to F	Fill Truck:	<u>4</u> 1	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value	Number ls: ss. Job Conditio within this Basi	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders —	Numbers Number	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.):	Numbers: S. Job Condition Within this Basi Material Descr	r of Loading Tool Pas on Rating: NA ic Rating: NA ription:	ses Required to F			passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders —	Numbers: S. Job Condition Within this Basi Material Descr	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.):	Numbers S. Job Condition Within this Basion Material Descript Material Material Descript Material Ma	on Rating: NA ic Rating: NA ription: Maneuver: NA		Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA	Numbers S. Job Condition Within this Basion Material Descript Moreone	r of Loading Tool Pas on Rating: Ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim		Dump: 0.100 naneuver): 0 Factor (min.)	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material:	Numbers ls: s. Job Condition within this Basin Material Describes Material Describes Material Describes Mixed Mixed material Mixed material Mixed material Describes Mixed Material Describes Mixed Material Describes Mixed Mixed Material Describes Mixed Mix	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Time	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020	0 0.625 min Source (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile:	Numbers ls: s. Job Condition within this Basin Material Describes Material Describes Material Describes Mixed Mixed material No adjustments	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: NA daneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000	0 Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Number ls: s. Job Conditio within this Basi Material Descr Unadjusted Basi Mixed material No adjustment Common ow	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number ls: s. Job Conditio within this Basi Material Descr Unadjusted Basi Mixed material No adjustmer Common owe Constant ope	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and icration -0.04	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Number ls: s. Job Conditio within this Basi Material Descr Unadjusted Basi Mixed material No adjustment Common ow	on Rating: On Rating: NA ic Rating: Maneuver: Maneuver: NA asic Loader Cycle Time ial 0.02 nt - factor not applicate nership of trucks and interaction -0.04 get 0.00	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number ls: s. Job Conditio within this Basi Material Descr Unadjusted Basi Mixed material No adjustmer Common owe Constant ope	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 ration -0.04 get 0.00 Net Cycle Tim	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number ls: s. Job Conditio within this Basi Material Descr Unadjusted Basi Mixed material No adjustmer Common owe Constant ope	r of Loading Tool Pas on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 cration -0.04 get 0.00 Net Cycle Tim Adjusted Loade	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number ls: s. Job Conditio within this Basi Material Descr Unadjusted Basi Mixed material No adjustmer Common owe Constant ope	r of Loading Tool Pas on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 cration -0.04 get 0.00 Net Cycle Tim Adjusted Loade	ne (load, dump, mole 0.00 loaders -0.04 load	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value of Selected V	Number ls: s. Job Condition within this Basi Material Describle Unadjusted Basi Mixed material No adjustment Common own Constant ope Nominal targ	r of Loading Tool Pas on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 cration -0.04 get 0.00 Net Cycle Tim Adjusted Loade	ne (load, dump, mole 0.00 loaders -0.04 loaders -0.04 loaders -me per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Number ls: s. Job Condition within this Basi Material Describle. Unadjusted Basi Mixed material No adjustment Common own Constant ope Nominal targ	r of Loading Tool Pas on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and 1 cration -0.04 get 0.00 Net Cycle Tim Adjusted Loade Net Load Ti	ne (load, dump, mole 0.00 loaders -0.04 loaders -0.04 loaders -Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5332.00	4.50	3.00	7.50	985	5.490

Haul Time: 5.490 minutes

Return Ro	oute:					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5332.00	-4.50	3.00	-1.50	3503	1.569

Return Time: 1.569 minutes
Total Truck Cycle Time: 10.891 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

387.86 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour

Adjusted for job efficiency: 321.92 LCY/Hour

Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,287.68 LCY/Hour Adjusted single truck/loader team production: 1,287.68 LCY/Hour Adjusted multiple truck/loader team production: 1,287.68 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 32.80
 Hours

 Unit cost:
 \$2.221
 /LCY
 Total job cost:
 \$93,782

Task description: Crusher Mine Area -Topsoil - I	Dozer Spreading	
: Cresson Project Permit Action: 2	023 Permit/Job#:	M1980244
PROJECT IDENTIFICATION		
Task #: A0603 State: Colorado Date: 11/20/2023 County: Teller 10:21:58 PM ZTT	Abbreviation: Filename:	None M244-A060
Agency or organization name: DRMS		
HOURLY EQUIPMENT COST		
Basic Machine: Cat D7R DS Series II LGP Horsepower: 240 Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG)		
Cost Breakdown:		
Ownership Cost/Hour: \$114.76 Operating Cost/Hour: \$91.98 Ripper own. Cost/Hour: \$0.00 Ripper op. Cost/Hour: \$0.00	Utilization % NA 100 NA 25	
Operator Cost/Hour: \$41.30	NA	
MATERIAL QUANTITIES Initial Volume: 34,759 Swell factor: 1.215 Loose volume: 42,232 LCY		
Source of estimated volume: Source of estimated swell factor: 2022 CC&V Provided E Cat Handbook	Stimate	
HOURLY PRODUCTION		
Average push distance: 50 feet Unadjusted hourly production: 800.0 LCY/hr		
Materials consistency description: Loose stockpile 1.2		
Average push gradient: -30 % Average site altitude: 9,500 feet		
Material weight: 1,600 lbs/LCY		
Weight description: Top Soil		
Job Condition Correction Factor Operator Skill: 0.750	Source (AVG.)	
Material consistency: 1.200	(CAT HB)	

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 1,100.64 LCY/hr
Adjusted fleet production: 1100.64 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.225/LCY

Total job time: 38.37 Hours
Total job cost: \$9,518

BULLDOZER RIPPING WORK

	Task description:	Crusl	her Mine Area	- Topsoi	l - Ripping				
Site:	Cresson Projec	t	Permit	Action:	2023		Permit/Job#:	M198024	14
	PROJECT IDE	NTIFICATIO	<u>ON</u>						
	Task #: A06	04	State: C	olorado		Ah	breviation:	None	
		1/2023		eller			Filename:	M244-A0	604
		:34 PM	<u> </u>						
	User: ZTT								
	Agency of	or organization i	name: DRMS	S					
	HOURLY EQU	IPMENT CO	<u>OST</u>						
	Basic M	Iachine: Cat	D7R DS Series	II LGP		Horsepower:		240	
	Ripper Attac	chment: 3-Sh	nank Ripper			Shift Basis:		er day	
						Data Source:	((CRG)	
	Cost Breakdown:								
						Utilization %			
		Ownership Co			\$114.76	NA			
		Operating Co			\$91.98	100	_		
		Ownership Co			\$9.06	NA 100	<u>—</u>		
	Rippe	er Operating Coa Operator Coa			\$5.02 \$41.30	100 NA	_		
		Total Unit Co			\$262.12	INA			
		Total Ollit Co.	st/110ti1.		φ202.12				
		Total Fleet Co	st/Hour:	\$262	2.12				
	MATERIAL QU	<u>UANTITIES</u>		Sele	ected estimating	g method: Ar	ea		
	Alternate Methods	<u>:</u>							
eismic:	NA		Bank V	olume:	NA	BCY		NA	
Area:	43.09	acres	Rip Dep	-	2.50	Volume:	173,796		BCY or CCY
		Source of actim	nated quantity:	-	C & V Drovidad		·		
			iated qualitity.	2022 C	C&V Flovided	Estimate			
	HOURLY PRO	<u>DUCTION</u>							
	Seismic:								
		S	eismic Velocity	:	NA	feet/se	econd		
	Area:								
	<u>rirou.</u>	Average	Ripping Depth	ı:	2.45	feet/pa	ass		
			Ripping Width		6.50	feet/pa			
			Ripping Length		100.00	feet/pa			
			ge Dozer Speed		88.00	feet/m			
			Maneuver Time		0.25		es/pass		
		Producti	ion per unit area	ı:	0.646	acres/	hour		
	Job Condition Cor	rection Factors							
	Una	djusted Hourly	Unit Production	:	0.646	Acres	/hr		
			Site Altitude		9,500	feet			
			Altitude Adj		1.00	(CAT	*		
			Job Efficiency		0.83		ft/day)		
			Net Correction	ı:	0.83	multip	oner		
			Hourly Unit Pro		0.54	Acres/hr			
		Adjusted F	Hourly Fleet Pro	duction:	0.54	Acres/hr			
	JOB TIME AN	D COST							
	Fleet size:	1	Grader(s)		Total job tim	ne:	80.39	Hou	ırs
	Unit cost:	\$489.015	Per acre		Total job co		\$21,072		

Cresson Project					
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTI	<u>FICATION</u>				
Task #: A0605	State:	Colorado		Abbreviation:	None
Date: $\frac{11/20/20}{11/20/20}$		Teller		Filename:	M244-A0605
10:23:04	•	101101		1 11011111111	1,12 110000
User: ZTT				-	
Agency or ors	ganization name: DI	RMS			
HOURLY EQUIPM	MENT COST				
	Cat D10T - 10SU				
	74				
	lemi-Universal				
Attachment: N	JA		<u> </u>		
	per day				
Data Source:(CRG)		<u> </u>		
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour	:	\$178.69	NA		
Operating Cost/Hour	:	\$160.22	100		
Ripper own. Cost/Hour		\$0.00	NA		
Ripper op. Cost/Hour		\$0.00	0		
Operator Cost/Hour	:	\$41.30	NA		
Total Fleet Cost/Hour:	\$760.42				
MATERIAL QUAN Initial Volume: 8.8	867				
	000				
Swell factor: 1.0	000 867 LCY				
Swell factor: 1.0 Loose volume: 8,5	867 LCY	<u> </u>			
Swell factor: 1.0 Loose volume: 8,3 Source of estimated vol	867 LCY lume: 2022 CC	&V Provided	l Estimate		
Swell factor: 1.0 Loose volume: 8,5 Source of estimated vol	867 LCY lume: 2022 CC		l Estimate		
Swell factor: 1.0 Loose volume: 8,3 Source of estimated volumes Source of estimated sw	Ref LCY lume: 2022 CC ell factor: Cat Hand		l Estimate		
Swell factor: 1.0 Loose volume: 8,3 Source of estimated volumes of estimated swell by the state of the state	Refr LCY lume: ell factor: CTION		l Estimate		
Swell factor: 1.0 Loose volume: 8,3 Source of estimated volume: 1.0 Source of estimated sw. HOURLY PRODUCT	2022 CC 2022 CC Cat Hand CTION 165 feet	book	l Estimate		
Swell factor: 1.0 Loose volume: 8,8 Source of estimated volume: Source of estimated sw. HOURLY PRODUCE Average push distance: Unadjusted hourly productions.	2022 CC 2022 CC Cat Hand CTION 165 feet 1,141.9 LC	book Y/hr	l Estimate		
Swell factor: 1.0 Loose volume: 8,3 Source of estimated volume: 1.0 Source of estimated sw. HOURLY PRODUCT Average push distance: Unadjusted hourly procuments of the state of	2022 CC Cat Hand	book Y/hr			
Swell factor: 1.0 Loose volume: 8,3 Source of estimated volume: 1.0 Source of estimated sw. HOURLY PRODUCE Average push distance: Unadjusted hourly procuments consistency described by the same of th	2022 CC Cat Hand	book Y/hr			
Swell factor: 1.0 Loose volume: 8,3 Source of estimated volume: 1.0 Source of estimated sw. HOURLY PRODUCT Average push distance: Unadjusted hourly procuments consistency of the state of	2022 CC Cat Hand	book Y/hr			
Swell factor: 1.0	2022 CC Cat Hand	book Y/hr			
Swell factor: Loose volume: 8,3 Source of estimated volume: Source of estimated sw. HOURLY PRODUCE Average push distance: Unadjusted hourly proc Materials consistency of Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	2022 CC 2022 CC Cat Hand CTION 165 feet 1,141.9 LC Rock, J -30 % 9,500 feet 2,800 lbs/LCY Granite - Broken On Factor Single Granite Granite	Y/hr poorly ripped	l or blasted 0.6		
Swell factor: 1.0 Loose volume: 8,3 Source of estimated volume: Source of estimated sw. HOURLY PRODUCE Average push distance: Unadjusted hourly proc Materials consistency of Average push gradient: Average site altitude: Material weight:	2022 CC 2022 CC Cat Hand CTION 165 feet 1,141.9 LC lescription: Rock, J 9,500 feet 2,800 lbs/LCY Granite - Broken On Factor or Skill: 0.	book Y/hr	l or blasted 0.6		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4713

Adjusted unit production: 538.18 LCY/hr
Adjusted fleet production: 1076.36 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.706/LCY

Total job time: 8.24 Hours
Total job cost: \$6,264

Task description:	Crus	her Mine A	rea - Delivei	y Rd - I	Fine Grading		
Cresson Project		Per	mit Action:	2023		Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION	<u>ON</u>					
Task #: A0600	5	State:	Colorado			Abbreviation:	None
Date: 11/20		County:	Teller			Filename:	M244-A0606
	:09 PM	county.	Tener			i nename.	1412 1 1 1 1 1 1 0 0 0 0
User: ZTT							
Agency or	organization	name: Dl	RMS				
HOURLY EQUI	PMENT CO	<u>OST</u>					
Basic Machine:	Cat D7R D	S Series II L	GP				
Horsepower:	240						
Blade Type:	Straight						
Attachment:	NA						
Shift Basis:	1 per day						
Data Source:	(CRG)						
Cost Breakdown:							
Cost Breakdown.				1	Utilization %		
Ownership Cost/H	our:		\$114.76	≐	NA		
Operating Cost/H			\$91.98		100		
Ripper own. Cost/H			\$0.00		NA		
Ripper op. Cost/H			\$0.00		0		
Operator Cost/H			\$41.30		NA		
MATERIAL QU Initial Volume: Swell factor:	985 1.000						
Loose volume:	985 LCY						
_		2022 GG					
Source of estimated		-	&V Provided	Estimat	te		
Source of estimated	swell factor:	Cat Hanc	lbook				
HOURLY PROD	<u>UCTION</u>						
Average push distan	ice:	165 feet					
Unadjusted hourly p		343.9 LCY	/hr				
Materials consistence	y description	: Rock,	poorly ripped	or blast	ted 0.6		
Average push gradie	ent: -30 %						
Average site altitude							
Material weight:	2,800	lbs/LCY				_	
Weight description:	Grani	te - Broken					
Job Condition Corre					Source		
	rator Skill: _		.750		(AVG.)		
Material co			.600		(CAT HB)		
Dozir	g method:	1	.000		(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3927

Adjusted unit production: 135.05 LCY/hr
Adjusted fleet production: 135.05 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.837/LCY

Total job time: 7.29 Hours \$1,809

TRUCK/LOADER TEAM WORK

Site: Cresson Project		Permit	Actio	n: <u>2023</u>		Permit/Job#: N	M1980244
PROJECT IDEN	NTIFICATION	[
Task #: A060			olora	do	Ab		one
	2/2023 12 PM	County: T	eller			Filename: M	I244-A0607
User: $\frac{2.13.}{ZTT}$	121111						
Agency or	organization nar	ne: DRMS	S				
HOURLY EQUI	PMENT COS	Γ			Shift bas	is: <u>1 per day</u>	
		_	F	Equipment Descri		··· <u></u>	
	Fruck Loader Tea	m -Truck:	Cat 7		ption		
		-Loader:		992K			
Supp	ort Equipment -I	oad Area: Lump Area:	Cat I NA	D10T - 10SU			
Road M	Iaintenance –Mot	1		`16M			
	-Wa	ter Truck:		er Tanker, 7,000	Gal.		
C 4D 11	TD 1.77	1 70		G . I	- · · ·	3.6 1.4	F
Cost Breakdown:	Truck/Lo	ader Team Loader		Load Area	Equipment Dump Area	Motor Grader	water Truck
Utilization-machine:	100	1	100	100	NA	25	
Ownership cost/hour:	\$206.48	\$229		\$178.69	NA NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200		\$178.09	NA NA	\$31.22	
%Utilization-riper:	NA	Ψ200	0	NA	NA NA	NA	
pper own. cost/hour:	NA	\$0	.00	\$0.00	NA	\$0.00	
Ripper op. cost/hour:	NA	\$0	.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40	.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470	.24	\$380.21	NA	\$271.99	\$135.80
Number of Units:	2		1	1	0	1	
Group Subtotals:	Work:	\$1,270.82		Support:	\$380.21	Maint:	\$407.85
Total work team co MATERIAL QU Initial volume	JANTITIES		CCY	Swell	factor: 1.215		
Loose volume	: 10,01	.6	LCY				
	ource of estimated e of estimated swe Material Purch To	ell factor: Gase Cost: S			Estimate		
HOURLY PRO	<u>DUCTI</u> ON						
Truck Capacity: Truck Payload (wei							
Material v		oil		Pounds/LCY			
Rated Pa				Pounds			

Payload Capacity: _	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	Based on Number of	Loader Passes:	70.40	LCY	
Loading Tool Capacity			Ruck	et Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)	Duck	et Size Class. N	NA .	
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100-	120%) 1.100		_
Adjusted Capacity:	17.600	LCY	`	,		_
Job Condition Corrections:	•	 Sit	e Altitude (ft.): 9	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB))		
	0.830	0.830	(CAT HB)			
Job Efficiency:						
Net Correction:	0.830	0.813				
Net Correction:			ses Pequired to E	SII Truck	4	naccac
Net Correction: Loading Tool Cycle Time:	Numbe	0.813 r of Loading Tool Pas	ses Required to F	Fill Truck:	<u>4</u>	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	Numbe ls: s. Job Conditio	r of Loading Tool Pas	ses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v	Numbe <u>ls:</u> s. Job Conditio within this Basi	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	Numbe ls: s. Job Conditio within this Basi Material Descr	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders –	Numbe ls: s. Job Conditio within this Basi Material Descr	r of Loading Tool Pas on Rating: NA ic Rating: NA	ses Required to F	Fill Truck:		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.):	Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA NA ription: Maneuver: NA		Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA	Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA NA ription: Maneuver: NA		Dump: 0.100	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders –	Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA In Rating: NA In Rating: NA In		Dump: 0.100	0 0.625 min	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba	on Rating: NA In Rating: NA In Rating: NA In	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.)	0 0.625 min Source	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applicat nership of trucks and	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	r of Loading Tool Pasen Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Time ial 0.02 nt - factor not applicate nership of trucks and cration -0.04	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	0	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow	on Rating: On Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate nership of trucks and eration -0.04 get 0.00	ne (load, dump, m	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim ial 0.02 nt - factor not applicate the restriction of trucks and cration -0.04 get 0.00 Net Cycle Tim	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applicate the ration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, mole 0.00 loaders -0.04	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applicate the ration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, mole 0.00 loaders -0.04 loaders -Cycle Time:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmet Common ow Constant ope Nominal targ	r of Loading Tool Pas on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin ial 0.02 nt - factor not applicate the ration -0.04 get 0.00 Net Cycle Tim Adjusted Loader	ne (load, dump, mole 0.00 loaders -0.04 loaders -0.04 loaders -me per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope Nominal targ	on Rating: On Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Time ial 0.02 nt - factor not applicate nership of trucks and eration -0.04 get 0.00 Net Cycle Time Adjusted Loade Net Load Ti	ne (load, dump, mole 0.00 loaders -0.04 loaders - Cycle Time: me per Truck:	Dump: 0.100 naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	O Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	-3.60	3.00	-0.60	3503	0.213

Haul Time: **0.213** minutes

Return Route:

ictuin ic	rute.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	3.60	3.00	6.60	2398	0.394

Return Time: 0.394 minutes
Total Truck Cycle Time: 4.439 minutes

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production

____951.64 LCY/Hour Adjusted for job efficiency: ____789.86 LCY/Hour

Optimal No. of Trucks: _____ 2 ___ Truck(s) Selected Number of Trucks: ____ 2 ___ Truck(s)

Adjusted hourly truck team production: 1,579.73 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 7.52
 Hours

 Unit cost:
 \$1.545
 /LCY
 Total job cost:
 \$15,480

Task description:	Crush	her Mine A	rea -Topsoil -	Delivery Road - Doze	r Spreading	
Cresson Project		Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATI(ON				
Task #: A060		State:	Colorado		Abbreviation:	None
Date: 11/20	/2023	County:	Teller		Filename:	M244-A0608
	:14 PM				-	
User: ZTT						
Agency or	organization i	name: DF	RMS			
HOURLY EQUI	PMENT CO	<u>ST</u>				
Basic Machine:	Cat D7R DS	S Series II L	GP	_		
Horsepower:	240					
Blade Type:	Straight			_		
Attachment:	NA			_		
Shift Basis:	1 per day			_		
Data Source:	(CRG)			=		
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/H			\$114.76	NA		
Operating Cost/H			\$91.98	100		
Ripper own. Cost/H			\$0.00	NA		
Ripper op. Cost/H	our:		\$0.00	25		
Operator Cost/H	our:		\$41.30	NA		
MATERIAL QU Initial Volume:	8,244 1.215					
Swell factor: Loose volume:	1.215 10,016 LCY		<u>—</u> —			
Source of estimated Source of estimated		2022 CC Cat Hand	&V Provided I	Estimate		
HOURLY PROD	<u>UCTION</u>					
Average push distar		50 feet	/1			
Unadjusted hourly p	production: _	800.0 LCY	nr			
Materials consistence	ey description:	Loose	stockpile 1.2			
Average push gradie	ent: -30 %					
Average site altitude		feet				
Material weight:	1,600	lbs/LCY			_	
Weight description:	Top S	oil				
Job Condition Corre				Source		
	rator Skill:		750	(AVG.)		
Material co			200	(CAT HB)		
Dozir	g method:	1.	000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 1,100.64 LCY/hr
Adjusted fleet production: 1100.64 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.225/LCY

Total job time: 9.10 Hours
Total job cost: \$2,257

BULLDOZER RIPPING WORK

	Task description:	Crusher	Mine Area - Topsoi	- Delivery Rd	- Ripping			
Site:	Cresson Projec	et	Permit Action:	2023	Peri	mit/Job#:	: <u>M19802</u>	14
	PROJECT IDE	NTIFICATION						
	Task #: A06	509	State: Colorado		Abbre	viation:	None	
			County: Teller			ename:	M244-A0	609
	2:09):24 PM						
	User: ZTT	·						
	Agency	or organization nar	ne: DRMS					
	HOURLY EQU	IPMENT COST	<u>r</u>					
	Basic M	Machine: Cat D7	R DS Series II LGP		Horsepower:		240	
	Ripper Atta		k Ripper		Shift Basis:	1 1	per day	
	••		••		Data Source:		CRG)	
	Cost Breakdown:							
	Cost Broakdo Wil.			1	Utilization %			
		Ownership Cost/I	Hour:	\$114.76	NA			
		Operating Cost/I		\$91.98	100			
		r Ownership Cost/l		\$9.06	NA			
	Rippe	er Operating Cost/l		\$5.02	100			
		Operator Cost/l		\$41.30	NA			
		Total Unit Cost/l	Hour:	\$262.12				
		Total Fleet Cost/l	Hour: \$262	.12				
	MATERIAL Q	UANTITIES	Sele	cted estimating	method: Area			
	Alternate Methods		Seic	cted estimating	method: Thea			
•		-	D1 W -1	NT A	DCW		NTA	
smic: Area:	NA 10.22	0.0700	Bank Volume: _ Rip Depth (ft):	NA 2.50	BCY Volume: 41	,221	NA	BCY or C
nca.	10.22	acres				,221		BCT 01 C
		Source of estimate	ed quantity: 2022 C	C&V Provided	Estimate			
	HOURLY PRO	DUCTION						
	Seismic:							
	Scisinc.	Seis	mic Velocity:	NA	feet/secon	nd		
		5015		1111	1004 80001			
	Area:	, D	· · · · D · d	2.45	S /			
			ipping Depth:	2.45 6.50	feet/pass			
			ipping Width: oping Length:	300.00	feet/pass feet/pass			
			Dozer Speed:	88.00	feet/minu	te.		
		_	neuver Time:	0.25	minutes/p			
			per unit area:	0.734	acres/hou			
	Job Condition Cor	rection Factors						
		djusted Hourly Un	it Production:	0.734	Acres/hr			
		-	Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HB)		
		Je	ob Efficiency:	0.83	(1 shift/da	*		
			et Correction:	0.83	multiplier	•		
		Adjusted Ho	urly Unit Production:	0.61	Acres/hr			
			rly Fleet Production:	0.61	Acres/hr			
	JOB TIME AN	·			120100/111			
	Fleet size:		rader(s)	Total job tim	و. 14	.77	Ног	ırc
				•			1100	*10
	Unit cost:	\$430.227 P	er acre	Total job cos	st: \$4, :	397		

TRUCK/LOADER TEAM WORK

Task description:	Chicago	Mine Area - To	psoil - Transport	t		
Site: Cresson Project	· ·	Permit Actio	on: <u>2023</u>]	Permit/Job#: M	1980244
PROJECT IDEN	NTIFICATION	<u>1</u>				
Task #:A070		State: Colora	ado	Ab	breviation: No	
	2/2023 55 PM	County: Teller			Filename: M2	244-A0700
User: $\frac{2.13}{ZTT}$	33 I WI					
Agency of	r organization nai	me: DRMS				
HOURLY EQUI	PMENT COS	<u>T</u>		Shift bas	is: <u>1 per day</u>	
		I	Equipment Descri	ption		
	Truck Loader Tea	am -Truck: Cat	777F	1		
			Γ 992K			
Supp	oort Equipment -I D-	ump Area: Cat NA	D10T - 10SU			<u> </u>
Road M	Iaintenance –Mot	1	Г 16М			
	-Wa	ater Truck: Wat	er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team		Equipment		ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$1,270.82	Support:	\$380.21	Maint:	\$407.85
Total work team co MATERIAL OU Initial volume	JANTITIES	CCY	Swell	factor: 1.215		
Loose volume	3,92	2 LCY				
	ource of estimated e of estimated swe Material Purch	ell factor: Cat H		Estimate		
HOUBLEAD		ψυ.υυ	•			
HOURLY PRO	_					
Truck Payload (wei			Pounds/LCY			
	ription: $\frac{1,000}{\text{Top So}}$	oil	Founds/LC I			
Rated Pa			Pounds			

Payload Capacity:	125.00	LC	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Bucl	ket Size Class:	NA	
Rated Capacity:	16.000	LCY (heaped	1)	-		
Bucket Fill Factor:	1.100	Other - rock/o		0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	S:_		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:			Dassas Daquirod to	Fill Truck:	4	nassas
Loading Tool Cycle Time	:: Numbe		Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Show	els: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Numberels: vs. Job Condition within this Bas	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Numbered	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value	e: Numbered	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc):	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to		.100	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min.	vels: vs. Job Condition within this Bas Material Desc):	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0.	.100	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min.) Load: NA	vels: vs. Job Condition within this Base Material Desc): 4 5 - Unadjusted B	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Base Material Desc): S - Unadjusted B	on Rating: NA Sic Rating: NA Stription: NA State Loader Cycle Tasks		Dump: 0.	100 0.625 min	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minimal Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	vels: vs. Job Condition within this Base Material Desc : - Material Desc : - Unadjusted B Mixed material No adjustme	on Rating: NA	Time (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000	.100 0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base Material Desc : - Material Desc : - Unadjusted B Mixed mater No adjustme Common ow	on Rating: NA	Time (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA	Time (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Stription: NA S	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump: _0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Trial 0.02 Sent - factor not applied where the property of trucks a seration -0.04 Set 0.00 Net Cycle Total Net Cyc	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.)	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Station: NA Station: NA	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Station: NA Station: NA	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump:0. maneuver): Factor (min.)	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minimals) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: Maneuver: NA Station: NA Station: NA	Time (load, dump, ricable 0.00 nd loaders -0.04	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minimals) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vs. Job Condition within this Base Material Desc The Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: Maneuver: NA Station: NA Station: NA	Time (load, dump, ricable 0.00 nd loaders -0.04 Fime Adjustment: lader Cycle Time: I Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base Material Desc : - Material Desc : - Unadjusted B Mixed mater No adjustme Common ow Constant ope Nominal targ ne: 0.80	on Rating: NA Sic Rating: Maneuver: NA Station: Maneuver: NA Station: Maneuver: NA Station: Maneuver: NA Station: NA Station: NA	Time (load, dump, ricable 0.00 nd loaders -0.04 Time Adjustment: rader Cycle Time: d Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	-3.60	3.00	-0.60	3503	0.213

Haul Time: 0.213 minutes

Return Route:

Ttotal II Ito	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	3.60	3.00	6.60	2398	0.394

Return Time: 0.394 minutes
Total Truck Cycle Time: 4.439 minutes

Loading Tool unit

Optimal No. of Trucks: _____ 2 ___ Truck(s) Selected Number of Trucks: ____ 2 ___ Truck(s)

Adjusted hourly truck team production: 1,579.73 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____ Hours

Unit cost: \$1.545 /LCY Total job cost: **\$6,061**

Task description:	Chicago Mine A	rea -Topsoil	- Dozer Spreading		
Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTI	IFICATION				
Task #: A0701	State:	Colorado		Abbreviation:	None
Date: $\frac{76701}{11/20/20}$		Teller		Filename:	M244-A0701
10:26:25	•				
User: ZTT					
Agency or or	ganization name:DF	RMS			
HOURLY EQUIPM	MENT COST				
Basic Machine: 0	Cat D7R DS Series II L	GP			
Horsepower: 2	240				
	Straight				
	NA				
	per day		<u> </u>		
	CRG)		<u> </u>		
Cost Breakdown:			<u>Utilization %</u>		
Ownership Cost/Hour	p.	\$114.76	NA		
Operating Cost/Hour		\$91.98	100		
Ripper own. Cost/Hour		\$0.00	NA		
Ripper op. Cost/Hour		\$0.00	25		
Operator Cost/Hour		\$41.30	NA		
Total Fleet Cost/Hour: MATERIAL QUAN	\$248.04 NTITIES				
	228				
	215	_			
	922 LCY				
Source of estimated vo		— &V Provided	l Estimata		
Source of estimated vo			- Estimate		
HOURLY PRODU	CTION				
Average push distance:					
Unadjusted hourly produced		'hr			
Materials consistency of	description: Loose s	stockpile 1.2			
Average push gradient:	: -30 %				
Average site altitude:	9,500 feet	<u> </u>			
Material weight:	1,600 lbs/LCY			_	
Weight description:	Top Soil				
Job Condition Correcti			Source		
Operato Material cons		750 200	(AVG.) (CAT HB)		
N/Intornal across					

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 1,100.64 LCY/hr
Adjusted fleet production: 1100.64 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.225/LCY

Total job time: 3.56 Hours
Total job cost: \$884

BULLDOZER RIPPING WORK

	Task description:	Chica	ago Mine Area - Topsoil	- Ripping				
Site:	Cresson Projec	t	Permit Action:	2023	Peri	nit/Job#:	M1980	244
	PROJECT IDE	NTIFICATI(<u>ON</u>					
	Task #: A070	02	State: Colorado		Abbrey	viation:	None	
	Date: 11/2 2:10	1/2023 :41 PM	County: Teller			ename:	M244-A	0702
	User: ZTT		name: DRMS					
	HOURLY EQU	· ·						
	Basic M		D7R DS Series II LGP		Homomorrom		240	
	Ripper Attac		nank Ripper	_	Horsepower: Shift Basis:		240 er day	
	Ripper Attac		анк кірреі	<u> </u>	Data Source:		CRG)	
	Cost Breakdown:							
					Utilization %			
		Ownership Co		\$114.76	NA NA			
	Dimmon	Operating Co		\$91.98	100			
		Ownership Co or Operating Co		\$9.06 \$5.02	NA 100			
	Kippe	Operator Co		\$41.30	NA			
		Total Unit Co		\$262.12	IVA			
		Total Fleet Co	st/Hour: \$262	2.12				
	MATERIAL QU							
	Alternate Methods		Sele	cted estimating	method: Area			
		<u>•</u>						
smic:	NA		Bank Volume:	NA 2.50	BCY		NA	D.CV.
Area:	4.10	acres	Rip Depth (ft):	2.50	Volume: 16	,537		BCY or C
		Source of estim	nated quantity: 2022 C	C&V Provided	Estimate			
	HOURLY PRO	DUCTION						
	Seismic:							
	<u>seisime.</u>	S	leismic Velocity:	NA	feet/secon	d		
				·				
	Area:	A	Dinning Double	2.45	£4/			
			e Ripping Depth: e Ripping Width:	2.45 6.50	feet/pass feet/pass			
			Ripping Width: Ripping Length:	150.00	feet/pass			
			ge Dozer Speed:	88.00	feet/minut	e.		
			Maneuver Time:	0.25	minutes/p			
			ion per unit area:	0.687	acres/hour			
	Job Condition Cor	rection Factors						
	Una	djusted Hourly	Unit Production:	0.687	Acres/hr			
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HB	•		
			Job Efficiency:	0.83	(1 shift/da	•		
			Net Correction:	0.83	multiplier			
			Hourly Unit Production:	0.57 0.57	Acres/hr Acres/hr			
	JOB TIME ANI	· ·	Hourly Fleet Production:	<u> </u>	ACICS/III			
	Fleet size:	1	Grader(s)	Total job tim	ne: 7. .	19	Ц	ours
		¢450.601		•				Outs
	Unit cost:	\$459.621	Per acre	Total job cos	st: \$1, 8	584		

TRUCK/LOADER TEAM WORK

Site Cresson Project	Task description:	TR133	WHEX Clay Boi	row Area - Tops	oil - Transport		
Task #: A0703	Site: Cresson Project		Permit Acti	on: 2023]	Permit/Job#: M	1980244
Date I1/22/2023 County: Teller Filename: M244-A0703	PROJECT IDE	NTIFICATION	<u>I</u>				
					Ab		
User: ERR			County: Teller	•		Filename: M2	44-A0703
HOURLY FOUPMENT COST			-				
Equipment Description	Agency o	r organization nar	ne: DRMS				
Truck Loader Team - Truck Cat 740 -Loader Cat 188T - 88U Cat 18	HOURLY EQU	PMENT COS	<u>r</u>		Shift bas	is: 1 per day	
CAT 988H Support Equipment -Load Area: Data Support Equipment NA					ption		,
Support Equipment -Load Area: -Dump Area: -Dump Area: -Dump Area: -Dump Area: -Dump Area: -NA	,	Fruck Loader Tea					
Road Maintenance	Supp	oort Equipment -I					
Nater Truck			1				
Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment	Road M				Col		
Mater Truck Loader Load Area Dump Area Motor Grader Water Truck		- VV 2	iter fruck: wa	ter ranker, 7,000	Gai.		
Multilization-machine: 100	Cost Breakdown:	Truck/Lo	ader Team	Support l	Equipment	Maintenan	ce Equipment
Ownership cost/hour: \$113.82 \$109.98 \$241.38 NA \$212.21 \$86.29 Operating cost/hour: \$81.91 \$95.55 \$143.92 NA \$31.22 \$28.44 % Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Ripper opc. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Operator cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Operator cost/hour: \$32.98 \$40.71 \$41.30 NA \$28.56 \$21.12 Unit Subtotals: \$228.71 \$246.24 \$426.60 NA \$271.99 \$135.86 Number of Units: 3 1 1 0 1 1 1 Group Subtotals: Work: \$932.37 Support: \$426.60 Maint: \$407.85 MATERIAL QUANTITIES Source of estimated swell fact		Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
Operating cost/hour:	%Utilization-machine:	100	100	100	NA	25	25
%Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Operator cost/hour: \$32.98 \$40.71 \$41.30 NA \$28.56 \$21.12 Unit Subtotals: \$228.71 \$246.24 \$426.60 NA \$271.99 \$135.86 Number of Units: 3 1 1 0 1 1 1 Group Subtotals: Work: \$932.37 Support: \$426.60 Maint: \$407.85 Total work team cost/hour: ### Acceptable of estimated volume: Source of estimated swell factor: ### Acceptable of the control of the contro	Ownership cost/hour:	\$113.82	\$109.98	\$241.38	NA	\$212.21	\$86.29
Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$0.00 Ripper op. cost/hour: NA \$0.00 \$0.00 \$0.00 NA \$0.00	Operating cost/hour:	\$81.91	\$95.55	\$143.92	NA	\$31.22	\$28.44
Ripper op. cost/hour: NA	•						
Operator cost/hour: \$32.98 \$40.71 \$41.30 NA \$28.56 \$21.12 Unit Subtotals: \$228.71 \$246.24 \$426.60 NA \$271.99 \$135.86 Number of Units: 3 1 1 0 1 1 Group Subtotals: Work: \$932.37 Support: \$426.60 Maint: \$407.85 MATERIAL QUANTITIES Initial volume: 3,807 CCY Swell factor: 1.215 Loose volume: 4,626 LCY Source of estimated volume: TR133 Cat Handbook Material Purchase Cost: \$0.00 Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil							
Unit Subtotals: \$228.71 \$246.24 \$426.60 NA \$271.99 \$135.86 Number of Units: 3							·
Number of Units: 3	*						
Group Subtotals: Work: \$932.37 Support: \$426.60 Maint: \$407.85 Total work team cost/hour: \$1,766.82 MATERIAL QUANTITIES Initial volume: 3,807 CCY Swell factor: 1.215 Loose volume: 4,626 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook So.00 Material Purchase Cost: 50.00 Total Cost: Total Cost: Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil		· · · · · · · · · · · · · · · · · · ·					
Total work team cost/hour: \$1,766.82 MATERIAL QUANTITIES Initial volume: 3,807							
MATERIAL QUANTITIES Initial volume: 3,807	•			Support.	φ420.00	Maint.	\$407.83
Initial volume: 3,807	Total work team co	st/hour: \$1,766.	82				
Loose volume: Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: When the standard of the sta	MATERIAL QU	JANTITIES					
Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: Source of estimated swell factor: Cat Handbook \$0.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: Description: Top Soil					factor: 1.215		
Source of estimated swell factor: Material Purchase Cost: Total Cost: So.00 HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: Description: Top Soil	Loose volume	4,62	6 LCY	•			
Material Purchase Cost: Total Cost: \$0.00							
HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil	Source						
HOURLY PRODUCTION Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil							
Truck Capacity: Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil		1		~			
Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil	HOURLY PRO	<u>DUCTION</u>					
Truck Payload (weight) Basis: Material weight: 1,600 Pounds/LCY Description: Top Soil	Truck Capacity:	_					
Description: Top Soil	Truck Payload (we						
			••	Pounds/LCY			
				Pounds			

Payload Capacity	54.38	LC	Y			
Truck Bed (volume) Basi	ç.					
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
F	inal Truck Volur	me Based on Number	r of Loader Passes:	30.36	LCY	
Loading Tool Capacity			р. 1	G. G. A	.т.а	
Rated Capacity	9.200	LCY (heaped		ket Size Class: N	NA	<u>—</u>
Bucket Fill Factor	: 1.100	Other - rock/	dirt mixtures (100	-120%) 1.100		_
Adjusted Capacity	10.120	LCY				_
Job Condition Correction	ons:		Site Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB	,		
Job Efficiency:	0.830	0.830	(CAT HB	3)		
Net Correction:	0.681	0.789				
Net Correction: Loading Tool Cycle Tin		0.789 ber of Loading Tool	Passes Required to	Fill Truck:	3 1	passes
L	me: Numl		Passes Required to	Fill Truck:	31	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin	ne: Numl	ber of Loading Tool	Passes Required to	Fill Truck:	31	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va	ne: Numl ovels: ne vs. Job Condit	ber of Loading Tool tion Rating: NA asic Rating: NA	Passes Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va	ne: Numbovels: ne vs. Job Conditue within this Bars – Material Des	ber of Loading Tool tion Rating: NA asic Rating: NA	Passes Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loade	ne: Numbovels: ne vs. Job Conditue within this Bars – Material Des	ber of Loading Tool tion Rating: NA asic Rating: NA	Passes Required to	Fill Truck:		passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m	ne: Numlovels: ne vs. Job Conditue within this Bars – Material Desin.):	tion Rating: NA NA Scription: NA		Dump: 0.10		
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA	ne: Numlovels: ne vs. Job Conditue within this Bars – Material Desin.):	tion Rating: NA NA Scription: NA		Dump: 0.10	0	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Factor Materia	ne: Numbers Numbers - Unadjusted in Mixed material Designs:	ber of Loading Tool tion Rating: NA asic Rating: NA Scription: NA Maneuver: NA Basic Loader Cycle of the control of the cont	Time (load, dump, r	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020	0 0.575 min Source (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Factor Materi Stockpi	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Destin.): ers - Unadjusted in the series of th	tion Rating: Assic Rating: Maneuver: Maneuver: NA Basic Loader Cycle erial 0.02 nent - factor not appl	Time (load, dump, r	Dump: 0.100 maneuver): 0.000 Factor (min.) 0.020 0.000	0 0.575 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownersh	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Design.): ers - Unadjusted or sers – Unadjuste	tion Rating: NA asic Rating: NA scription: Maneuver: NA Basic Loader Cycle derial 0.02 ment - factor not applications are supplied to the content of the co	Time (load, dump, r	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040	0 Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpii Truck Ownershi Operation	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Design.): ers - Unadjusted ors al: Mixed material Designs or one of the common one of the constant of the	tion Rating: NA asic Rating: NA scription: Maneuver: NA Basic Loader Cycle cerial 0.02 ment - factor not appl ownership of trucks a peration -0.04	Time (load, dump, r	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownersh	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Design.): ers - Unadjusted ors al: Mixed material Designs or one of the common one of the constant of the	tion Rating: NA asic Rating: NA Scription: Maneuver: NA Basic Loader Cycle derial 0.02 ment - factor not applownership of trucks a peration -0.04 urget 0.00	Time (load, dump, r icable 0.00 and loaders -0.04	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpii Truck Ownershi Operation	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Design.): ers - Unadjusted ors al: Mixed material Designs or one of the common one of the constant of the	tion Rating: NA asic Rating: NA scription: Maneuver: NA Basic Loader Cycle erial 0.02 nent - factor not appl ownership of trucks a peration -0.04 urget 0.00 Net Cycle	Time (load, dump, ricable 0.00 and loaders -0.04	Dump: 0.100 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpii Truck Ownershi Operation	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Design.): ers - Unadjusted ors al: Mixed material Designs or one of the common one of the constant of the	tion Rating: NA asic Rating: Maneuver: Maneuver: NA Basic Loader Cycle erial 0.02 ment - factor not appl ownership of trucks a peration -0.04 triget 0.00 Net Cycle T Adjusted Lo	Time (load, dump, r icable 0.00 and loaders -0.04	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Val Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpii Truck Ownershi Operation	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Design.): ers - Unadjusted ors al: Mixed material Designs or one of the common one of the constant of the	tion Rating: NA asic Rating: Maneuver: Maneuver: NA Basic Loader Cycle erial 0.02 ment - factor not appl ownership of trucks a peration -0.04 triget 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operatio Dump Targ	ne: Numbers Nu	tion Rating: NA asic Rating: NA scription: Maneuver: NA Basic Loader Cycle derial 0.02 ment - factor not appl ownership of trucks a peration -0.04 urget 0.00 Net Cycle derived the cycle of the cycle	Time (load, dump, r icable 0.00 ind loaders -0.04 Time Adjustment: bader Cycle Time: d Time per Truck:	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operatio Dump Targ	ne: Number ovels: ne vs. Job Conditue within this Bars – Material Design.): ers - Unadjusted ors al: Mixed material Mixed material in	tion Rating: Asic Rating: Maneuver: Maneuver: Maneuver: Maneuver: Asic Loader Cycle rerial 0.02 ment - factor not appl ownership of trucks a peration -0.04 arget 0.00 Net Cycle T Adjusted Lo Net Load Minutes	Time (load, dump, residual loaders -0.04 Time Adjustment: pader Cycle Time: dd Time per Truck:	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515 1.130	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2800.00	0.00	3.00	3.00	3005	1.724

Haul Time: 1.724 minutes

Return Route:

rectarii rec	acc.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2800.00	0.00	3.00	3.00	3005	1.099

Return Time: 1.099 minutes
Total Truck Cycle Time: 5.964 minutes

Adjusted for job efficiency: 253.52 LCY/Hour

Loading Tool unit

Production 948.17 LCY/Hour Adjusted for job efficiency: 786.98 LCY/Hour Truck Unit Production

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 3 Truck(s)

305.45 LCY/Hour

Adjusted hourly truck team production: 760.57 LCY/Hour Adjusted single truck/loader team production: 760.57 LCY/Hour Adjusted multiple truck/loader team production: 760.57 LCY/Hour

JOB TIME AND COST

Fleet size: _____ 1 Team(s) Total job time: _____ 6.08 Hours

Unit cost: \$2.323 /LCY Total job cost: **\$10,745**

BULLDOZER RIPPING WORK

Task description:	TR133 WHEX Clay Borrov	v Area - Topsoil	- Ripping		
Site: Cresson Project	Permit Action:	2023	Permit	/Job#: _	M1980244
PROJECT IDENTIF	<u>ICATION</u>				
Task #: A0704	State: Colorado		Abbrevia	tion:	None
Date: 11/21/2023			Filen		M244-A0704
2:11:46 PM	<u> </u>				
User: ERR					
Agency or organ	nization name: DRMS				
HOURLY EQUIPME	ENT COST				
Basic Machine	e: Cat D7R DS Series II LGP		Horsepower:	24	.0
Ripper Attachment			Shift Basis:	1 per	
			Data Source:	(CR	
Cost Breakdown:					
Cost Bicardowii.			Utilization %		
Owne	rship Cost/Hour:	\$114.76	NA		
	rating Cost/Hour:	\$91.98	100		
Ripper Owne	rship Cost/Hour:	\$9.06	NA		
	rating Cost/Hour:	\$5.02	100		
<u> </u>	erator Cost/Hour:	\$41.30	NA		
Total	Unit Cost/Hour:	\$262.12			
Total	Fleet Cost/Hour: \$26	52.12			
MATERIAL OHANT					
MATERIAL QUANT	Se.	lected estimating	method: Area		
Alternate Methods:					
smic: NA	Bank Volume:	NA	BCY	N.	
Area: 4.70 acr	res Rip Depth (ft):	2.50	Volume: 18,95	57	BCY or 0
Source	e of estimated quantity: TR13	3			
HOURLY PRODUCT	TION				
•	HON				
Seismic:		27.4	6 ./ 1		
	Seismic Velocity:	NA	feet/second		
Area:					
	Average Ripping Depth:	2.45	feet/pass		
	Average Ripping Width:	6.50	feet/pass		
•	Average Ripping Length:	245.00	feet/pass		
	Average Dozer Speed: Average Maneuver Time:	88.00	feet/minute	_	
	Production per unit area:	0.25 0.723	minutes/pass acres/hour	8	
Job Condition Correction	•	0.723	acres/flour		
		0.702	A		
Unaajusted	Hourly Unit Production:	0.723	Acres/hr		
	Site Altitude:	9,500	feet (CAT UP)		
	Altitude Adj:	1.00 0.83	(CAT HB)		
	Job Efficiency: Net Correction:	0.83	(1 shift/day) multiplier		
	djusted Hourly Unit Production:	0.60	Acres/hr		
		0.60			
	djusted Hourly Unit Production:	0.60	Acres/hr		
Ac	djusted Hourly Unit Production:	0.60	Acres/hr Acres/hr		Hours

Task description: The	R133 WHEX Clay Borrow A	rea - Topsoil - Dozer	Spreading	
Cresson Project	Permit Action: _2	2023	Permit/Job#:	M1980244
PROJECT IDENTIFICAT	<u> FION</u>			
Task #: A0705 Date: 11/20/2023 10:27:21 PM User: ERR	State: Colorado County: Teller		Abbreviation: Filename:	None M244-A0705
Agency or organization	on name: DRMS			
HOURLY EQUIPMENT	COST			
Horsepower: 240 Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: \$24	\$114.76 \$91.98 \$0.00 \$0.00 \$41.30	Utilization % NA 100 NA 25 NA		
MATERIAL QUANTITIE Initial Volume: 3,807 Swell factor: 1.215 Loose volume: 4,626 LCY	<u>Y</u>			
Source of estimated volume: Source of estimated swell factor	TR133 Cat Handbook			
HOURLY PRODUCTION Average push distance: Unadjusted hourly production: Materials consistency descripti	200 feet 289.3 LCY/hr			
Average push gradient: -30 Average site altitude: 9,5	% 00 feet			
Material weight: 1,6	00 lbs/LCY			
Weight description: Top	o Soil			
Job Condition Correction Factor Operator Skill: Material consistency:	0.750 1.200	Source (AVG.) (CAT HB)		
Dozing method:	1.000	(GEN.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 398.02 LCY/hr
Adjusted fleet production: 398.02 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.623/LCY

Total job time: 11.62 Hours
Total job cost: \$2,883

Task description:	TR137 W	R137 WHEX Clay Borrow Area Expansion - Fine Grading EMP18				
: Cresson Project		Permit Action: _2	2023	Permit/Job#:	M1980244	
PROJECT IDEN	TIFICATION					
Task #: A0706	ń	State: Colorado		Abbreviation:	None	
Date: 12/1/2		ounty: Teller		Filename:	M244-A0706	
User: ERR		, <u> </u>		-		
Agency or	organization name	e: DRMS				
HOURLY EQUI	PMENT COST					
Basic Machine:	Cat D7R DS Ser	ries II LGP	-			
Horsepower:	240		-			
Blade Type:	Straight		-			
Attachment: Shift Basis:	NA 1 man day		=			
	1 per day		-			
Data Source:	(CRG)		-			
Cost Breakdown:		1				
0 11 ~ ==		A44	<u>Utilization %</u>			
Ownership Cost/H		\$114.76	NA 100			
Operating Cost/H		\$91.98	100 NA			
Ripper own. Cost/H		\$0.00 \$0.00	NA 0			
Ripper op. Cost/H						
Operator Cost/H	our:	\$41.30	NA			
Total unit Cost/Hour Total Fleet Cost/Hour						
Total Fleet Cost/110	л. \$240.04					
MATERIAL QU	ANTITIES					
Initial Volume:	1,870					
Swell factor:	1.000					
Loose volume: _	1,870 LCY					
Source of estimated	volume: T	R137				
Source of estimated	swell factor: C	at Handbook				
HOURLY PROD	<u>UCTION</u>					
Average push distan		feet				
Unadjusted hourly p	roduction: 496	.4 LCY/hr				
Materials consistence	y description:	Consolidated stockpil	e 1.0			
Average push gradie Average site altitude						
Material weight:		LCY				
Weight description:	Granite - F	Broken				
Job Condition Corre	ction Factor		Source			
	ator Skill:	0.750	(AVG.)			
Material co		1.000	(CAT HB)			
Dozin	g method:	1.000	(GEN.)			
	Visibility:	1.000	(AVG.)			

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6546

Adjusted unit production: 324.94 LCY/hr
Adjusted fleet production: 324.94 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.763/LCY

Total job time: 5.75 Hours
Total job cost: \$1,427

TRUCK/LOADER TEAM WORK

Task description:	TR137	WHEX Clay Bor	row Area Expan	sion - Topsoil - T	'ransport			
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244		
		r						
PROJECT IDEN		_						
Task #: A070 Date: 12/1/		State: Colora County: Teller	ıdo	Ab	breviation: Nor M2 Filename: M2	ne 44-A0707		
User: ERR	2023	County: Teller			riieliailie: M2	44-A0707		
	r organization nar	me: DRMS						
HOURLY EQU	PMENT COST	<u>r</u>		Shift bas	is: <u>1 per day</u>			
	Equipment Description							
	Fruck Loader Tea							
	· F		Г 988Н					
Supp	Support Equipment -Load Area: Cat D8T - 8SU -Dump Area: NA							
Road M	Iaintenance –Mot		Г 16М					
			er Tanker, 7,000	Gal.				
Cost Breakdown:		ader Team		Equipment		ce Equipment Water Truck		
	Truck	Loader	Load Area	Dump Area	Motor Grader	water Truck		
%Utilization-machine:	100	100	100	NA	25	25		
Ownership cost/hour:	\$113.82	\$109.98	\$241.38	NA	\$212.21	\$86.29		
Operating cost/hour:	\$81.91	\$95.55	\$143.92	NA	\$31.22	\$28.44		
%Utilization-riper:	NA	0	NA	NA	NA	NA		
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00		
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00		
Operator cost/hour:	\$32.98	\$40.71	\$41.30	NA	\$28.56	\$21.12		
Unit Subtotals:	\$228.71	\$246.24	\$426.60	NA	\$271.99	\$135.86		
Number of Units:	3	1	1	0	1	1		
Group Subtotals:	Work:	\$932.37	Support:	\$426.60	Maint:	\$407.85		
Total work team co		82						
MATERIAL QU	<u>IANTITIES</u>							
Initial volume		CCY	Swell	factor: 1.215				
Loose volume	: 7,98 9	9 LCY						
	ource of estimated							
Source	of estimated swe		Iandbook					
	Material Purch	ase Cost: $\frac{\$0.00}{\$0.00}$						
	10	Jui Cost. <u>ψ0.00</u>	,					
HOURLY PRO	DUCTION							
Truck Capacity: Truck Payload (wei	oht) Basis							
Material v			Pounds/LCY					

Pounds

LCY

Description:

Rated Payload:

Payload Capacity:

Top Soil

87,000

54.38

Truck Bed (volume) Basis: Struck Volume:	24.20 L	CY				
Heaped Volume:		CY				
Average Volume:		CY				
Adjusted Volume:		CY				
riajusteu voiume.						
Final '	Гruck Volume В	Based on Number of	Loader Passes:	30.36	LCY	
Loading Tool Capacity						
		i .	Buck	et Size Class: Na	A	_
Rated Capacity:	9.200	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dir	t mixtures (100-	120%) 1.100		_
Adjusted Capacity:	10.120	LCY				
Job Condition Corrections:		Si	te Altitude (ft.): 92	500 feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB))		
Job Efficiency:	0.830	0.830	(CAT HB))		
Net Correction:	0.681	0.789				
Loading Tool Cycle Time:	Number (of Loading Tool Pas	see Reallirea to F			
Excavators and Front Shovel		C	sses required to 1	III TTUCK.	p	asses
Excavators and Front Shovels	<u>s:</u>	-	sses required to 1	III Truck.	p	asses
Excavators and Front Shovels Machine Cycle Time vs Selected Value w	s: . Job Condition	Rating: NA	sses required to 1		p	asses
Machine Cycle Time vs	s: . Job Condition vithin this Basic	Rating: NA NA NA	sees recounted to 1		p	oasses
Machine Cycle Time vs Selected Value w Track Loaders – I	s: . Job Condition vithin this Basic	Rating: NA NA NA	sees required to 1		p	oasses
Machine Cycle Time vs Selected Value w Track Loaders – I	s: . Job Condition vithin this Basic Material Descrip	Rating: NA NA NA	sses required to r	Dump: 0.100		oasses
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA	s: . Job Condition vithin this Basic Material Descrip Ma	Rating: NA	· 	Dump: 0.100		
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.):	s: Job Condition vithin this Basic Material Descrip Ma	Rating: NA	· 	Dump: 0.100		
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders -	s: Job Condition vithin this Basic Material Descrip Ma	Rating: NA Rating: NA ition: NA neuver: NA ic Loader Cycle Tin	· 	Dump: 0.100 naneuver): 0.100	575 minu	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors	s: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material	Rating: NA Rating: NA ition: NA neuver: NA ic Loader Cycle Tin	ne (load, dump, m	Dump: 0.100 naneuver): 0.100 Factor (min.)	575 minu Source	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material:	s: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment	Rating: NA	ne (load, dump, m	Dump: 0.100 naneuver): 0. Factor (min.) 0.020	575 minu Source (Cat HB)	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	s: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment	Rating: NA Rating: NA Include: NA Rating: NA	ne (load, dump, m	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000	575 minu Source (Cat HB) (Cat HB)	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	S: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment Common owners	Rating: NA Rating: NA Pation: NA Rating: NA	ne (load, dump, m	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000 -0.040	575 minu Source (Cat HB) (Cat HB) (Cat HB)	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	S: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment Common owner Constant opera	Rating: NA Rating: NA N	ne (load, dump, m ble 0.00 loaders -0.04	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040	575 minu Source (Cat HB) (
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	S: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment Common owner Constant opera	Rating: NA Rating: NA N	ne (load, dump, m ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	Dump: 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515	575 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	S: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment Common owner Constant opera	Rating: NA Rating: NA N	ne (load, dump, m ble 0.00 loaders -0.04	Dump: 0.100 naneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	S: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment Common owner Constant opera	Rating: NA Rating: NA N	ne (load, dump, m ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	Dump: 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	S: Job Condition vithin this Basic Material Descrip Ma Unadjusted Basic Mixed material No adjustment Common owner Constant opera	Rating: NA Rating: NA N	ne (load, dump, m ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time: ime per Truck:	Dump: 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	ites
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Material Descrip Material Descrip Ma Unadjusted Basi Mixed material No adjustment Common owner Constant opera Nominal target	Rating: NA Rating: NA N	ne (load, dump, moble 0.00 loaders -0.04 loa	Dump: 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515 1.130	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

Truck Travel (Haul & Return) Time: Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2800.00	0.00	3.00	3.00	3005	1.724

Haul Time: 1.724 minutes

Return Route:

Tetain Toute.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2800.00	0.00	3.00	3.00	3005	1.099

Return Time: 1.099 minutes
Total Truck Cycle Time: 5.964 minutes

Loading Tool unit

Production 948.17 LCY/Hour Adjusted for job efficiency: 786.98 LCY/Hour Truck Unit Production 305.45 LCY/Hour Adjusted for job efficiency: 253.52 LCY/Hour

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 760.57 LCY/Hour Adjusted single truck/loader team production: 760.57 LCY/Hour Adjusted multiple truck/loader team production: 760.57 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____10.50 Hours

Unit cost: \$2.323 /LCY Total job cost: **\$18,558**

BULLDOZER RIPPING WORK

	Task description	: TR	137 WHEX Clay Borrow	Area Expansi	on - Topsoil - Ripp	ing		
Site	: Cresson Proje	ect	Permit Action:	2023	Perr	nit/Job#	: <u>M19802</u>	44
	PROJECT ID	ENTIFICAT	ION					
	Task #: A0	0708	State: Colorado		Abbrev	iation:	None	
		/1/2023	County: Teller		File	ename:	M244-A0	0708
	User: ER	RR						
	Agency	or organization	n name: DRMS					
	HOURLY EQ	UIPMENT C	OST					
			at D7R DS Series II LGP		Horsepower:		240	
	Ripper Att		Shank Ripper		Shift Basis:	1 1	per day	
	11		· · · · · · · · · · · · · · · · · · ·	<u>—</u>	Data Source:		CRG)	
	Cost Breakdown	:						
		_			Utilization %			
		Ownership C		\$114.76	NA			
	D'	Operating C		\$91.98	100 NA			
		er Ownership C per Operating C		\$9.06 \$5.02	NA 100			
	Kip	Operator C		\$41.30	NA			
		Total Unit C		\$262.12				
		Total Fleet C	Cost/Hour: \$262) 12				
			-	.12				
	MATERIAL (<u> UANTITIES</u>	Sele Sele	cted estimating	g method: Area			
	Alternate Method	ds:						
Seismic:	NA		Bank Volume:	NA	BCY		NA	
Area:	8.20	acres	Rip Depth (ft):	2.50	Volume:33,	073		BCY or C
		Source of est	imated quantity: TR137					
	HOURLY PR	ODUCTION						
								
	Seismic:		Seismic Velocity:	NA	feet/secon	d		
				1,11				
	Area:	Avano	go Pinning Donthy	2.45	foot/page			
			ge Ripping Depth: ge Ripping Width:	2.45 6.50	feet/pass feet/pass			
			ge Ripping Width:	245.00	feet/pass			
		_	rage Dozer Speed:	88.00	feet/minut	e		
			e Maneuver Time:	0.25	minutes/pa			
		Produ	ction per unit area:	0.723	acres/hour			
	Job Condition Co	orrection Factor	<u>'S</u>					
	Ur	nadjusted Hourl	y Unit Production:	0.723	Acres/hr			
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HB))		
			Job Efficiency:	0.83	(1 shift/da			
			Net Correction:	0.83	multiplier			
		Adjusted	l Hourly Unit Production:	0.60	Acres/hr			
		Adjusted	Hourly Fleet Production:	0.60	Acres/hr			
	JOB TIME AN	ND COST						
	Fleet size:	1	_ Grader(s)	Total job tin	ne: <u>13.</u>	67	Но	urs
	Unit cost:	\$436.825	Per acre	Total job co	ost: \$3.5	882		

Task description:	TR13	77 WHEX Clay Borrow A	rea Expansion - Tops	soil - Dzr Spread	
: Cresson Project		Permit Action: 2	023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATIO	<u>ON</u>			
Task #: A0709	9	State: Colorado		Abbreviation:	None
Date: 12/1/2		County: Teller		Filename:	M244-A0709
User: ERR				-	
Agency or	organization i	name: DRMS			
HOURLY EQUI					
Basic Machine:		S Series II LGP			
Horsepower:	240				
Blade Type:	Straight				
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/H		\$114.76	NA		
Operating Cost/H		\$91.98	100		
Ripper own. Cost/H		\$0.00	NA		
Ripper op. Cost/H		\$0.00	25		
Operator Cost/H	our:	\$41.30	NA		
T. (.1	φ 2.40. 6				
Total unit Cost/Hou Total Fleet Cost/Hou					
MATERIAL QU Initial Volume: Swell factor:	6,575 1.215				
Loose volume:	7,989 LCY				
Source of estimated Source of estimated		TR137 Cat Handbook			
HOURLY PROD	<u>UCTION</u>				
Average push distan	ice:	200 feet			
Unadjusted hourly p	oroduction:	289.3 LCY/hr	<u> </u>		
Materials consistence	y description:	Loose stockpile 1.2			
Average push gradie Average site altitude		feet			
Material weight:	1,600	lbs/LCY			
Weight description:	Top S	oil			
Job Condition Corre		0.750	Source (AVC)		
	rator Skill:	0.750	(AVG.)		
Material co	onsistency: ig method:	1.200 1.000	(CAT HB) (GEN.)		
	Visibility:	1.000	(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 398.02 LCY/hr
Adjusted fleet production: 398.02 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.623/LCY

Total job time: 20.07 Hours
Total job cost: \$4,978

Task description:	AGVLF - Pile Le	eveling - Ma	ss Grading		
: Cresson Project	Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIF	<u>ICATION</u>				
Task #: A1000	State:	Colorado		Abbreviation:	None
Date: $\frac{A1000}{11/20/2023}$		Teller		Filename:	M244-A1000
10:28:21 P	•	101101		1 11011111101	1.12 111000
User: ZTT				-	
Agency or orga	nization name:DF	RMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	t D10T - 10SU				
Horsepower: 574	4				
	mi-Universal				
Attachment: NA			_		
	er day				
Data Source: (Cl	RG)		<u> </u>		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hour:	-	\$178.69	NA		
Operating Cost/Hour:		\$160.22	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$380.21 \$760.42				
MATERIAL QUANT Initial Volume: 31,7					
Swell factor: 1.00					
Source of estimated volu Source of estimated swel		&V Provided book	l Estimate		
HOURLY PRODUC	TION				
Average push distance:	50 feet				
Unadjusted hourly produ		Y/hr			
Materials consistency des	scription: Loose s	stockpile 1.2			
Avanaga1 1'	10.0/				
Average push gradient: Average site altitude:	-10 % 9,500 feet	<u> </u>			
Material weight:	2,800 lbs/LCY			_	
Weight description:	Granite - Broken				
Job Condition Correction		5 50	Source		
Operator		750	(AVG.)		
Material consist		200	(CAT HB)		
Dozing me	eunoa: <u>1.</u>	200	(S-BY-S)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7212

Adjusted unit production: 1,982.36 LCY/hr
Adjusted fleet production: 3964.72 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.192/LCY

Total job time: 8.01 Hours
Total job cost: \$6,092

Task description:	AGVLF - Pile Level	ing - Fin	e Grading		
: Cresson Project	Permit .	Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIF	<u>ICATION</u>				
Task #: A1001 Date: 11/20/2023 10:29:44 P User: ZTT	County: T	olorado eller		Abbreviation: Filename:	None M244-A1001
Agency or orga	nization name: DRMS	}			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca Horsepower: 244 Blade Type: Str Attachment: NA Shift Basis: 1 p	D7R DS Series II LGP				
Cost Breakdown:	(G)		_		
Ownership Cost/Hour: Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour:		114.76 \$91.98 \$0.00 \$0.00	Utilization % NA 100 NA 0		
Operator Cost/Hour: Total unit Cost/Hour:	\$248.04	\$41.30	NA		
MATERIAL QUANT Initial Volume: 3,52 Swell factor: 1.00	9				
Loose volume: 3,52 Source of estimated volu Source of estimated swel HOURLY PRODUC	factor: Cat Handboo		Estimate		
Average push distance: Unadjusted hourly produ	50 feet 800.0 LCY/hr				
Materials consistency de	scription: Loose stoc	kpile 1.2			
Average push gradient: Average site altitude:	-10 % 9,500 feet				
Material weight:	2,800 lbs/LCY				
Weight description:	Granite - Broken				
Job Condition Correction Operator			Source (AVG.)		
Material consist Dozing me	ency: 1.200		(CAT HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6010

Adjusted unit production: 480.80 LCY/hr
Adjusted fleet production: 480.8 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s) Unit cost: \$0.516/LCY

Total job time: 7.34 Hours
Total job cost: \$1,821

Permit Action: 2023 Permit/Job#: M1980	
Task #: A1002	0244
Date: 11/20/2023 10:31:05 PM User: ZTT	
Date: 11/20/2023 10:31:05 PM User: ZTT	
User: ZTT	A1002
User: ZTT	
Basic Machine:	
Basic Machine: Cat D10T - 10SU Horsepower: 574 Blade Type: Semi-Universal Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Basic Machine: Cat D10T - 10SU Horsepower: 574 Blade Type: Semi-Universal Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Blade Type: Semi-Universal Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: Source of estimated volume: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Shift Basis: Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Data Source: (CRG)	
Cost Breakdown: Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$380.21 Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: Loose volume: 2,395,752 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Ownership Cost/Hour: \$178.69 NA Operating Cost/Hour: \$160.22 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: S180.00 Operator Cost/Hour: S180.21 Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: Loose volume: 2,395,752 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: So.00 Operator Cost/Hour: \$380.21 Total unit Cost/Hour: Total Fleet Cost/Hour: \$380.21 Total Fleet Cost/Hour: MATERIAL QUANTITIES Initial Volume: Source of estimated volume: Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Total unit Cost/Hour: \$380.21 Total Fleet Cost/Hour: \$760.42 MATERIAL QUANTITIES Initial Volume: 2,395,752 Swell factor: 1.000 Loose volume: 2,395,752 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
Source of estimated volume: Source of estimated swell factor: 2022 CC&V Provided Estimate Cat Handbook	
Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 165 feet	
HOURLY PRODUCTION Average push distance: 165 feet	
Average push distance: 165 feet	
Materials consistency description: Consolidated stockpile 1.0	
Average push gradient:30 %	
Average site altitude: 9,500 feet	
Material weight: 2,800 lbs/LCY	
Weight description: Granite - Broken	
Job Condition Correction Factor Source	
Operator Skill: 0.750 (AVG.)	
Material consistency: 1.000 (CAT HB) Dozing method: 1.200 (S-BY-S)	

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7855

Adjusted unit production: 896.96 LCY/hr
Adjusted fleet production: 1793.92 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.424/LCY

Total job time: 1,335.48 Hours
Total job cost: \$1,015,535

Task description:	AGVLF - 20 - 20	00 ft face - Fi	ne Grading			
: Cresson Project	Per	mit Action:	2023		Permit/Job#:	M1980244
PROJECT IDENTIH	FICATION					
Task #:A1003	State:	Colorado			Abbreviation:	None
Date: 11/20/202	•	Teller			Filename:	M244-A1003
User: $\frac{10:32:30 \text{ I}}{\text{ZTT}}$	PM				=	
Agency or orga	anization name: DF	RMS				
HOURLY EQUIPM	ENT COST					
	at D7R DS Series II L	GP				
Horsepower: 24						
	raight					
Attachment: N						
	per day CRG)					
	.KU)					
<u>Cost Breakdown</u> :		ı	¥ 7. ***			
O		¢11476		zation %		
Ownership Cost/Hour: Operating Cost/Hour:		\$114.76 \$91.98		NA 100		
Ripper own. Cost/Hour:		\$0.00		NA		
Ripper op. Cost/Hour:		\$0.00		0		
Operator Cost/Hour:		\$41.30		NA	<u> </u>	
MATERIAL QUANT Initial Volume: 266 Swell factor: 1.00	5,196					
	6, 196 LCY					
Source of estimated volu	,	— &V Provided	Estimate			
Source of estimated swe						
HOURLY PRODUC	<u>CTION</u>					
Average push distance:	165 feet					
Unadjusted hourly produ	uction: 343.9 LCY	/hr				
Materials consistency de	escription: Consol	idated stockp	pile 1.0			
	-30 %					
Average push gradient:						
Average push gradient: Average site altitude:	9,500 feet					
					_	
Average site altitude:	9,500 feet					
Average site altitude: Material weight: Weight description: Job Condition Correctio	9,500 feet 2,800 lbs/LCY Granite - Broken on Factor	750		Source	-	
Average site altitude: Material weight: Weight description:	9,500 feet 2,800 lbs/LCY Granite - Broken on Factor r Skill: 0.	.750		Source (AVG.) (CAT HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6546

Adjusted unit production: 225.12 LCY/hr
Adjusted fleet production: 225.12 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.102/LCY

Total job time: 1,182.46 Hours

Total job cost: \$293,301

TRUCK/LOADER TEAM WORK

Task description:	AGVLF	' - Topsoil - Tra	nsport			
Site: Cresson Project		Permit Act	ion: 2023		Permit/Job#: M	1980244
PROJECT IDEN	TIFICATION	<u>]</u>				
Task #: A1004	4	State: Color	rado	Ab	breviation: No	one
Date: 11/22		County: Telle	r		Filename: M2	244-A1004
	25 PM					
User: ZTT						
Agency or	organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>C</u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
Γ	Гruck Loader Tea		it 777F	1		
			AT 992K			
Supp	ort Equipment -L		t D10T - 10SU			
		ump Area: NA				
Road M	laintenance –Mot		AT 16M ater Tanker, 7,000	Cal		
	- vv a	ter fruck: w	ater ranker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo:	ader Team	Support I	Equipment	Maintenar	nce Equipment
COSt Bi canao wii.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
0/TT:'11' .' 1.'	100	100	100	2 27.4	25	25
%Utilization-machine:	100	100		NA	25	25
Ownership cost/hour:	\$206.48	\$229.24		NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0		NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86

Support:

Total work team cost/hour: \$2,058.88

MATERIAL QUANTITIES

Initial volume: 26,557 CCY Swell factor: 1.215

Loose volume: 32,267 LCY

Work:

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

\$1,270.82

HOURLY PRODUCTION

Truck Capacity:

Number of Units:

Group Subtotals:

Truck Payload (weight) Basis:

Material weight: 1,600 Pounds/LCY

Description: Top Soil

Rated Payload: 200,000 Pounds

Maint:

\$407.85

0

\$380.21

Payload Capacity:	125.00	LCY	•			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			Buck	ket Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		=
Bucket Fill Factor:	1.100	Other - rock/di		-120%) 1.100		=
Adjusted Capacity:	17.600	LCY	(100	120,0) 11100		_
, , <u>, </u>			Site Altitude (ft.), O	0500 foot		
Job Condition Corrections:			Site Altitude (ft.): 9	<u>7500</u> feet		
A101 1 A 11	Truck	Loader	Source			
Altitude Adj:	1.000 0.830	0.980 0.830	(CAT HB	,		
	0.830	0.830	(САТ ПВ)		
Job Efficiency:			`			
Net Correction:	0.830	0.813				
·		0.813 er of Loading Tool P		Fill Truck:	4 p	passes
Net Correction:	Numbe			Fill Truck:	4 p	oasses
Net Correction: Loading Tool Cycle Time:	Numbe ls: s. Job Condition	er of Loading Tool P		Fill Truck:	4 F	passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v	Numbess: s. Job Condition within this Bases	er of Loading Tool P on Rating: NA ic Rating: NA		Fill Truck:	4	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time very Selected Value very selected Value very selected very select	Numbess: s. Job Condition within this Bases Material Description	er of Loading Tool P on Rating: NA ic Rating: NA		Fill Truck:		oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value vs. Track Loaders –	Numbe ls: s. Job Condition within this Base Material Descr	er of Loading Tool P on Rating: NA ic Rating: NA		Fill Truck: Dump:0.100		oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.):	Numbe ls: s. Job Condition within this Base Material Descript M	on Rating: NA ic Rating: NA ription: NA	asses Required to I	Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v. Selected Value v. Track Loaders — Cycle Time Elements (min.): Load: NA	Numbe ls: s. Job Condition within this Base Material Descript M	on Rating: NA ic Rating: NA ription: NA	asses Required to I	Dump: 0.100)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time v. Selected Value v. Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders –	Numbe ls: s. Job Condition within this Base Material Descript M	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle T	asses Required to I	Dump: 0.100) .625 minu	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile:	Numbe ls: s. Job Condition within this Base Material Descript Unadjusted Base Mixed mater No adjustme	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Total 0.02 ent - factor not applic	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000	Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	Number State Number State No adjustme Common ow	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ta rial 0.02 ont - factor not applic	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Total 0.02 ont - factor not applice/pership of trucks and eration -0.04	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	Number State Number State No adjustme Common ow	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Trial 0.02 ont - factor not applice receiving of trucks and eration -0.04 get 0.00	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Telephore and the factor not applice for trucks and the factor 10.04 get 0.00 Net Cycle Ti	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applice reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time very Selected Value very Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number State Number State No. A State No.	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applice reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, notable 0.00 d loaders -0.04 d loaders -0.04 der Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v. Selected Value v. Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Number	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applice reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	asses Required to I ime (load, dump, n cable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v. Selected Value v. Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Number State Numbe	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti rial 0.02 ont - factor not applice reation -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	asses Required to I	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

2000.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	-0.60	3.00	2.40	3328	1.578

Haul Time: **1.578** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min)

3.00

0.60

Return Time: 0.874 minutes
Total Truck Cycle Time: 6.284 minutes

3411

0.874

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

672.22 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 557.94 LCY/Hour Optimal No. of Trucks: 2 Truck(s)

Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 1,115.89 LCY/Hour Adjusted single truck/loader team production: 1,115.89 LCY/Hour Adjusted multiple truck/loader team production: 1,115.89 LCY/Hour

3.60

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 28.92
 Hours

 Unit cost:
 \$1.845
 /LCY
 Total job cost:
 \$59,534

Task description:	AGVLF -Topsoil	- Dozer Sp	reading		
Cresson Project	Peri	nit Action:	2023	Permit/Job#:	M1980244
PROJECT IDENTIF	<u>ICATION</u>				
Task #: A1005 Date: 11/20/2023 10:34:11 P User: ZTT	•	Colorado Teller		Abbreviation: Filename:	None M244-A1005
Agency or orga	nization name: DR	MS			
HOURLY EQUIPME	ENT COST				
Horsepower: 240 Blade Type: Str Attachment: NA Shift Basis: 1 p	aight	GP			
Cost Breakdown:					
Ownership Cost/Hour: Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour:		\$114.76 \$91.98 \$0.00 \$0.00	Utilization % NA 100 NA 25	<u>6</u>	
Operator Cost/Hour:		\$41.30	NA		
Initial Volume: 26,5 Swell factor: Loose volume: 32,2	557	_			
Source of estimated volu Source of estimated swel	me: 2022 CC	&V Provided book	Estimate		
HOURLY PRODUC	<u> FION</u>				
Average push distance: Unadjusted hourly produ	260 feet 222.5 LCY/	hr			
Materials consistency des	scription: Loose s	tockpile 1.2			
Average push gradient: Average site altitude:	-30 % 9,500 feet				
Material weight:	1,600 lbs/LCY				
Weight description:	Top Soil				
Job Condition Correction		750	Sourc		
Operator Material consist	эк ии: 0.	750	(AVG	(.) IB)	

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 306.12 LCY/hr
Adjusted fleet production: 306.12 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.810/LCY

Total job time: 105.41 Hours
Total job cost: \$26,145

BULLDOZER RIPPING WORK

	Task description:	AG	VLF - Topsoi	l - Ripping					
Site:	Cresson Project		Peri	mit Action:	2023	F	Permit/Job#	: <u>M198</u> 0)244
	PROJECT IDENTIFICA		<u>ION</u>						
	Task #: A100	16	State:	Colorado		Ahl	oreviation:	None	
		/2023	County:	Teller			Filename:	M244-	A1006
		40 PM	2 3 33319 1						
	User: ZTT					 ,			
	Agency or	r organizatio	n name: DR	RMS					
	HOURLY EQUI	PMENT C	COST						
	Basic Ma	achine: Ca	at D7R DS Ser	ries II LGP		Horsepower:		240	
	Ripper Attac	hment: 3-	Shank Ripper		<u> </u>	Shift Basis:	1 1	per day	
						Data Source:	(CRG)	
	Cost Breakdown:								
	Cost Bicardown.					Utilization %			
		Ownership (Cost/Hour:		\$114.76	NA			
		Operating C	Cost/Hour:		\$91.98	100	_		
		Ownership (\$9.06	NA	_		
	Ripper	Operating C			\$5.02	100	_		
		Operator C			\$41.30	NA	_		
		Total Unit C	Cost/Hour:		\$262.12				
		Total Fleet C	Cost/Hour:	\$262	2.12				
	MATERIAL QU	ANTITIES	<u>S</u>	Sele	ected estimating	method: Are	a		
	Alternate Methods:		_		C				
mic:	NA		Banl	k Volume:	NA	BCY		NA	
rea:	32.93	acres		Depth (ft):	2.50	Volume:	132,818	- 1,111	BCY or 0
		— 	•	_	1C 0 1/ D 11. 1		•		_
		Source of est	imated quantit	y: <u>2022 C</u>	C&V Provided	Estimate			
	HOURLY PROI	<u>DUCTION</u>							
	Seismic:								
	<u> </u>		Seismic Velo	city:	NA	feet/sec	cond		
					· · · · · · · · · · · · · · · · · · ·				
	Area:		D: : D	.1	2.45	C /			
			ge Ripping De		2.45 6.50	feet/pa			
			ge Ripping Wage Ripping Ler		350.00	feet/pa feet/pa			
			rage Dozer Sp		88.00	feet/mi			
			e Maneuver T		0.25	minute			
					0.741	acres/h	-		
	Production per unit area: 0.741 acres/hour Job Condition Correction Factors								
			_ y Unit Produc	tion:	0.741	Acres/l	hr		
	Office	justed Houri	Site Altit		9,500	feet			
				-	1.00	(CAT l	HR)		
	Altitude Ad Job Efficiency		0.83	(1 shift					
			Net Correc		0.83	multipl	•		
		Adiuste	d Hourly Unit	Production:	0.62	Acres/hr			
			Hourly Fleet		0.62	Acres/hr			
	JOB TIME AND	J	•						
	Fleet size:	1	Grader(s)		Total job tim	e:	53.52	H	Iours
		Φ40 < 00 7			Č				
	Unit cost:	\$426.027	Per acre		Total job cos	st: \$	14,029		

TRUCK/LOADER TEAM WORK

Task description:	AGVLF	' - Topsoil -	Lift 1	l - Transport			
Site: Cresson Project		Permi	t Actio	on: 2023		Permit/Job#: N	11980244
PROJECT IDEN	NTIFICATION	[
			Colora Teller	ado	Ab		one 244-A1007
User: ZTT							
Agency of	r organization nar	ne: DRM	IS				
HOURLY EQUI	IPMENT COST	<u>r</u>			Shift bas	is: <u>1 per day</u>	
	D 11 1 1	TD 1		Equipment Descri	ption		
	Truck Loader Tea	m -Truck: -Loader:		777F Γ 992K			
Supr	oort Equipment -L			D10T - 10SU			
	ump Area:	NA					
Road M	or Grader:		Г 16М	G 1			
	-Wa	ter Truck:	Wat	er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team		Support F	Equipment	Maintena	nce Equipment
Cost Di candown.	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$22	9.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10		0.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	, ,	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$	0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$	0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$4	0.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$47	0.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3		1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11		Support:	\$380.21	Maint:	\$407.85
Total work team co	st/hour: \$2,459.	17					
MATERIAL QU	JANTITIES						
Initial volume	e: 23,223		CCY	Swell	factor: 1.215		
Loose volume	28,21	.6	LCY				
Sc	ource of estimated	volume:	2022	CC&V Provided	Estimate		
Source	e of estimated swe	ell factor:		Iandbook			
	Material Purch	_	\$0.00				
	To	otal Cost: _	\$0.00)			
HOURLY PRO	DUCTION						

Truck Capacity:
Truck Payload (weight) Basis:

Material weight: Pounds/LCY 1,600 Description: Top Soil

Rated Payload: 200,000 Pounds

Payload Capacity	125.00	LCY	•			
Truck Bed (volume) Basi						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fi	inal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity	: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor		Other - rock/di		0-120%) 1.100		_
Adjusted Capacity		LCY	ir illixtures (100	7-12070) 1.100		_
Job Condition Correction			Site Altitude (ft.): 9	0500 feet		
Job Condition Correction	Truck	Loader	Source	9 <u>300</u> leet		
Altitude Adj:	1.000	0.980	(CAT HE	8)		
Job Efficiency:	0.830	0.830	(CAT HE			
Job Efficiency.	0.830	0.630	(CAI III	•)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tin		0.813 eer of Loading Tool Page 1	asses Required to	Fill Truck:	4	passes
	me: Numb		asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front She Machine Cycle Tim	ne: Numb ovels: ne vs. Job Conditi	er of Loading Tool Parties on Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim Selected Val	ne: Numb ovels: ne vs. Job Conditi ue within this Ba	on Rating: NA NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim Selected Val	ne: Numbovels: ne vs. Job Conditi ue within this Ba rs – Material Desc	on Rating: NA NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Val Track Loader	ne: Numbovels: ne vs. Job Conditiue within this Bars – Material Description.):	on Rating: NA NA	asses Required to		100	passes
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi	ne: Numbovels: ne vs. Job Conditi ue within this Ba es – Material Desc	ton Rating: Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.	100	passes
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader	ne: Numbovels: ne vs. Job Conditiue within this Bars – Material Descin.):	ton Rating: Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.	100 0.625 mir	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Facto	ne: Numbovels: ne vs. Job Conditiue within this Bass – Material Descin.): ers - Unadjusted Fors	oer of Loading Tool Parties on Rating: NA Scription: Maneuver: NA Basic Loader Cycle Ti	· 	Dump: 0.	.100 0.625 mir) Source	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs ns Mixed mate	ter of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.)	100 0.625 mir) Source (Cat HB)	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm	ter of Loading Tool Parison Rating: NA Sic Rating: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applic	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000	0.625 mir Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov	on Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle To orial 0.02 ent - factor not applic wnership of trucks and	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020	0.625 mir Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ton Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Total 0.02 ent - factor not applic wnership of trucks and peration -0.04	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040	0.625 mir Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ton Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not application with a propertion of trucks and peration -0.04 reget 0.00	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	0.625 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA oription: Maneuver: NA oription: Parial 0.02 original 0.02 original 0.02 original 0.04 original 0.04 original 0.04 original 0.00	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tin Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ion Rating: NA sic Rating: NA cription: NA cription of trucks and criptio	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment:	Dump: _0. maneuver):	0.625 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tin Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ion Rating: NA sic Rating: NA cription: NA cription of trucks and criptio	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatior Dump Targer	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov n: Constant op et: Nominal tar	ion Rating: NA sic Rating: NA cription: NA cription of trucks and criptio	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Loading Tool Cycle Tin Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpill Truck Ownershit Operatior Dump Targer	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustm p: Common ov n: Constant op et: Nominal tar ime: 0.80	ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ti crial 0.02 ent - factor not applic wnership of trucks and beration -0.04 rget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	0.625 mir Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3087.00	3.90	3.00	6.90	1160	2.789

Haul Time: 2.789 minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 3087.00 3.00 -0.90 3503 -3.90 0.916

Return Time: 0.916 minutes
Total Truck Cycle Time: 7.537 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

560.46 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour

Adjusted for job efficiency: 465.18 LCY/Hour

Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,395.55 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 21.18
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$52,084

TRUCK/LOADER TEAM WORK

Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$2 % Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$\$\$ Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$\$\$ Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$2 Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$13 Number of Units: 3 1 1 0 1 \$407.85 Total work team cost/hour: \$2,459.17 \$2,459.17 \$380.21 Maint: \$407.85 MATERIAL QUANTITIES Initial volume: 30,224 CCY Swell factor: 1.215 Loose volume: 36,722 LCY Cat Handbook Material Purchase Cost: 50.00 \$0.00 HOURLY PRODUCTION	Task description:		F - Topsoil - Lift 2		,	Downit/Joh#. N	
Task #: A1008	Site: Cresson Project	et	Permit Actio	on: <u>2023</u>		Permit/Job#: N	11980244
Task #: A1008	PROJECT IDE	NTIFICATION	I				
Date: 11/22/2023 County: Teller Filename: M244-A1008	_		_	ado.	Λh	braviation: No	one
User: ZTT				ido	Au		
HOURLY EQUIPMENT COST	2:17	':50 PM					
HOURLY EQUIPMENT COST	User: ZTI						
Equipment Description	Agency	or organization nar	ne: DRMS				
Cat 777E	HOURLY EQU	IPMENT COST	<u>r</u>		Shift bas	is: <u>1 per day</u>	
CAT 992K			J	Equipment Descri	ption		
Support Equipment -Load Area: -Dump Area: NA		Truck Loader Tea			_		
Cost Breakdown: Truck		· F · · · · · ·					
Road Maintenance - Motor Grader: - Water Truck:	Sup			D101 - 10SU			
Cost Breakdown: Truck/Loader Team	Road I		1	Г 16М			
Truck Loader Load Area Dump Area Motor Grader Water Truck Water Truck Substitution Substituti				er Tanker, 7,000	Gal.		
Truck Loader Load Area Dump Area Motor Grader Water Truck Water Truck Substitution Substituti							
%Utilization-machine: 100 100 100 NA 25 Ownership cost/hour: \$206.48 \$229.24 \$178.69 NA \$212.21 \$8 Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$2 %Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00	Cost Breakdown	_		1.1			
Ownership cost/hour: \$206.48 \$229.24 \$178.69 NA \$212.21 \$8 Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$2 %Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$3 Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$3 Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$2 Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$13 Number of Units: 3 1 1 0 1 \$407.85 Total work team cost/hour: \$2,459.17 \$2000 \$380.21 \$407.85 \$407.85 MATERIAL QUANTITIES Initial volume: \$36,722 LCY \$8well factor: \$1.215 \$2000 \$2000 \$2000 \$40.00 \$30.00 \$3		Truck	Loader	Load Area	Dump Area	Motor Grader	water Truck
Operating cost/hour: \$160.10 \$200.29 \$160.22 NA \$31.22 \$2 % Utilization-riper: NA 0 NA NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$\$\$ Ripper op. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$\$\$ Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$2 Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$13 Number of Units: 3 1 1 0 1 \$407.85 Total work team cost/hour: \$2,459.17 \$2,459.17 \$380.21 Maint: \$407.85 MATERIAL QUANTITIES Initial volume: 30,224 CCY Swell factor: 1.215 Loose volume: 36,722 LCY Cat Handbook Material Purchase Cost: 50.00 \$0.00 HOURLY PRODUCTION	%Utilization-machine:	100	100	100	NA	25	25
%Utilization-riper: NA 0 NA NA NA Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00	Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Ripper own. cost/hour: NA \$0.00 \$0.00 NA \$0.00 \$	Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
Ripper op. cost/hour:	%Utilization-riper:	NA	0	NA	NA	NA	NA
Operator cost/hour: \$33.71 \$40.71 \$41.30 NA \$28.56 \$2 Unit Subtotals: \$400.29 \$470.24 \$380.21 NA \$271.99 \$13 Number of Units: 3 1 1 0 1 1 Group Subtotals: Work: \$1,671.11 Support: \$380.21 Maint: \$407.85 MATERIAL QUANTITIES Initial volume: 30,224 CCY Swell factor: 1.215 Loose volume: 36,722 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00	Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Unit Subtotals: \$400.29	Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Number of Units: 3 1 1 0 1 Group Subtotals: Work: \$1,671.11 Support: \$380.21 Maint: \$407.85 Total work team cost/hour: \$2,459.17 MATERIAL QUANTITIES Initial volume: 30,224 CCY Swell factor: 1.215 Loose volume: 36,722 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Material Purchase Cost: 50.00 Total Cost: \$0.00 HOURLY PRODUCTION	Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Group Subtotals: Work: \$1,671.11 Support: \$380.21 Maint: \$407.85 Total work team cost/hour: \$2,459.17 MATERIAL QUANTITIES Initial volume: 30,224 CCY Swell factor: 1.215 Loose volume: 36,722 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00	Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Total work team cost/hour: \$2,459.17 MATERIAL QUANTITIES Initial volume: 30,224	Number of Units:	3	1	1	0	1	1
MATERIAL QUANTITIES Initial volume: 30,224	Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Initial volume: 30,224 CCY Swell factor: 1.215 Loose volume: 36,722 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: \$0.00 Total Cost: \$0.00	Total work team c	ost/hour: \$2,459.	17				
Loose volume: 36,722 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook Material Purchase Cost: 50.00 Total Cost: 90.00	MATERIAL Q	<u>UANTITIES</u>					
Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost: HOURLY PRODUCTION 2022 CC&V Provided Estimate Cat Handbook \$0.00 \$0.00	Initial volum	e: 30,224	CCY	Swell	factor: 1.215		
Source of estimated swell factor: Material Purchase Cost: Total Cost: Which is a specific and several factor: Total Cost: Cat Handbook \$0.00 \$0.00	Loose volum	ie: 36,72	LCY				
Source of estimated swell factor: Material Purchase Cost: Total Cost: Which is a specific and several factor: Total Cost: Cat Handbook \$0.00 \$0.00	S	Source of estimated	l volume: 2022	CC&V Provided	Estimate		
Total Cost: \$0.00 HOURLY PRODUCTION							
HOURLY PRODUCTION							
		To	otal Cost: \$0.00)			
	HOUDI WEE	ODLIGGION					
Truck Connecity	HOURLY PR	<u>UDUCTION</u>					
Truck Payload (weight) Basis:	Truck Capacity:						

Pounds/LCY

Pounds

Material weight:

Description:

Rated Payload:

1,600

Top Soil 200,000

Truck/Loader Worksheet Con	t'd	1ask # A1008			Page 2 of 3	
Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60 I	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	78.80 I	LCY				
Final '	Truck Volume I	Based on Number of Load	er Passes:	70.40	LCY	
<u>Loading Tool Capacity</u>			Ruck	et Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)	Duck	ct Size Class.	NA.	_
Bucket Fill Factor:	1.100	Other - rock/dirt mixt	ures (100_	120%) 1.100		_
Adjusted Capacity:	17.600	LCY	ures (100	12070) 1.100		_
Adjusted Capacity.	17.000					
Job Condition Corrections:		Site Alti	tude (ft.): <u>9</u>	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB)			
Job Efficiency:	0.830	0.830	(CAT HB))		
Net Correction:	0.830	0.813				
Loading Tool Cycle Time: Excavators and Front Shovel:		of Loading Tool Passes R	equired to F	Fill Truck:	4 1	passes
Machine Cycle Time vs	. Job Condition					
Selected Value w						
Track Loaders – I Cycle Time Elements (min.):	viateriai Descrij	puon				
Load: NA	Ma	aneuver: NA	_	Dump: 0.10	0	
Wheel and Track Loaders -	Unadjusted Bas	sic Loader Cycle Time (loa	ad, dump, m	naneuver):).625 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	Mixed materia	1 0.02		0.020	(Cat HB)	_
Stockpile:		t - factor not applicable 0.0	00	0.000	(Cat HB)	
Truck Ownership:	•	ership of trucks and loade		-0.040	(Cat HB)	_
Operation:	Constant opera	ation -0.04		-0.040	(Cat HB)	_
Dump Target:	Nominal targe			0.000	(Cat HB)	<u> </u>
		Net Cycle Time Adj		-0.060	minutes	
		Adjusted Loader Cyc		0.565	minutes	
		Net Load Time po	er Truck: _	1.795	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
Truck Load Time:	1.795	Minutes	Adjusted	for site altitude:	1.832	Minutes
ck Maneuver and Dump Time:	1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
Truck Load Time:	1.795	Minutes	Adjusted	for site altitude:	1.832	_ N

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3196.00	-0.70	3.00	2.30	3328	1.867

Haul Time: 1.867 minutes

Return Route:

rectarii rec	Tetam Route.								
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)			
1	3196.00	0.70	3.00	3.70	3411	1.231			

Return Time: 1.231 minutes
Total Truck Cycle Time: 6.930 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

609.56 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 505.93 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,517.79 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 27.56
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$67,786

TRUCK/LOADER TEAM WORK

Task description:	AGVLF	- Topsoil - Lift 3				
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#:M	[1980244
PROJECT IDENT	TFICATION	Ī				
		State: Colora	, do	1 h	breviation: No	one
Task #: A1009 Date: 11/22/20	023	County: Teller		AD		one 244-A1009
2:18:33		country. Tener			1101101101	
User: ZTT						
Agency or or	rganization nan	me: DRMS				
HOURLY EQUIP	MENT COST	<u>r</u>		Shift bas	is: 1 per day	
]	Equipment Descri	ption		
Tru	ick Loader Tea		777F			
	. F I		T 992K			
Suppor	t Equipment -L	ump Area: Cat NA	D10T - 10SU			
Road Mair	ntenance –Mot	1	Т 16М			
	-Wa	ter Truck: Wat	ter Tanker, 7,000	Gal.		
-						
Cost Breakdown:		ader Team	Support l Load Area	Equipment		nce Equipment Water Truck
	Truck	Loader	Load Area	Dump Area	Motor Grader	water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team cost/	hour: \$2,459.	17				
MATERIAL QUA	NTITIES					
Initial volume:	40,095	CCY	Swell	factor: 1.215		
Loose volume:	48,71					
Sour	ce of estimated	volume: 2022	CC&V Provided	Estimate		
	f estimated swe		Handbook	Listinate		
]	Material Purch					
	To	otal Cost: \$0.00)			

HOURLY PROD	<u>UCTION</u>					
Truck Capacity:						
Truck Payload (weigh	t) Basis:					

Pounds/LCY

Pounds

Material weight:

Description:

Rated Payload:

1,600

Top Soil 200,000

Payload Capacity	125.00	LCY	,			
Truck Bed (volume) Basis		LOV				
Struck Volume:	<u>60.60</u> 78.80	LCY LCY				
Heaped Volume: Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Adjusted Volume.	76.60	LCT				
Fi	nal Truck Volum	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			D	last Cias Class	NT A	
Rated Capacity	16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:		Other - rock/di)-120%) 1.100		
Adjusted Capacity	17.600	LCY				
Job Condition Correction	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT H			
too Eliferentj.						
Net Correction:	0.830	0.813				
Net Correction:			asses Required to	Fill Truck:	4	nasses
Net Correction: Loading Tool Cycle Tin	ne: Numbe	0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader	ne: Number ovels: e vs. Job Condition ue within this Bas s – Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to		.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi	ne: Number ovels: e vs. Job Condition this Bases - Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA		Dump: 0	.100	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.): The state of t	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA		Dump: 0	.100 0.625 mi	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.): rs - Unadjusted B	er of Loading Tool P on Rating: NA Sic Rating: NA cription: NA Basic Loader Cycle T		Dump: 0 maneuver): Factor (min.	.100 0.625 mi) Source	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.): rs - Unadjusted Bases It Mixed material	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T	ime (load, dump, i	Dump: 0 maneuver): Factor (min. 0.020	.100 0.625 mi Source (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi) Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpilo	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases –	er of Loading Tool P on Rating: NA Sic Rating: NA cription: NA Basic Loader Cycle T	ime (load, dump, a	Dump: 0 maneuver): Factor (min.	.100 0.625 mi) Source	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): Press – Unadjusted Bases	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.625 mi Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases: Mixed material Mixed material constant opens.	on Rating: NA	ime (load, dump, pable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040	.100	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases: Mixed material Mixed material constant opens.	on Rating: NA	ime (load, dump, reable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases: Mixed material Mixed material constant opens.	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565	.100 0.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases: Mixed material Mixed material constant opens.	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases: Mixed material Mixed material constant opens.	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565	.100 0.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi) Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): The second of the se	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, page 2000) cable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): It is - Unadjusted Bases: No adjustment of Common own: Constant opent: Nominal targetime: Nominal targetime: 0.80	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle To rial 0.02 ent - factor not applicate and the company of trucks and the company of the cycle To Adjusted Load Net Load To	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4268.00	-3.30	3.00	-0.30	3503	1.291

Haul Time: 1.291 minutes

Return Route:

ictuin ic	Return Route.							
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)		
1	4268.00	3.30	3.00	6.30	2853	1.818		

Return Time: 1.818 minutes
Total Truck Cycle Time: 6.941 minutes

Loading Tool unit

Adjusted hourly truck team production: 1,515.39 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 36.57
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$89,925

TRUCK/LOADER TEAM WORK

Task description:	AGVLF	' - Topsoil - Lif	t 4 - Transport			
Site: Cresson Project		Permit Ac	etion: 2023		Permit/Job#: M	1980244
PROJECT IDEN	TIFICATION	Ī				
Task #: A1010		=	orado	Ab	breviation: No	one
Date: 11/22		County: Tell			Filename: M2	244-A1010
2:20:0	04 PM					
User: ZTT						
Agency or	organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>r</u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
Т	ruck Loader Tea		at 777F			
Cunn	ort Equipment -L		AT 992K at D10T - 10SU			
Supp		ump Area: N				
Road M	aintenance –Mot	1	AT 16M			
	-Wa	iter Truck: W	ater Tanker, 7,000	Gal.		
			g		3.5	
Cost Breakdown:	Truck/Loa	ader Team Loader	Load Area	Equipment Dump Area	Maintenar Motor Grader	nce Equipment Water Truck
				-		
%Utilization-machine:	100	100		NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	·	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29		NA	\$31.22	\$28.44
%Utilization-riper:	NA	(0.00		NA NA	NA #0.00	NA to oo
Ripper own. cost/hour:	NA	\$0.00		NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00		NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71		NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24		NA	\$271.99	\$135.86
Number of Units:	3	1		0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team cos	st/hour: \$2,459.	17				
MATERIAL QU	<u>ANTITIES</u>					
Initial volume: Loose volume:		00 CC		factor: 1.215		
	urce of estimated		22 CC&V Provided	Estimata		
	of estimated swe		t Handbook	Estimate		
Bouree	Material Purch					
	To	otal Cost: \$0.				
HOUDI V DDO	DUCTION					
HOURLY PRO	DUCTION					
Truck Capacity:						

Truck Payload (weight) Basis:

1,600 Pounds/LCY Material weight: Description:

Top Soil 200,000 Rated Payload: Pounds

Payload Capacity	125.00	LCY				
Truck Bed (volume) Basi						
Struck Volume:	60.60	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	78.80	LCY				
Fi	inal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity	r: 16.000	LCY (heaped)	Bucl	ket Size Class:	NA	
Bucket Fill Factor		Other - rock/di	rt miyturos (100	0-120%) 1.100		_
Adjusted Capacity		LCY	it illixtures (100	7-120%) 1.100		_
			lita Altituda (ft.). (0500 foot		
Job Condition Correction			Site Altitude (ft.): 9			
Altitude Adj:	Truck	Loader	Source			
Job Efficiency:	1.000 0.830	0.980 0.830	(CAT HE			
Job Efficiency.	0.830	0.830	(CAI III)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tir		0.813 eer of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
_	me: Numb	-	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir	me: Numb	per of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numb ovels: ne vs. Job Conditi ue within this Ba	oer of Loading Tool Parison Rating: NA Sic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numb ovels: ne vs. Job Conditi ue within this Ba cs – Material Desc	oer of Loading Tool Parison Rating: NA Sic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader	ne: Numbovels: ne vs. Job Conditiue within this Bars – Material Descin.):	oer of Loading Tool Parison Rating: NA Sic Rating: NA	asses Required to		.100	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.):	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA	·	Dump: _0.	.100	passes
Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader	ne: Numbovels: ne vs. Job Conditiue within this Bars – Material Descin.):	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA	·	Dump: 0.	.100 0.625 min	
Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted E	oer of Loading Tool Parion Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Ti	·	Dump: 0. maneuver): Factor (min.	.100 0.625 min) Source	
Loading Tool Cycle Tire Excavators and Front She Machine Cycle Tire Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F ors al: Mixed mate	oer of Loading Tool Pation Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02	me (load, dump, r	Dump: 0. maneuver): Factor (min.) 0.020	.100 0.625 min Source (Cat HB)	
Loading Tool Cycle Tire Excavators and Front She Machine Cycle Tire Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F rs al: Mixed mate e: No adjustme	per of Loading Tool Parison Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applic	ime (load, dump, 1	Dump: 0. maneuver): Factor (min. 0.020 0.000	.100 0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F ars al: Mixed mate e: No adjustm p: Common ov	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applic wnership of trucks and	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040	.100 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted E rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applic wnership of trucks and peration -0.04	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	.100	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted E rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00	able 0.00	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted E rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	oer of Loading Tool Pation Rating: NA sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice wnership of trucks and peration -0.04 rget 0.00 Net Cycle Tierial Tool Pation	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060	.100 0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted E rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	able 0.00	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted E rs al: Mixed mate e: No adjustm p: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tire Excavators and Front She Machine Cycle Tire Selected Val Track Loader Cycle Time Elements (mine) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatior Dump Targer	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F al: Mixed mate e: No adjustm p: Common ov n: Constant op et: Nominal tar	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpill Truck Ownershit Operatior Dump Targer	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted E ers al: Mixed mate e: No adjustme p: Common ov n: Constant op et: Nominal tar ime: 0.80	ion Rating: NA sic Rating: NA NA cription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice wnership of trucks and peration -0.04 rget 0.00 Net Cycle Tierial Cyc	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6312.00	-5.50	3.00	-2.50	3450	1.926

Haul Time: 1.926 minutes

Return Route:

Return Route.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6312.00	5.50	3.00	8.50	2327	2.985

Return Time: 2.985 minutes
Total Truck Cycle Time: 8.743 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

483.15 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 401.01 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,203.04 LCY/Hour Adjusted single truck/loader team production: 1,203.04 LCY/Hour Adjusted multiple truck/loader team production: 1,203.04 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 60.10
 Hours

 Unit cost:
 \$2.044
 /LCY
 Total job cost:
 \$147,790

Task description:	AGVLE	- Topsoil -	Lift 5	5 - Transport			
Site: Cresson Projec	t	Permit	Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	<u>I</u>					
			Colora Feller	do	Ab	breviation: No Miles Mil	one 244-A1011
	r organization naı	ne: DRM	S				
HOURLY EQU	IPMENT COS	<u>r</u>			Shift bas	is: <u>1 per day</u>	
Equipment Description							
	Truck Loader Team -Truck: Cat 777F -Loader: CAT 992K						
Sup	port Equipment -I			D10T - 10SU			
		ump Area:	NA				
Road N	Maintenance –Mot	or Grader: ater Truck:		Γ 16M er Tanker, 7,000 (Ga1		
-	- ***	itel Truck.	wat	Ci Tanker, 7,000 V	Jai.		
Cost Breakdown:		ader Team			Equipment		nce Equipment
	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229	9.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200	0.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA		0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	· ·	0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour: Operator cost/hour:	\$33.71	·	0.00	\$0.00	NA NA	\$0.00	\$0.00
Unit Subtotals:	\$400.29	\$470		\$41.30 \$380.21	NA NA	\$28.56 \$271.99	\$21.12 \$135.86
Number of Units:	\$400.29 4	\$470	1	\$380.21 1	0	\$271.99	\$133.80
Group Subtotals:	Work:	\$2,071.40		Support:	\$380.21	Maint:	\$407.85
<u> </u>		i		Support.	\$300.21	Maint.	ψ+07.03
Total work team co	ost/nour: \$2,859.	<u>46</u>					
MATERIAL QU	J ANTITIES						
Initial volume			CCY	Swell	factor: 1.215		
Loose volume		18	LCY	Swell	1.213		
	ource of estimated			CC&V Provided	Estimate		
Sourc	e of estimated swe Material Purch		\$0.00	landbook			
		otal Cost: _	\$0.00				
HOURLY PRO	DUCTION						
'	220011011						
Truck Capacity: Truck Payload (we	ight) Basis:						
Material				Pounds/LCY			
	ription: Top So		-				
Rated P	ayload: 200,00	0		Pounds			

Payload Capacity	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fi	nal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: N	NA	_
Rated Capacity	16.000	LCY (heaped)				
Bucket Fill Factor		Other - rock/di		0-120%) 1.100		_
Adjusted Capacity	17.600	LCY	,	,		_
Job Condition Correction	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	,		
Net Correction:	0.830	0.813				
Loading Tool Cycle Tin	ne: Numb	per of Loading Tool Pa	asses Required to	Fill Truck:	4 1	passes
	ne: Numb		asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim	ne: Numb	per of Loading Tool Pa	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:	1	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader	ne: Numbovels: e vs. Job Conditi ue within this Ba s – Material Desc	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi	ne: Numbovels: e vs. Job Conditine within this Bass – Material Description.):	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA		Dump: 0.10		
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA	ne: Numbovels: e vs. Job Condition within this Bass – Material Description.): rs - Unadjusted F	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA		Dump: 0.10	0	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade	ne: Numbovels: e vs. Job Conditing within this Bass – Material Description.): ers - Unadjusted F	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Ti		Dump: 0.10	0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F rs l: Mixed mate	oer of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Ti	ime (load, dump, 1	Dump: 0.10 maneuver): (Factor (min.)	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov	oer of Loading Tool Parisic Rating: Maneuver: Maneuver: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applic wnership of trucks and	ime (load, dump, 1	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020 0.000 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applic wnership of trucks and peration -0.04	ime (load, dump, 1	Dump: 0.10 maneuver): 0.00 Factor (min.) 0.020 0.000 -0.040 -0.040	00	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	oer of Loading Tool Pation Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and peration -0.04 rget 0.00	able 0.00 d loaders -0.04	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	per of Loading Tool Parisic Rating: NA Sic Rating: Maneuver: Maneuver: Maneuver: Prial 0.02 Perial 0.02 Perial 0.02 Perial 0.04 Perial 0.04 Reget 0.00 Net Cycle Ti	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA Sic Rating: NA Seription: NA Seription: NA Seription: NA Serial 0.02 Sent - factor not application whereship of trucks and seration -0.04 Series of the Cycle Tick Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA Sic Rating: NA Seription: NA Seription: NA Seription: NA Serial 0.02 Sent - factor not application whereship of trucks and seration -0.04 Series of the Cycle Tick Adjusted Load	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA Sic Rating: NA Seription: NA Seription: NA Seription: NA Serial 0.02 Sent - factor not application whereship of trucks and seration -0.04 Series of the Cycle Tick Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader Cycle Time Elements (minor Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targer	ne: Numb ovels: e vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op t: Nominal tar	ion Rating: NA Sic Rating: NA Seription: NA Seription: NA Seription: NA Serial 0.02 Sent - factor not application whereship of trucks and seration -0.04 Series of the Cycle Tick Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpill Truck Ownership Operation Dump Targe	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op t: Nominal tan me: 0.80	ion Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02 Ent - factor not applice wnership of trucks and peration -0.04 rget 0.00 Net Cycle Tierial Cycle Tie	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Tiuui Itou	ic.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	7462.00	-6.20	3.00	-3.20	3450	2.277

Haul Time: 2.277 minutes

Return Route:

110001111110						
Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel
	(Ft)		(%)	(%)	(fpm)	Time
						(min)
1	7462.00	6.20	3.00	9.20	2134	3.723

Return Time: 3.723 minutes
Total Truck Cycle Time: 9.832 minutes

Loading Tool unit

Production Truck Unit Production

Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production

429.63 LCY/Hour Adjusted for job efficiency: 356.60 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,426.38 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____55.28 Hours

Unit cost: \$2.146 /LCY Total job cost: **\$158,078**

Task description:	AGVLF	- Topsoil - Lift 6	- Transport			
Site: Cresson Project	<u>t</u>	Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #:A102 Date:11/22	12	State: Colora County: Teller	do	Ab	breviation: No Filename: M2	ne 244-A1012
Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS	<u>r</u>		Shift bas	is: 1 per day	
-	Truck Loader Tea		Equipment Descri 777F	ption		
	Truck Loader Tea		777 Γ Γ992Κ			
Sup	port Equipment -I	Load Area: Cat	D10T - 10SU			
		ump Area: NA				
Road N	Maintenance – Mot		Γ 16M er Tanker, 7,000 (Gal		
	- ** 2	iter Truck. Wat	ci Tanker, 7,000 v	Gai.		
Cost Breakdown:	Truck/Lo	ader Team	1.1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	5	1	1	0	1	1
Group Subtotals:	Work:	\$2,471.69	Support:	\$380.21	Maint:	\$407.85
Total work team co		<u>75 </u>				
Initial volume		CCY	Swell	factor: 1.215		
Loose volume			Swell	1actor. 1.213		
So	ource of estimated	l volume: 2022	CC&V Provided Iandbook	Estimate		
	Material Purch	ase Cost: $\frac{\$0.00}{\$0.00}$				
		Ψ0.00				
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity: Truck Payload (we	ight) Basis:					
Material	weight: 1,600		Pounds/LCY			
	ription: Top So ayload: 200,00		Pounds			

maintained 3.0

Payload Capacity:	125.00	LCY				
T 15 1/ 1 \5						
Truck Bed (volume) Basis:	60.60	T CV				
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume: _	78.80	LCY				
Fina	al Truck Volume	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity:	16.000	LCY (heaped)	Buc	ket Size Class: 1	NA	_
Bucket Fill Factor:	1.100	Other - rock/di	et mixtures (100	0-120%) 1.100		
Adjusted Capacity:	17.600	LCY	it illixtures (100	J-120%) 1.100		
Adjusted Capacity.	17.000	LC1				
Job Condition Correction	<u>s:</u>	S	ite Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE			
ess zineieney.	0.020	0.000	(0.11 112	-,		
Net Correction:	0.830	0.813				
Loading Tool Cycle Time	: Numbe	er of Loading Tool Pa	asses Required to	Fill Truck:	1	passes
Excavators and Front Show Machine Cycle Time Selected Value	: Numbe	on Rating: NA ic Rating: NA	asses Required to	Fill Truck:	41	passes
Excavators and Front Show Machine Cycle Time Selected Value	vs. Job Condition within this Base Material Description	on Rating: NA ic Rating: NA	asses Required to	Fill Truck:		passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	Number els: vs. Job Condition within this Base Material Description:	on Rating: NA ic Rating: NA	asses Required to	Fill Truck:		passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min.	Numberels: vs. Job Condition within this Bas Material Descript:	on Rating: NA ic Rating: NA ription: Maneuver: NA		Dump: 0.10		
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA	vs. Job Condition within this Bas Material Descript: Unadjusted Bas	on Rating: NA ic Rating: NA ription: Maneuver: NA		Dump: 0.10	00	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders	vs. Job Condition within this Bas Material Descript: Unadjusted Base	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti		Dump: 0.10	00 0.625 min	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors	vs. Job Condition within this Base Material Descript: - Unadjusted Base Mixed mater	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti	me (load, dump, 1	Dump: 0.10 maneuver): 0.10 Factor (min.)	00 0.625 min Source	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material:	vs. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Ti	me (load, dump, 1	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020	0.625 min Source (Cat HB)	
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Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vs. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 nt - factor not applic rership of trucks and eration -0.04	me (load, dump, 1	Dump: 0.10 maneuver): 0.020 0.000 -0.040	00 0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle Ti rial 0.02 nt - factor not applic mership of trucks and eration -0.04 get 0.00	me (load, dump, 1	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	me (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	me (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0.000 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	me (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	ws. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load	me (load, dump, rable 0.00 d loaders -0.04 me Adjustment: ler Cycle Time: Fime per Truck:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vs. Job Condition within this Bas Material Description - Unadjusted Bas Mixed mater No adjustme Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti rial 0.02 ont - factor not applic reation -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	me (load, dump, i able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	OO O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time	Number sels: vs. Job Condition within this Base Material Description: - Unadjusted Base Mixed mater No adjustme Common ow Constant open Nominal target selection (1.795)	on Rating: On Rating: NA ic Rating: Maneuver: Maneuver: NA asic Loader Cycle Ti rial 0.02 nt - factor not applice mership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load Minutes	me (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	Dump: 0.10 maneuver): 6 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes 0.800	utes

Tiuui Itou	ic.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	8747.00	-6.80	3.00	-3.80	2545	3.618

Haul Time: 3.618 minutes

Return Route:

rectarii re	Retain Route.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	8747.00	6.80	3.00	9.80	1789	5.013	

Return Time: 5.013 minutes
Total Truck Cycle Time: 12.463 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

338.93 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 281.31 LCY/Hour Optimal No. of Trucks: 5 Truck(s)

Selected Number of Trucks: 5 Truck(s)

Adjusted hourly truck team production: 1,406.57 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 70.60
 Hours

 Unit cost:
 \$2.447
 /LCY
 Total job cost:
 \$230,137

Task description	: AGVL	F - Topsoil - Lift 7	/ - Transport				
Site: Cresson Proj	ect	Permit Action	on: 2023		Permit/Job#: M	1980244	
PROJECT ID	ENTIFICATION	<u>v</u>					
Task #: A1	.013	State: Colora	ado	Ab	breviation: No	one	
	Date: 11/22/2023 County: Teller 2:22:52 PM User: ZTT		Filen		Filename: M2		
Agency	or organization na	me: DRMS					
1.50.10)	or organization in					 -	
HOURLY EQ	UIPMENT COS	<u>T</u>		Shift bas	is: 1 per day		
			Equipment Descri	ption			
	Truck Loader Te		777F				
	ipport Equipment -		T 992K				
31		Dump Area: NA	D10T - 10SU				
Road	Maintenance –Mo	1	Т 16М				
	-W	ater Truck: Wat	ter Tanker, 7,000	Gal.			
Cost Breakdow	n: Truck/La	oader Team	Support I	Equipment	Maintenar	nce Equipment	
OSS DI GANGO III	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck	
%Utilization-machine	: 100	100	100	NA	25	25	
Ownership cost/hour		\$229.24	\$178.69	NA	\$212.21	\$86.29	
Operating cost/hour		\$200.29	\$160.22	NA	\$31.22	\$28.44	
%Utilization-riper		0	NA	NA	NA	NA	
Ripper own. cost/hour	: NA	\$0.00	\$0.00	NA	\$0.00	\$0.00	
Ripper op. cost/hour	: NA	\$0.00	\$0.00	NA	\$0.00	\$0.00	
Operator cost/hour	: \$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12	
Unit Subtotals	: \$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86	
Number of Units	: 5	1	1	0	1	1	
Group Subtotals	: Work:	\$2,471.69	Support:	\$380.21	Maint:	\$407.85	

MATERIAL QUANTITIES

Initial volume: 104,752 CCY Swell factor: 1.215

Loose volume: 127,274 LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 1,600 Pounds/LCY

Description: Top Soil
Rated Payload: 200,000 Pounds

Payload Capacity	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fi	nal Truck Volum	ne Based on Number o	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: N	NA	
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:		Other - rock/di)-120%) 1.100		_
Adjusted Capacity	17.600	LCY				_
Job Condition Correction	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HE	· · · · · · · · · · · · · · · · · · ·		
Net Correction:	0.830	0.813				
Loading Tool Cycle Tim	ne: Numb	per of Loading Tool Pa	asses Required to	Fill Truck:	4 1	passes
	ne: Numb		asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Numb	per of Loading Tool Pa	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi ne within this Ba	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader	ne: Numbovels: e vs. Job Conditine within this Bands – Material Description.):	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi	ne: Numbovels: e vs. Job Conditine within this Base – Material Description.):	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.10		
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade	vels: e vs. Job Condition we within this Baus – Material Description.): rs - Unadjusted F	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.10	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (minute of the cycle) Load: NA	ne: Numbovels: e vs. Job Conditions within this Bass – Material Description.): ers - Unadjusted F	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Ti	· 	Dump: 0.10	00 0.625 min Source	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor	e vs. Job Conditing within this Bass – Material Description.): The visual properties of the vis	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Ti	ime (load, dump, 1	Dump: 0.10 maneuver): (Factor (min.)	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia	evels: e vs. Job Condition e within this Bactor s – Material Description rs - Unadjusted Fores l: Mixed mater ex No adjustm	oer of Loading Tool Pation Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02	ime (load, dump, nable 0.00	Dump: 0.10 maneuver): (Factor (min.) 0.020	00 0.625 min Source (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile	e vs. Job Condition within this Bas – Material Description.): The viscous distribution of the viscous distributio	tion Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applic	ime (load, dump, nable 0.00	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000	00 0.625 min Source (Cat HB) (Cat HB)	
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Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	oer of Loading Tool Parison Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whereship of trucks and peration -0.04 rget 0.00 Net Cycle Tierial Tool Parison Par	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targer	e vs. Job Condition within this Bass – Material Description.): The second of the seco	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted F s l: Mixed mate e: No adjustm o: Common ov n: Constant op t: Nominal tan me: 0.80	ion Rating: Sic Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice wnership of trucks and peration -0.04 rget 0.00 Net Cycle Tierial Adjusted Load Telephone (Net Load Telephone)	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0.10 maneuver): (Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

maintained 3.0

Page 3 of 3

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	10490.00	-6.80	3.00	-3.80	2545	4.339

Haul Time: 4.339 minutes

Return Route:

110000111111	0 4.00					
Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)		(%)	(%)	(fpm)	(min)
1	10490.00	6.80	3.00	9.80	1789	5.987

Return Time: 5.987 minutes
Total Truck Cycle Time: 14.158 minutes

Loading Tool unit

Production Truck Unit Production

298.35 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour

Adjusted for job efficiency: 247.63 LCY/Hour

Optimal No. of Trucks: 5 Truck(s)

Selected Number of Trucks: 5 Truck(s)

Adjusted hourly truck team production: 1,238.17 LCY/Hour Adjusted single truck/loader team production: 1,238.17 LCY/Hour Adjusted multiple truck/loader team production: 1,238.17 LCY/Hour LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 102.79
 Hours

 Unit cost:
 \$2.633
 /LCY
 Total job cost:
 \$335,075

	<u> </u>		- 10pson -	Lift 8 - Transport					_
Site	: Cresson Project		Permi	t Actio	on: 2023		Permit/Job#:	M1980244	
	PROJECT IDEN	JTIFICATION	ſ						
			=	G 1	1	4.1	1	N	
	Task #: A101 Date: 11/22			Colorado Teller			breviation: _ Filename:	None M244-A1014	1
		42 PM	County.	I CHCI			riichame.	W1244-A1014	+
	User: ZTT						_		
	Agency or	organization nar	ne: DRM	IS					-
	HOURLY EQUI	PMENT COST	<u>r</u>			Shift bas	is: <u>1 per day</u>		
					Equipment Descri	ption			
_	Truck Loader Team -Truck:				777F				-
_	C	· E · · · · · ·	-Loader:		7 992K				Ē.
	Supp	ort Equipment -L		NA	D10T - 10SU				
-	-Dump Area: Road Maintenance –Motor Grader:				7 16M				÷
_		-Wa	ter Truck:	Wate	er Tanker, 7,000	Gal.			-
	Cost Breakdown:		ader Team		1.1	Equipment		enance Equip	
		Truck	Loader		Load Area	Dump Area	Motor Grad	er Water 7	Iruck
%Ut	ilization-machine:	100		100	100	NA	,	25	25
Ow	nership cost/hour:	\$206.48	\$22	9.24	\$178.69	NA	\$212.2	21	\$86.29
Oı	perating cost/hour:	\$160.10	\$20	0.29	\$160.22	NA	\$31.	22	\$28.44
9	% Utilization-riper:	NA		0	NA	NA		IA .	NA
Ripp	er own. cost/hour:	NA	\$	0.00	\$0.00	NA	\$0.0	00	\$0.00
	oper op. cost/hour:	NA	\$	0.00	\$0.00	NA	\$0.0		\$0.00
C	Operator cost/hour:	\$33.71	\$4	0.71	\$41.30	NA	\$28.	56	\$21.12
	Unit Subtotals:	\$400.29	\$47	0.24	\$380.21	NA	\$271.9	99 \$	135.86
	Number of Units:	3		1	1	0		1	1
	Group Subtotals:	Work:	\$1,671.11		Support:	\$380.21	Maii	nt: \$407.85	5
	Total work team co	st/hour: \$2,459.	<u> 17 </u>						
	MATERIAL QU	ANTITIES							
	Initial volume	: 59,879		CCY	Swell	factor: 1.215			
	Loose volume	72,75	53	LCY					
	So	urce of estimated	volume:	2022	CC&V Provided	Estimate			
	Source	of estimated swe	_	Cat H	andbook				-
		Material Purch	_	\$0.00					_
		То	otal Cost: _	\$0.00					
	HOURLY PRO	DUCTION							
	Truck Capacity:								

Pounds/LCY

Pounds

1,600

Top Soil 200,000

Material weight:

Description: Rated Payload:

CIRCES Cost Estimating Software

Payload Capacity:						
	125.00	LC	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume: _	78.80	LCY				
Fina	l Truck Volume	e Based on Number	r of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Bucl	cet Size Class:	NA	
Rated Capacity:	16.000	LCY (heaped	1)	-		_
Bucket Fill Factor:	1.100	Other - rock/o		-120%) 1.100		=
Adjusted Capacity:	17.600	LCY		,		_
Job Condition Corrections	S : _		Site Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	,		
Net Correction:	0.830	0.813				
Loading Tool Cycle Times Excavators and Front Shove		er of Loading Tool	Passes Required to	Fill Truck:	4 1	passes
Machine Cycle Time v Selected Value	els: vs. Job Condition within this Bas	on Rating: NA NA	Passes Required to	Fill Truck:	4 1	passes
Excavators and Front Shove Machine Cycle Time	els: vs. Job Condition within this Bas	on Rating: NA NA	Passes Required to	Fill Truck:	4	passes
Excavators and Front Shove Machine Cycle Time v Selected Value	els: vs. Job Conditio within this Bas: - Material Descr	on Rating: NA NA	Passes Required to	Fill Truck:	41	passes
Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders -	els: vs. Job Condition within this Base Material Descript:	on Rating: NA NA	Passes Required to		100	passes
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.)	els: vs. Job Condition within this Base Material Descript:	on Rating: NA		Dump:0.1	,	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA	els: vs. Job Condition within this Base Material Descript:	on Rating: NA		Dump:0.1	100	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders	els: vs. Job Condition within this Base Material Descript:	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle		Dump: 0.1	0.625 min	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors	els: vs. Job Condition within this Base Material Descript: M Unadjusted Base Mixed mater	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle	Time (load, dump, r	Dump: 0.1 naneuver): Factor (min.)	0.625 min Source	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow	on Rating: NA ic Rating: NA ription: NA aneuver: NA asic Loader Cycle 7 rial 0.02 nt - factor not applierership of trucks a	Time (load, dump, r	Dump: 0.1 naneuver): Factor (min.) 0.020 0.000 -0.040	0.625 min	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA aneuver: NA asic Loader Cycle rial 0.02 nt - factor not applierership of trucks a cration -0.04	Time (load, dump, r	Dump: 0.1 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow	on Rating: NA ic Ration: NA ic Ration ic Ratio	Time (load, dump, r	Dump: 0.1 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Ration: NA ic Ration ic Ratio	Time (load, dump, r icable 0.00 nd loaders -0.04	Dump: 0.1 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA ription: NA asic Loader Cycle rial 0.02 nt - factor not applicate of trucks a cration -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 loaders -0.04 loaders -0.04 loaders -0.04 loaders -0.04 loaders -0.04 loader Cycle Time:	Dump: 0.1 maneuver): Factor (min.)	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA ription: NA asic Loader Cycle rial 0.02 nt - factor not applicate of trucks a cration -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, r icable 0.00 nd loaders -0.04	Dump: 0.1 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA ription: NA asic Loader Cycle rial 0.02 nt - factor not applicate of trucks a cration -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 loaders -0.04 loaders -0.04 loaders -0.04 loaders -0.04 loaders -0.04 loader Cycle Time:	Dump: 0.1 maneuver): Factor (min.)	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: NA ription: NA asic Loader Cycle rial 0.02 nt - factor not applicate of trucks a cration -0.04 get 0.00 Net Cycle T Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 lime Adjustment: lader Cycle Time:	Dump: 0.1 maneuver): Factor (min.)	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	els: vs. Job Condition within this Base Material Descript: Unadjusted Base Mixed mater No adjustme Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle rial 0.02 nt - factor not applicate of trucks a certation -0.04 get 0.00 Net Cycle Tadjusted Load	Time (load, dump, ricable 0.00 and loaders -0.04 Time Adjustment: loader Cycle Time: la Time per Truck:	Dump: 0.1 naneuver): Factor (min.)	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2805.00	-9.10	3.00	-6.10	1870	1.656

Haul Time: **1.656** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 2805.00 9.10 3.00 12.10 1628 1.862

Return Time: 1.862 minutes
Total Truck Cycle Time: 7.350 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

574.72 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 477.02 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,431.06 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 54.61
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$134,296

Site: Cresson Project		Permit Act	ion: 2023	<u> </u>	Permit/Job#:	M1980244
PROJECT IDENT Task #: A1015		State: Color		Ab		Vone
Date: 11/22/2		County: Telle	r		Filename: N	1244-A1015
User: $\frac{2:25:09}{ZTT}$	9 PM					
	organization nar	ne: DRMS				
HOURLY EQUIP	MENT COST	<u>r</u>		Shift bas	sis: <u>1 per day</u>	
			Equipment Descri	ption		
Tr	ruck Loader Tea		t 777F			
			T 992K			
Suppo	rt Equipment -L		t D10T - 10SU			
Road Ma	-Dump Area: NA Road Maintenance –Motor Grader: CAT					
	-Wa		ater Tanker, 7,000	Gal.		
Cost Breakdown:		ader Team		Equipment		ance Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	5 25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	2 \$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	5 \$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$1,270.82	Support:	\$380.21	Maint	: \$407.85
Total work team cost		88				
		CC	7 0 .11	C 1 215		
Initial volume: Loose volume:	41,737 50,71			factor: 1.215		
	-					
	rce of estimated of estimated swe Material Purch To	ell factor: Cat		Estimate		

Pounds/LCY

Pounds

Material weight:

Description: Rated Payload: 1,600

Top Soil 200,000

Payload Capacity	125.00	LC	Y			
Truck Bed (volume) Basis		LOW				
Struck Volume:	60.60	LCY				
Heaped Volume: Average Volume:	78.80 69.70	LCY LCY				
Adjusted Volume:	78.80	LCY				
Adjusted Volume.	76.60	LCI				
	nal Truck Volum	ne Based on Number	r of Loader Passes:	70.40	LCY	
Loading Tool Capacity			Bucl	ket Size Class: N	NA	
Rated Capacity		LCY (heaped	d)		171	_
Bucket Fill Factor			dirt mixtures (100	-120%) 1.100		=
Adjusted Capacity	17.600	LCY				
Job Condition Correction	ns:		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	/		
Job Efficiency:	0.830	0.830	(CAT HB	3)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tin		0.813 per of Loading Tool	Passes Required to	Fill Truck:	4	passes
	e: Numb		Passes Required to	Fill Truck:	4I	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	e: Numb	per of Loading Tool	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb vels: e vs. Job Conditi	oer of Loading Tool ion Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	vels: vels: vs. Job Conditi we within this Ba — Material Desc	oer of Loading Tool ion Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader	vels: vels: e vs. Job Conditi e within this Ba s – Material Desc	oer of Loading Tool ion Rating: NA sic Rating: NA	Passes Required to	Fill Truck: Dump: 0.100		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi	vels: e vs. Job Conditing within this Bases — Material Description.):	oer of Loading Tool ion Rating: NA sic Rating: NA cription: NA		Dump: 0.100		
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade	vels: e vs. Job Condition we within this Bass – Material Descript: s - Unadjusted F	oer of Loading Tool ion Rating: NA sic Rating: NA cription: NA		Dump: 0.100	0	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (minutes) Load: NA	vels: e vs. Job Condition we within this Bases – Material Descent.): es - Unadjusted E	oer of Loading Tool ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle		Dump: 0.100	0 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor	vels: e vs. Job Condition we within this Base – Material Description.): rs - Unadjusted Fase Mixed mate	oer of Loading Tool ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle	Time (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.)	0 0.625 minu Source	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership	vels: e vs. Job Conditi the within this Ba s – Material Desc n.): es - Unadjusted F s l: Mixed mate es: No adjustments c: Common ov	oer of Loading Tool ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle ' crial 0.02 ent - factor not appli wnership of trucks a	Time (load, dump, r	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040	0	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conditi e within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate c: No adjustme c: Common ov n: Constant op	oer of Loading Tool ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle ' erial 0.02 ent - factor not appli wnership of trucks a peration -0.04	Time (load, dump, r	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	0	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership	vels: e vs. Job Conditi e within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate c: No adjustme c: Common ov n: Constant op	oer of Loading Tool ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle erial 0.02 ent - factor not appliance of trucks a peration -0.04 rget 0.00	Time (load, dump, ricable 0.00 and loaders -0.04	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conditi e within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate c: No adjustme c: Common ov n: Constant op	ion Rating: NA Sic Rating: NA Seription: NA Serial 0.02 Serial 0.02 Serial 0.02 Serial 0.04 Serial 0.04 Serial 0.04 Serial 0.00 Serial 0.0	Time (load, dump, ricable 0.00 and loaders -0.04 Γime Adjustment:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conditi e within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate c: No adjustme c: Common ov n: Constant op	ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle and the factor not appliance of trucks a peration -0.04 rget 0.00 Net Cycle and Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 loaders -0.04 loaders -0.04 loader Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conditi e within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate c: No adjustme c: Common ov n: Constant op	ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle and the factor not appliance of trucks a peration -0.04 rget 0.00 Net Cycle and Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 Γime Adjustment:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	vels: e vs. Job Conditi e within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate c: No adjustme c: Common ov n: Constant op	ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle and the factor not appliance of trucks a peration -0.04 rget 0.00 Net Cycle and Adjusted Lo	Time (load, dump, ricable 0.00 and loaders -0.04 loaders -0.04 loaders -0.04 loader Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targer	vels: e vs. Job Conditi e within this Ba s – Material Desc n.): es - Unadjusted F s l: Mixed mate e: No adjustm c: Common ov e: Constant op e: Nominal tar	ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle and the factor not appliance of trucks a peration -0.04 rget 0.00 Net Cycle and Adjusted Lo	Time (load, dump, r icable 0.00 ind loaders -0.04 Fime Adjustment: oader Cycle Time: d Time per Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	vels: e vs. Job Conditi the within this Bass – Material Description.): es - Unadjusted Est Mixed materials: No adjustment: Common over Constant oper: Nominal tar	ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle retail 0.02 tent - factor not appliance appropriate to 2.00 Net Cycle 7 Adjusted Loader Loader Cycle 7 Net Loader Cyc	Time (load, dump, ricable 0.00 and loaders -0.04 Time Adjustment: pader Cycle Time: di Time per Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	O Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Page 3 of 3

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1859.00	-8.00	3.00	-5.00	1870	1.140

Haul Time: 1.140 minutes

Return Route:

return re	rute.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1859.00	8.00	3.00	11.00	1734	1.214

Return Time: 1.214 minutes
Total Truck Cycle Time: 6.186 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

682.87 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 566.78 LCY/Hour Optimal No. of Trucks: 2 Truck(s)

Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 1,133.57 LCY/Hour Adjusted single truck/loader team production: 1,133.57 LCY/Hour Adjusted multiple truck/loader team production: 1,133.57 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 44.74
 Hours

 Unit cost:
 \$1.816
 /LCY
 Total job cost:
 \$92,104

BULLDOZER WORK

Task description:	AGV	LF - Topson	- Lill I -)	- Dozer Spreading		
Cresson Project		Peri	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	NTIFICATION	<u>ON</u>				
Task #: A101	6	State:	Colorado		Abbreviation:	None
	0/2023	County:	Teller		Filename:	M244-A1016
	:40 PM	county.	Tener		i nename.	1412 11 711010
User: ZTT					•	
Agency or	organization	name: DR	RMS			
HOURLY EQUI	PMENT CO	OST				
Basic Machine:	Cat D7R D	S Series II L	GP			
Horsepower:	240					
Blade Type:	Straight					
Attachment:	NA					
Shift Basis:	1 per day					
Data Source:	(CRG)					
Cost Breakdown:	<u></u>	-				
COSt DICARGOWII.				Utilization %		
Ownership Cost/H	lour.		\$114.76	NA		
Operating Cost/H			\$91.98	100		
Ripper own. Cost/H			\$0.00	NA		
Ripper op. Cost/H			\$0.00	25		
Operator Cost/H			\$41.30	NA NA		
MATERIAL QU	ANTITIES					
Initial Volume:	497,443					
Swell factor:	1.215					
Loose volume:	604,393 LC	Y				
Source of estimated	volume:	2022 CC	&V Provided	l Estimate		
Source of estimated		Cat Hand		Littinace		
HOURLY PROI	DUCTION					
Average push distar	<u> </u>					
	nce:	210 feet				
Unadjusted hourly p		210 feet 277.8 LCY/	'hr			
Unadjusted hourly p Materials consistence	production:	277.8 LCY/	hr stockpile 1.2			
	oroduction: _	277.8 LCY/				
Materials consisten	cy description ent:30 %	277.8 LCY/				
Materials consistence Average push gradi	ent:30 % e:9,500	277.8 LCY/				
Materials consistend Average push gradi Average site altitud	ent:30 % e:	277.8 LCY/ : Loose s feet lbs/LCY				
Materials consistence Average push gradi Average site altitud Material weight: Weight description: Job Condition Corre	ent:30 % e:1,600	277.8 LCY/ : Loose s feet lbs/LCY Soil	stockpile 1.2	Source		
Materials consistence Average push gradi Average site altitud Material weight: Weight description: Job Condition Corre	ent:30 % e:1,600 Top S ection Factor erator Skill:	277.8 LCY/ : Loose s feet lbs/LCY O.				

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 382.20 LCY/hr
Adjusted fleet production: 382.2 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.649/LCY

Total job time: 1,581.35 Hours
Total job cost: \$392,242

BULLDOZER RIPPING WORK

Task descriptio	on: AC	GVLF - Topsoil	l - Lift 1 - 9	- Ripping			
Site: Cresson Pro	ject	Pern	mit Action: _	2023	Peı	rmit/Job#:	M1980244
PROJECT II	DENTIFICAT	ΓΙΟΝ					
Task #: A	1017	State:	Colorado		Abbre	eviation:	None
	1/21/2023	County:	Teller			ilename:	M244-A1017
	:13:32 PM						
User: Z	TT	- -				-	
Agend	cy or organization	on name: DR	MS				
•	QUIPMENT (
		Cat D7R DS Seri	ies II LGP		Horsepower:	·	240
		3-Shank Ripper			Shift Basis:		er day
11				_	Data Source:		CRG)
Cost Breakdow	7 n·						
Cost Dicardow	<u>11.</u>				Utilization %		
	Ownership	Cost/Hour:		\$114.76	NA		
		Cost/Hour:		\$91.98	100		
	pper Ownership			\$9.06	NA		
Ri	pper Operating			\$5.02	100		
		Cost/Hour:		\$41.30	NA		
	Total Unit	Cost/Hour:		\$262.12			
	Total Fleet	Cost/Hour:	\$262	2.12			
MATEDIAI	QUANTITIE		0.1		.1 1 A		
		<u> 20</u>	Sele	cted estimating	method: Area		
Alternate Meth	ods:						
nic: NA			Volume: _	NA	BCY		NA
rea: 616.66	acres	Rip I	Depth (ft):	2.50	Volume: 2,	487,195	BCY
	Source of es	stimated quantity	y: 2022 C	C&V Provided	Estimate		
			· -				
HOURLY PI	RODUCTION	<u>N</u>					
Seismic:							
		Seismic Veloc	city:				
Area:				NA	feet/seco	nd	
	Aver			NA	feet/seco	nd	
		age Ripping De	pth:	NA 2.45	feet/seco		
	Aver	age Ripping Wi	dth:	2.45 6.50	feet/pass feet/pass		
	Aver Avera	rage Ripping Winge Ripping Len	dth:	2.45 6.50 442.00	feet/pass feet/pass feet/pass		
	Aver Avera Av	rage Ripping Wi age Ripping Len verage Dozer Spo	dth: gth:	2.45 6.50 442.00 88.00	feet/pass feet/pass feet/pass feet/minu	ıte	
	Aver Avera Av Avera	rage Ripping Wi age Ripping Len verage Dozer Sp ge Maneuver Ti	dth: gth: eed: ime:	2.45 6.50 442.00 88.00 0.25	feet/pass feet/pass feet/pass feet/minu minutes/p	ite pass	
	Aver Avera Av Avera	rage Ripping Wi age Ripping Len verage Dozer Spo	dth: gth: eed: ime:	2.45 6.50 442.00 88.00	feet/pass feet/pass feet/pass feet/minu	ite pass	
Job Condition (Aver Avera Av Avera	rage Ripping Winge Ripping Lenverage Dozer Spage Maneuver Tiuction per unit a	dth: gth: eed: ime:	2.45 6.50 442.00 88.00 0.25	feet/pass feet/pass feet/pass feet/minu minutes/p	ite pass	
	Avera Avera Av Avera Prode	rage Ripping Winge Ripping Lenverage Dozer Spage Maneuver Tiuction per unit a	dth:gth:	2.45 6.50 442.00 88.00 0.25	feet/pass feet/pass feet/pass feet/minu minutes/p	ute pass ur	
	Avera Avera Av Avera Prode	rage Ripping Winge Ripping Lenverage Dozer Spage Maneuver Tiuction per unit a	dth: gth: eed: ime: urea:	2.45 6.50 442.00 88.00 0.25 0.751	feet/pass feet/pass feet/pass feet/minu minutes/pacres/hou	ute pass ur	
	Avera Avera Av Avera Prode	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiuction per unit and ors	dth:gth:eed:ime:iion:ude:ude:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00	feet/pass feet/pass feet/pass feet/minu minutes/p acres/hou	ute pass ur	
	Avera Avera Av Avera Prode	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiluction per unit a sors rly Unit Product Site Altitude A Job Efficier	dth:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00 0.83	feet/pass feet/pass feet/pass feet/minu minutes/p acres/hou Acres/hr feet (CAT HE (1 shift/d	nte pass nr 3) ay)	
	Avera Avera Av Avera Prode	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiguction per unit a sors rly Unit Product Site Altitude A	dth:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00	feet/pass feet/pass feet/pass feet/minu minutes/pacres/hou Acres/hr feet (CAT HI	nte pass nr 3) ay)	
	Avera Avera Avera Prode Correction Facto Unadjusted Hour	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiluction per unit a sors rly Unit Product Site Altitude Altitude Altitude Altitude Altitude Altitude Altitude Net Correct	dth: gth: gth: eed: ime: urea: ude: Adj: ncy: ion:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/pass feet/minu minutes/p acres/hou Acres/hr feet (CAT HE (1 shift/d multiplie	nte pass nr 3) ay)	
	Avera Avera Avera Avera Prode Correction Facto Jnadjusted Hour	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiluction per unit a sors rly Unit Product Site Altitude A Job Efficier	dth: gth: eed: ime: urea: ion: ude: Adj: ncy: ion: Production:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00 0.83	feet/pass feet/pass feet/pass feet/minu minutes/p acres/hou Acres/hr feet (CAT HE (1 shift/d	nte pass nr 3) ay)	
Ţ	Avera Avera Avera Avera Produ Correction Facto Jnadjusted Hour Adjuste Adjuste	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiguction per unit a sors rly Unit Product Site Altitude Alt	dth: gth: eed: ime: urea: ion: ude: Adj: ncy: ion: Production:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/minu minutes/p acres/hou Acres/hr feet (CAT HE (1 shift/d multiplie Acres/hr	nte pass nr 3) ay)	
	Avera Avera Avera Avera Produ Correction Facto Jnadjusted Hour Adjuste Adjuste	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiguction per unit a sors rly Unit Product Site Altitude Alt	dth: gth: eed: ime: urea: ion: ude: Adj: ncy: ion: Production:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/pass feet/minu minutes/p acres/hou Acres/hr feet (CAT HE (1 shift/d multiplie Acres/hr Acres/hr	nte pass nr 3) ay)	Hours
JOB TIME A	Avera Avera Avera Avera Produ Correction Facto Jnadjusted Hour Adjuste Adjuste	rage Ripping Winge Ripping Lenderage Dozer Spage Maneuver Tiguction per unit a sors Type Unit Product Site Altitude Al	dth: gth: eed: ime: urea: ion: ude: Adj: ncy: ion: Production:	2.45 6.50 442.00 88.00 0.25 0.751 0.751 9,500 1.00 0.83 0.83 0.62 0.62	feet/pass feet/pass feet/pass feet/pass feet/minu minutes/p acres/hou Acres/hr feet (CAT HF (1 shift/d multiplie Acres/hr Acres/hr Acres/hr	ute pass ir 3) ay) r	Hours

BULLDOZER WORK

	DG VLI		C - MIGGS	Grading			
Cresson Project		Permi	t Action:	2023		Permit/Job#:	M1980244
PROJECT IDEN	TIFICATION	_					
Task #: A1100)	State:	Colorado			Abbreviation:	None
Date: 11/20/			Teller			Filename:	M244-A1100
	41 PM					-	
User: ZTT							
Agency or	organization nar	ne: DRM	IS				
HOURLY EQUII	PMENT COST	<u>r</u>					
Basic Machine:	Cat D10T - 10	SU					
Horsepower:	574						
Blade Type:	Semi-Universa	1					
Attachment:	NA						
Shift Basis:	1 per day			<u>—</u>			
Data Source:	(CRG)						
Cost Breakdown:			1	T.T.			
Overnoushin Cost/II.			\$178.69	<u>Ut</u>	ilization % NA		
Ownership Cost/Ho Operating Cost/Ho			\$178.09		100		
Ripper own. Cost/Ho			\$0.00		NA		
Ripper op. Cost/Ho			\$0.00		0		
Operator Cost/Ho			\$41.30		NA		
MATERIAL OIL	A NITHITITITE						
MATERIAL QUA	1,797,311		-				
Initial Volume: Swell factor:							
Initial Volume: Swell factor: Loose volume:	1,797,311 1.000 1,797,311 LCY	2022 CC&V	V Provided	l Estimate			
Initial Volume: Swell factor:	1,797,311 1.000 1,797,311 LCY volume:	2022 CC&V Cat Handbo		l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated	1,797,311 1.000 1,797,311 LCY volume: swell factor:			l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	1,797,311 1.000 1,797,311 LCY volume: swell factor:			l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14	Cat Handbo	ook	l Estimate			
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distance	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14 roduction: 1,7	Cat Handbo 5 feet 284.6 LCY/	ook				
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly pu	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14 roduction: 1,7 y description:	Cat Handbo 5 feet 284.6 LCY/	ook hr				
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly processors	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14 roduction: 1,2 y description: ent: -30 %	Cat Handbo 5 feet 284.6 LCY/	ook hr				
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly production Materials consistence Average push gradie	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14 roduction: 1,2 y description: ent: -30 %	Cat Handbo 5 feet 284.6 LCY/ Consolidate t	ook hr				
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly poly Materials consistenc Average push gradie Average site altitude	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14 roduction: 1,7 y description: ent: -30 % :: 9,500 fee	5 feet 284.6 LCY/ Consolidate t	ook hr				
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly poly Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correct	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14 roduction: 1,7 y description: ent: -30 % : 9,500 fee 2,800 lbs Granite - ction Factor	5 feet 284.6 LCY/ Consolidat t /LCY Broken	hr ated stockp		Source		
Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly poly Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correct	1,797,311 1.000 1,797,311 LCY volume: swell factor: UCTION ce: 14 roduction: 1,7 y description: ent: -30 % : 9,500 fee 2,800 lbs Granite - ction Factor rator Skill:	5 feet 284.6 LCY/ Consolidate t	hr ated stockp		Source (AVG.)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7855

Adjusted unit production: 1,009.05 LCY/hr
Adjusted fleet production: 2018.1 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.377/LCY

Total job time: 890.60 Hours
Total job cost: \$677,231

BULLDOZER WORK

Permit Action: 2023 Permit Job#: M198024		Grading	
Task #: Al10 State: Colorado Abbreviation: None	Cresson Project Permit Action:	2023 Permit/Job#:	M1980244
Date 11/20/2023	PROJECT IDENTIFICATION		
Date	Task #: A1101 State: Colorado	Abbreviation:	None
User: ZTT Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat D7R DS Series II LGP Horsepower: 240 Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper opn. Cost/Hour: \$0.00 NA Ripper opn. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet			M244-A1101
Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat D7R DS Series II LGP Horsepower: 240 Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Unit Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 199,701 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet			
Basic Machine:	User: ZTT		
Basic Machine: Cat D7R DS Series II LGP Horsepower: 240 Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: Consolidated stockpile 1.0 Average push gradient: -30 % Average push gradient: -30 % Average push gradient: -30 % Average site altitude: 9,500 feet	Agency or organization name: DRMS		
Horsepower: 240 Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper ovn. Cost/Hour: \$0.00 NA Ripper ovn. Cost/Hour: \$0.00 NA Ripper ovn. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 2022 CC&V Provided Estimate Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated volume: 2145 feet Unadjusted hourly production: 415 feet Unadjusted hourly production: 2681.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	HOURLY EQUIPMENT COST		
Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Unit Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000	Basic Machine: Cat D7R DS Series II LGP		
Attachment: Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet 145 feet 140 Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	Horsepower: 240	<u> </u>	
Shift Basis: Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$0.00 NA Ripper oyn. Cost/Hour: \$41.30 NA Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 20 Na Sal.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average push gradient: -30 % Average site altitude: 9,500 feet	Blade Type: Straight		
Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 2006 feet Average push gradient: -30 % Average push gradient: -30 % Average site altitude: 9,500 feet	Attachment: NA		
Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 O Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: \$199,701 Swell factor: \$1.000 Loose volume: \$199,701 LCY Source of estimated volume: \$2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: \$145 feet Unadjusted hourly production: \$20.00 feet Consolidated stockpile 1.0 Average push gradient: \$-30 % Average site altitude: \$9,500 feet	Shift Basis: 1 per day		
Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 O Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	Data Source: (CRG)		
Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 O Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Pleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	Cost Breakdown		
Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 O Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 281.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	OUST DIVINGO WII.	Utilization %	
Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	Ownership Cost/Hour: \$114.76		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Substituting the state of			
Ripper op. Cost/Hour: Operator Cost/Hour: \$248.04 Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: Initial Volume: Indicator: I			
Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet			
Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 199,701 Swell factor: 1.000 Loose volume: 199,701 LCY Source of estimated volume: 2022 CC&V Provided Estimate Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet			
Source of estimated volume: Source of estimated swell factor: HOURLY PRODUCTION Average push distance: Unadjusted hourly production: Materials consistency description: Consolidated stockpile 1.0 Average push gradient: Average site altitude: 9,500 feet	Initial Volume: 199,701 Swell factor: 1.000		
Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	Loose volume: 199,701 LCY		
Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	Source of estimated volume: 2022 CC&V Provide	ed Estimate	
Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet		- Estimate	
Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	HOURI W BRODUCTION		
Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	HOURLY PRODUCTION		
Materials consistency description: Consolidated stockpile 1.0 Average push gradient: -30 % Average site altitude: 9,500 feet	<u></u>		
Average push gradient:30 %	Unadjusted hourly production: 381.4 LCY/hr		
Average site altitude: 9,500 feet	Materials consistency description: Consolidated stock	kpile 1.0	
Average site altitude: 9,500 feet	Average push gradient: _30 %		
Material weight: 2,800 lbs/LCY			
	Material weight: 2,800 lbs/LCY		
Weight description: Granite - Broken			
Job Condition Correction Factor Source	Weight description: Granite - Broken		
	Job Condition Correction Factor		
Material consistency: 1.000 (CAT HB) Dozing method: 1.000 (GEN.)	Job Condition Correction Factor Operator Skill: 0.750	(AVG.)	

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6546

Adjusted unit production: 249.66 LCY/hr
Adjusted fleet production: 249.66 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.994/LCY

Total job time: 799.89 Hours
Total job cost: \$198,407

Task description:	SGVLF	' - Topsoil - Lift 1	- Transport			
Site: Cresson Project	<u>t</u>	Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDEN	NTIFICATION	<u>I</u>				
2:25:		State: Colora County: Teller		Ab	breviation: No M2	ne 244-A1102
User: <u>ZTT</u> Agency o	r organization nar	ne: DRMS				
HOURLY EQU				Shift boo	is: 1 per dev	
HOURL1 EQUI	IFMENT COS		Equipment Descri		is: <u>1 per day</u>	
	Truck Loader Tea		Equipment Descri 777F	puon		
Cum	ant Equipment I		Γ 992K D10T - 10SU			
Supp	oort Equipment -I D-	ump Area: Cat NA	D101 - 108U			
Road M	Iaintenance –Mot	or Grader: CA	Г 16М			
	-Wa	ater Truck: Wat	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Ripper op. cost/hour: Operator cost/hour:	NA \$33.71	\$0.00 \$40.71	\$0.00 \$41.30	NA NA	\$0.00 \$28.56	\$0.00 \$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA NA	\$271.99	\$135.86
Number of Units:	5	1	1	0	1	1
Group Subtotals:	Work:	\$2,471.69	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$3,259.	75			<u>I</u>	
MATERIAL OL	I A NITITIES					
MATERIAL QU		COV	G 11	6 . 1015		
Initial volume Loose volume		CCY LCY		factor: 1.215		
	ource of estimated		CC&V Provided	Estimate		
Source	e of estimated swe Material Purch		Handbook			
		otal Cost: \$0.00				
HOURLY PRO	DUCTION					
Truck Capacity: Truck Payload (we	ight) Basis:					
Material	weight: 1,600		Pounds/LCY			
Desc Rated P	ription: $\frac{\text{Top So}}{200,00}$		Pounds			
Nated F	ajioaa. <u>200,00</u>		1 Julius			

Daviland Compaits						
Payload Capacity	: 125.00	LCY	7			
Truck Bed (volume) Basi	g•					
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fi	nal Truck Volum	ne Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class:	NA	_
Rated Capacity	: 16.000	LCY (heaped))			
Bucket Fill Factor		Other - rock/d		0-120%) 1.100		_
Adjusted Capacity	17.600	LCY	,	,		_
Job Condition Correction	ons:	5	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HI			
Net Correction:	0.830	0.813				
Net Correction:						
_						
Loading Tool Cycle Tir	ne: Numb	per of Loading Tool P	asses Required to	Fill Truck:	1	passes
_	ne: Numb		'asses Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin	ne: Numb	oer of Loading Tool P	asses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numb ovels: e vs. Job Conditi	oer of Loading Tool P ion Rating: NA usic Rating: NA	asses Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Desc	oer of Loading Tool P ion Rating: NA usic Rating: NA	asses Required to	Fill Truck:	4 1	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader	ne: Numbovels: ne vs. Job Conditi ue within this Ba s – Material Dese	oer of Loading Tool P ion Rating: NA usic Rating: NA	Passes Required to	Fill Truck:		passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Deso n.):	oer of Loading Tool P ion Rating: NA asic Rating: NA cription: NA		Dump: 0.10		
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader	ne: Numbovels: ne vs. Job Condition ue within this Ba s – Material Descent): rs - Unadjusted I	oer of Loading Tool P ion Rating: NA asic Rating: NA cription: NA		Dump: 0.10	0.625 min	
Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA	ne: Numbovels: ne vs. Job Condition ne within this Bacterial Description n.): rs - Unadjusted Form	oer of Loading Tool P ion Rating: NA asic Rating: NA cription: Maneuver: NA Basic Loader Cycle T		Dump: 0.10	00 0.625 min Source	
Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor	ne: Numb ovels: ne vs. Job Conditi ne within this Ba s – Material Deso n.): rs - Unadjusted F rs nl: Mixed mate	oer of Loading Tool P ion Rating: NA asic Rating: NA cription: Maneuver: NA Basic Loader Cycle T	ime (load, dump,	Dump: 0.10 maneuver): Factor (min.)	0.625 min	
Loading Tool Cycle Tire Excavators and Front She Machine Cycle Tire Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted I rs li: Mixed mate e: No adjustm	oer of Loading Tool P ion Rating: NA asic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T	ime (load, dump, sable 0.00	Dump: 0.10 maneuver): Factor (min.) 0.020	00 0.625 min Source (Cat HB)	
Loading Tool Cycle Tire Excavators and Front She Machine Cycle Tire Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Dese n.): rs - Unadjusted F rs l: Mixed mate e: No adjustm p: Common over	oer of Loading Tool P ion Rating: NA asic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 ient - factor not applic	ime (load, dump, sable 0.00	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000	0.625 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Dese n.): rs - Unadjusted H rs ll: Mixed mate e: No adjustm p: Common ov n: Constant op	per of Loading Tool P ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not application of trucks an overation -0.04 rget 0.00	ime (load, dump, reable 0.00 d loaders -0.04	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Dese n.): rs - Unadjusted H rs ll: Mixed mate e: No adjustm p: Common ov n: Constant op	per of Loading Tool P ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not application of trucks and trucks	ime (load, dump, stable 0.00 d loaders -0.04 ime Adjustment:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Dese n.): rs - Unadjusted H rs ll: Mixed mate e: No adjustm p: Common ov n: Constant op	oer of Loading Tool P ion Rating: NA usic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not applic wnership of trucks an oeration -0.04 rget 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, stable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Dese n.): rs - Unadjusted H rs ll: Mixed mate e: No adjustm p: Common ov n: Constant op	oer of Loading Tool P ion Rating: NA usic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not applic wnership of trucks an oeration -0.04 rget 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, stable 0.00 d loaders -0.04 ime Adjustment:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Dese n.): rs - Unadjusted H rs ll: Mixed mate e: No adjustm p: Common ov n: Constant op	oer of Loading Tool P ion Rating: NA usic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not applic wnership of trucks an oeration -0.04 rget 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, stable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tire Excavators and Front She Machine Cycle Tire Selected Val Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatior Dump Targer	ne: Numbovels: ne vs. Job Condition ue within this Bass – Material Deservation.): rs - Unadjusted Harss ni: Mixed materials: Mixed materials: No adjustments: Common over the Nominal target.	oer of Loading Tool P ion Rating: NA usic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not applic wnership of trucks an oeration -0.04 rget 0.00 Net Cycle Ti Adjusted Loa	cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time: Time per Truck:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpill Truck Ownershit Operatior Dump Targer	ne: Numb ovels: ne vs. Job Conditi ue within this Ba s – Material Desc n.): rs - Unadjusted H rs al: Mixed mate e: No adjustm p: Common ov n: Constant op et: Nominal tar sime: 0.80	oer of Loading Tool P ion Rating: NA usic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T erial 0.02 tent - factor not applicate whership of trucks and	ime (load, dump, reable 0.00 d loaders -0.04 dime Adjustment: der Cycle Time: Time per Truck:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	O0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6269.00	7.10	3.00	10.10	795	7.950

Haul Time: 7.950 minutes

Return Route:

Ttotal II Ito	ate.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6269.00	-7.10	3.00	-4.10	3450	1.873

Return Time: 1.873 minutes
Total Truck Cycle Time: 13.655 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

309.35 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 256.76 LCY/Hour Optimal No. of Trucks: 5 Truck(s)

Selected Number of Trucks: 5 Truck(s)

Adjusted hourly truck team production: 1,283.78 LCY/Hour Adjusted single truck/loader team production: 1,283.78 LCY/Hour Adjusted multiple truck/loader team production: 1,283.78 LCY/Hour LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____12.74 Hours

Task description:	SGVLF	- Topsoil - 1	Lift 2	- Transport			
Site: Cresson Projec	t	Permit	Actio	on: 2023	1	Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	<u>I</u>					
	2/2023 :33 PM		Colora Feller		Ab	breviation: No Miles Mil	one 244-A1103
	or organization nar	me: DRM	S				
HOURLY EQU	IPMENT COS	<u>r</u>			Shift bas	is: <u>1 per day</u>	
	m 1 1 1 m	TD 1		Equipment Descrip	ption		
	Truck Loader Tea	ım -Truck: -Loader:		777F Γ 992K			
Sup	port Equipment -I			D10T - 10SU			
		ump Area:	NA				
Road N	Maintenance –Mot	or Grader: iter Truck:		Γ 16M ter Tanker, 7,000 (Gal		
-	***	iter Truck.	***	ier ranker, 7,000 v	oui.		
Cost Breakdown:		ader Team			Equipment		nce Equipment
	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229	9.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200		\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	Φ.	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA NA	·	0.00	\$0.00	NA NA	\$0.00	\$0.00
Ripper op. cost/hour: Operator cost/hour:	\$33.71		0.00	\$0.00 \$41.30	NA NA	\$0.00 \$28.56	\$0.00 \$21.12
Unit Subtotals:	\$400.29	\$470		\$380.21	NA NA	\$28.36	\$135.86
Number of Units:	3400.29	Φ470	1	\$380.21	0	1	\$133.80 1
Group Subtotals:	Work:	\$2,071.40	1	Support:	\$380.21	Maint:	\$407.85
Total work team co		i		Support.	ψ300.21	Want.	ψ+07.03
Total work team co	92,039.	1 0					
MATERIAL QU	<u>UANTITIES</u>						
Initial volume Loose volume			CCY LCY		factor: 1.215		
c	ource of estimated			CC&V Provided	Estimata		
	e of estimated swe			Handbook	Estillate		
	Material Purch		\$0.00				
	To	otal Cost: _	\$0.00)			
HOURLY PRO	<u>ODUCTION</u>						
Truck Capacity:							
Truck Payload (we							
Material		.: 1		Pounds/LCY			
	eription: Top So 200,00			Pounds			

Payload Capacity: _	125.00	LCY	•			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Truck Volume	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			Puol	ket Size Class: N	JA	
Patad Canacity	16.000	LCY (heaped)		ket Size Class. N	A	=
Rated Capacity: _ Bucket Fill Factor:	1.100	Other - rock/di		-120%) 1.100		_
Adjusted Capacity:	17.600	LCY	iit iiiixtures (100	-120%) 1.100		=
Adjusted Capacity.	17.000	LC1				
Job Condition Corrections:	<u>L</u>	S	Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	,		
Ich Efficiency	0.830	0.830	(CAT HB	3)		
Job Efficiency:						
Net Correction:	0.830	0.813				
		0.813 er of Loading Tool P	asses Required to I	Fill Truck:	4 p	oasses
Net Correction:	Numbe	ı	asses Required to I	Fill Truck:	4 p	oasses
Net Correction: Loading Tool Cycle Time:	Numbe ls: s. Job Conditio	er of Loading Tool P	asses Required to I	Fill Truck:	4 F	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	Numbe ls: s. Job Conditio within this Basi	on Rating: NA ic Rating: NA	asses Required to I	Fill Truck:	4 F	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v	Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA ic Rating: NA	asses Required to I	Fill Truck:	4 r	oasses
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders –	Numbe l <u>s:</u> s. Job Conditio within this Basi Material Descr	on Rating: NA ic Rating: NA	asses Required to I	Fill Truck:		passes
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.):	Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA ic Rating: NA ription: NA		Dump: 0.100		
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders — Cycle Time Elements (min.): Load: NA	Numbe ls: s. Job Conditio within this Basi Material Descr	on Rating: NA ic Rating: NA ription: NA		Dump: 0.100)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders –	Numbe ls: s. Job Conditio within this Basi Material Descr	or of Loading Tool P on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle T		Dump: 0.100 maneuver): 0) .625 minu	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba	or of Loading Tool P on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle T	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.)) 0.625 minu Source	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 nt - factor not applic	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle T ial 0.02 nt - factor not applic mership of trucks an eration -0.04	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow	on Rating: NA ic Rating: Maneuver: NA asic Loader Cycle T ial 0.02 nt - factor not applic mership of trucks an eration -0.04 get 0.00	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 nt - factor not applic rership of trucks and ration -0.04 get 0.00 Net Cycle Ti	ime (load, dump, n able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 nt - factor not applic rership of trucks and ration -0.04 get 0.00 Net Cycle Ti Adjusted Loader Cycle To	ime (load, dump, n	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 nt - factor not applic rership of trucks and ration -0.04 get 0.00 Net Cycle Ti Adjusted Loader Cycle To	ime (load, dump, notable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove: Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmet Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 nt - factor not applic rership of trucks and ration -0.04 get 0.00 Net Cycle Ti Adjusted Loader Cycle To	ime (load, dump, notable 0.00 d loaders -0.04 d loaders -0.04 der Cycle Time: Time per Truck:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Numbe ls: s. Job Conditio within this Basi Material Descr M Unadjusted Ba Mixed mater No adjustmer Common ow Constant ope Nominal targ	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle T rial 0.02 nt - factor not applic rership of trucks and ration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, note able 0.00 doaders -0.04 doaders -0.04 der Cycle Time:	Dump: 0.100 maneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4774.00	5.40	3.00	8.40	985	4.952

Haul Time: **4.952** minutes

Return Route:

110001111110						
Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)		(%)	(%)	(fpm)	(min)
1	4774.00	-5.40	3.00	-2.40	3503	1.405

Return Time: 1.405 minutes
Total Truck Cycle Time: 10.189 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

414.58 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 344.10 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,376.40 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 11.57
 Hours

 Unit cost:
 \$2.146
 /LCY
 Total job cost:
 \$33,083

Task description:	SGVLF	- Topsoil - Li	ft 3 - Transport			
Site: Cresson Project	<u>t</u>	Permit A	action: _2023		Permit/Job#: N	11980244
PROJECT IDE	NTIFICATION	Ī				
Task #: A110		-	lorado	Ab	breviation: N	one
		County: Tel	ller		Filename: M	244-A1104
User: $\frac{2:27:}{ZTT}$:17 PM			<u></u>		
	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COST	<u>r</u>		Shift bas	is: 1 per day	
		_	Equipment Descr	ription		
	Truck Loader Tea		Cat 777F			
Sun	port Equipment -I		CAT 992K Cat D10T - 10SU			
Sup			NA			
Road N	Maintenance – Mot		CAT 16M			
	-Wa	ater Truck:	Water Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support	Equipment	Maintena	nce Equipment
OSSV DIVINIO	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	10	00 100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.2		NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.2	29 \$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA		0 NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.0	00 \$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.0		NA	\$0.00	
Operator cost/hour:	\$33.71	\$40.7		NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.2		NA	\$271.99	\$135.86
Number of Units:	3	** -=* **	1 1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,459.	<u>17 </u>				
MATERIAL QU	<u>JANTITIES</u>					
Initial volume	e: 16,792	C	CY Swell	factor: 1.215		
Loose volume			CY			
Se	ource of estimated	volume: 20	022 CC&V Provided	l Estimate		
Source	e of estimated swe		at Handbook			
	Material Purch		0.00			
	10	Jun Cost	5.00			
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity:						
Truck Payload (we						
Material		. '1	Pounds/LCY	<i>T</i>		
Desc Rated P	ription: Top So ayload: 200,00		Pounds			

Payload Capacity	125.00	LCY	<i>Y</i>			
Truck Bed (volume) Basi	a.					
Struck Volume:	<u>8.</u> 60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:		LCY				
Fi	inal Truck Volum	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity	: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor		Other - rock/d		0-120%) 1.100		
Adjusted Capacity		LCY		,		
Job Condition Correction	ons:	:	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
I 1 DCC '	0.830	0.830	(CAT HI	3)		
Job Efficiency:						
Net Correction:	0.830	0.813				
Net Correction:		0.813 er of Loading Tool F	Passes Required to	Fill Truck:	4	passes
,	ne: Numb	-	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir	ne: Numbe	er of Loading Tool F on Rating: NA	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val	ne: Numbo	er of Loading Tool F on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val	ne: Number ovels: ne vs. Job Condition within this Basers – Material Description.	er of Loading Tool F on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader	ne: Number ovels: ne vs. Job Condition within this Bases — Material Description.):	er of Loading Tool F on Rating: NA sic Rating: NA	Passes Required to		.100	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi	ne: Number ovels: ne vs. Job Condition ue within this Basers – Material Description.):	er of Loading Tool F on Rating: NA NA cription: Maneuver: NA	·	Dump: 0	.100	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted B	er of Loading Tool F on Rating: NA NA cription: Maneuver: NA	·	Dump: 0	.100 0.625 m	
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader	ne: Number ovels: ne vs. Job Condition ue within this Bases - Material Description.): ers - Unadjusted E	er of Loading Tool F on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T	·	Dump: 0	.100 0.625 m	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Bases – Unadjusted Bases	er of Loading Tool F on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T crial 0.02 ent - factor not applic	Time (load, dump, scable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.625 m Source (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Bases –	er of Loading Tool F on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applications and supplied with the control of trucks and supplied with the control	Time (load, dump, scable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool F on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applic wnership of trucks an eration -0.04	Time (load, dump, scable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool F on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applic wnership of trucks an eration -0.04 get 0.00	ime (load, dump, seable 0.00 ad loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool F on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applic wnership of trucks an eration -0.04 get 0.00 Net Cycle T	Cime (load, dump, stable 0.00 and loaders -0.04 ime Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool F on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not application frucks and eration -0.04 get 0.00 Net Cycle T Adjusted Loa	ime (load, dump, seable 0.00 ad loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.625 m) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers nl: Mixed mate e: No adjustment of the constant opens.	er of Loading Tool F on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not application frucks and eration -0.04 get 0.00 Net Cycle T Adjusted Loa	Cable 0.00 ad loaders -0.04 ime Adjustment: ader Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020	.100 0.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatior Dump Targer	ne: Number ovels: ne vs. Job Condition within this Bases — Material Description.): ers - Unadjusted Bases — Unadjusted Bases — No adjustment of Common own: Constant opet: Nominal tar	er of Loading Tool F on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not application frucks and eration -0.04 get 0.00 Net Cycle T Adjusted Loa	Cable 0.00 ad loaders -0.04 ime Adjustment: ider Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	inutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatior Dump Targer	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ers - Unadjusted Ers – Unadjusted Ers – No adjustment op: Common over on: Constant opet: Nominal tar	er of Loading Tool F on Rating: NA sic Rating: Maneuver: Maneuver: Maneuver: Maneuver: Maneuver: NA Basic Loader Cycle T erial 0.02 ent - factor not applic wnership of trucks an eration -0.04 get 0.00 Net Cycle T Adjusted Load Net Load	cable 0.00 ad loaders -0.04 ime Adjustment: ader Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m O.625 m (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes minutes	inutes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3710.00	3.90	3.00	6.90	1160	3.326

Haul Time: 3.326 minutes

Return Route:

	11010111 110 0101						
	Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time
		(Ft)		(%)	(%)	(fpm)	(min)
ſ	1	3710.00	-3.90	3.00	-0.90	3503	1.092

Return Time: 1.092 minutes
Total Truck Cycle Time: 8.250 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

512.02 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 424.98 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,274.94 LCY/Hour Adjusted single truck/loader team production: 1,274.94 LCY/Hour Adjusted multiple truck/loader team production: 1,274.94 LCY/Hour LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 16.00
 Hours

 Unit cost:
 \$1.929
 /LCY
 Total job cost:
 \$39,353

Task description:	SGVLF	- Topsoil - Lift 4	- Transport			
Site: Cresson Project	t	Permit Action	on: _2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	ſ				
Task #: A110		<u>.</u> State: Colora	ıdo	Ab	breviation: No	one
Date: 11/2	2/2023	County: Teller			Filename: M2	244-A1105
$\frac{2:28}{\text{User:}}$:08 PM					
	r organization nar	ne: DRMS				
HOURLY EQU	IPMFNT COS'			Shift bas	is: 1 per day	
HOURET EQU	II WIENT COS.		Equipment Descri		is. <u>1 per day</u>	
	Truck Loader Tea	ım -Truck: Cat	777F	ption		
			Γ 992K D10T - 10SU			
Sup	port Equipment -L Di-	ump Area: Cat NA	D101 - 1080			
Road N	Maintenance –Mot	or Grader: CA	Г 16М			
-	-Wa	ter Truck: Wat	er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Loa	ader Team	Support I	Equipment	Maintenar	nce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	3 Wasta	f1 (71 11	<u> </u>	0	Mainte	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,459.	<u> 17 </u>				
MATERIAL QU	JANTITIES					
Initial volume		CCY	Swell	factor: 1.215		
Loose volume			Swell	1actor. 1.213		
S	ource of estimated		CC&V Provided	Estimate		
	e of estimated swe		Iandbook	Littilate		
	Material Purch					
	То	otal Cost: \$0.00)			
HOURLY PRO	<u>ODUCTION</u>					
Truck Capacity:						
Truck Payload (we						
Material		.:1	Pounds/LCY			
Desc Rated P	eription: Top So $200,00$		Pounds			

Payload Capacity:	125.00	LCY	•			
Truck Bed (volume) Basis		I CIV				
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY LCY				
Average Volume: Adjusted Volume:	69.70 78.80	LCY				
Adjusted Volume.	76.60	LC I				
Fir	nal Truck Volum	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			n.	1 C' Cl	NT A	
Rated Capacity:	16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:		Other - rock/di		0-120%) 1.100		
Adjusted Capacity:	17.600	LCY				
Job Condition Correctio	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HI			
Job Efficiency.						
Net Correction:	0.830	0.813				
Net Correction:			asses Required to	Fill Truck:	4	nasses
Net Correction: Loading Tool Cycle Tim	ne: Numbe	0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	ne: Number ovels: e vs. Job Condition the within this Bases – Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to		.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min	ne: Number ovels: e vs. Job Condition within this Bases — Material Description.):	on Rating: NA		Dump: 0	.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA	ne: Number ovels: e vs. Job Condition us within this Bases – Material Descent.): The second of the	on Rating: NA		Dump: 0	.100 0.625 mi	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): rs - Unadjusted Bases	er of Loading Tool P on Rating: NA sic Rating: NA rription: NA Maneuver: NA sasic Loader Cycle T		Dump: 0	.100 0.625 mi	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases –	er of Loading Tool P on Rating: NA sic Rating: NA rription: NA Maneuver: NA sasic Loader Cycle T	ime (load, dump,	Dump: 0 maneuver): Factor (min.	.100 0.625 mi) Source	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition ue within this Bases s – Material Descent.): Press – Unadjusted Buses il: Mixed material il: No adjustments co: Common ow	on Rating: NA sic Rating: NA ription: NA sasic Loader Cycle T rial 0.02 ent - factor not applic	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040	.100 0.625 mi Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA sic Rating: NA ription: NA Maneuver: NA sasic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA	ime (load, dump, rable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 mi Source (Cat HB) (Cat	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA	ime (load, dump, sable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA sic Rating: NA ription: NA rating: NA ription: NA rating: NA rating: NA ription: NA rating: NA r	ime (load, dump, stable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA sic Rating: NA ription: NA rating: NA ription: NA rating: NA rating: NA ription: NA rating: NA r	ime (load, dump, sable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition us within this Bases — Material Descent.): The second of the	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not application -0.04 Reget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, stable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe Truck Cycle Time: Truck Exchange Ti	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases Mixed material Descent. Mixed material Descent. No adjustment Common owner Constant opent Nominal target Nom	er of Loading Tool P on Rating: NA Nic Rating: Maneuver: Maneuver: NA Pription: Massic Loader Cycle T rial 0.02 ent - factor not applic vership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load Minutes	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition us within this Bass s – Material Description.): The second of the second o	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not application -0.04 Reget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, stable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted Adjusted	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 mi O.626 mi O.627 mi	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3178.00	1.90	3.00	4.90	1550	2.249

Haul Time: 2.249 minutes

Return Route:

Tetain Toute.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3178.00	-1.90	3.00	1.10	3503	1.103

Return Time: 1.103 minutes
Total Truck Cycle Time: 7.184 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

588.00 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 488.04 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,464.13 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 23.49
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$57,756

Task description:	SGVLF	' - Topsoil - Lift 5	- Transport			
Site: Cresson Project	t	Permit Action	on: 2023]	Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	<u>I</u>				
2:28		State: Colora County: Teller	ado	Ab	breviation: No M2	ne 244-A1106
User: <u>ZTT</u> Agency o	r organization nar	ne: DRMS				
HOURLY EQU				Shift bas	is: 1 per day	
HOURET EQU	II WIENT COS.	<u> </u>	Equipment Descri		is. <u>i pei day</u>	
	Truck Loader Tea	am -Truck: Cat	777F	ption		
Sun	port Equipment -I		Γ 992K D10T - 10SU			
Sup		ump Area: NA	D101 - 1030			
Road N	Maintenance – Mot		Г 16М	G 1		
	-W 2	ater Truck: Wat	er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support l	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA no no	NA	NA	NA
Ripper own. cost/hour:	NA NA	\$0.00 \$0.00	\$0.00 \$0.00	NA NA	\$0.00 \$0.00	\$0.00 \$0.00
Ripper op. cost/hour: Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$1,270.82	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,058.	88			I	
MATERIAL QI	JANTITIES					
Initial volume		CCY	Swell	factor: 1.215		
Loose volume			Swell	1.213		
	ource of estimated		CC&V Provided	Estimate		
Sourc	e of estimated swe Material Purch		Iandbook			
		otal Cost: $\frac{$0.00}{$0.00}$				
HOURLY PRO	DDUCTION					
Truck Capacity:	<u>.</u>					
Truck Payload (we						
Material		_ :1	Pounds/LCY			
Desc Rated P	eription: Top So $200,00$		Pounds			

Payload Capacity	7: 125.00	LCY	•			
Truck Bed (volume) Basi		I CIV				
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	78.80	LCY				
F	inal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity	7: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor		Other - rock/di		0-120%) 1.100		
Adjusted Capacity		LCY	in mixtures (100	7-120/0) 1.100		_
Job Condition Correction	ons:	S	Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tir		1	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh	ne: Numb	0.813 per of Loading Tool P	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin	ne: Numb ovels: ne vs. Job Conditi	per of Loading Tool P	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numbovels: ne vs. Job Conditiue within this Ba	oer of Loading Tool Planting: NA Sic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numbovels: ne vs. Job Condition lue within this Bacters – Material Description	oer of Loading Tool Planting: NA Sic Rating: NA	asses Required to	Fill Truck:	4	passes
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Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor	ne: Numb ovels: ne vs. Job Conditi ue within this Ba rs – Material Desc in.): ers - Unadjusted F ors al: Mixed mate	oer of Loading Tool Prion Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle T	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.	.100 0.625 min) Source	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm	per of Loading Tool Parison Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Terrial 0.02	ime (load, dump, 1	Dump: 0. maneuver): Factor (min. 0.020	.100 0.625 min Source (Cat HB)	
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted H ors al: Mixed mate le: No adjustm p: Common or	per of Loading Tool Parising Rating: NA Sic Rating: Maneuver: NA Basic Loader Cycle Terrial 0.02 Perial 0.02 Perial 0.02 Perial 0.02 Perial 0.02	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.	.100 0.625 min Source (Cat HB) (Cat HB)	
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Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatio Dump Targe	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm p: Common ov n: Constant op et: Nominal tar	ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and operation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	.100 O.625 min O.626 HB) O.627 O.626 O.626 O.627 O.626 O.627 O.626 O.627 O.626 O.626 O.627 O.626 O.626 O.627 O.627 O.627 O.627 O.627	nutes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpill Truck Ownershi Operatior Dump Targer	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted H ors al: Mixed mate le: No adjustm p: Common ov n: Constant op et: Nominal tar ime: 0.80	ion Rating: Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Telephone Erial 0.02 Sent - factor not applice wnership of trucks and peration -0.04 rget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, 1 cable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0. maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	.100 O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes minutes minutes	

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2868.00	-2.00	3.00	1.00	3503	1.348

Haul Time: 1.348 minutes

Return Route:

rectarii rec	ate.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2868.00	2.00	3.00	5.00	3296	1.240

Return Time: 1.240 minutes
Total Truck Cycle Time: 6.420 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

657.98 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 546.12 LCY/Hour Optimal No. of Trucks: 2 Truck(s)

Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 1,092.25 LCY/Hour Adjusted single truck/loader team production: 1,092.25 LCY/Hour Adjusted multiple truck/loader team production: 1,092.25 LCY/Hour

JOB TIME AND COST

Fleet size:	1	Team(s)	Total job time:	45.86	Hours
Unit cost:	\$1.885	/LCY	Total job cost:	\$94,421	

Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: _	M1980244
PROJECT IDEN	TIFICATION					
Task #: A1107	7	State: Colora	ado	Ab	breviation: N	None
Date: 11/22/		County: Teller			Filename: N	M244-A1107
2:29:3	89 PM					
User: <u>ZTT</u> Agency or	organization nam	ne: DRMS				
	C					
HOURLY EQUI	PMENT COST	_		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
Т	ruck Loader Tear		777F			
Supp	ort Equipment -L		T 992K D10T - 10SU			
Suppo		imp Area: NA	D101 - 1030			
Road Ma	aintenance –Moto		T 16M			
	-Wai	ter Truck: War	ter Tanker, 7,000	Gal.		
G . D . 1.1	m 1.4		a		36.	-
Cost Breakdown:	Truck/Loa Truck	Loader	Load Area	Equipment Dump Area	Mainten Motor Grade	ance Equipment Water Truck
				•		
%Utilization-machine:	100	100	100	NA	2:	
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.2	
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.2	
%Utilization-riper:	NA	0	NA to co	NA	NA to o	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	
Ripper op. cost/hour:	NA ©22.71	\$0.00	\$0.00	NA NA	\$0.0	
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.5	
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	
Number of Units:	3	1	1	0		1 1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint	t: \$407.85
Total work team cos	st/hour: \$2,459.1	17				
MATERIAL QU	<u>ANTITIES</u>					
Initial volume:		CCY		factor: 1.215		
Loose volume:	86,022	LCY				
Sou	urce of estimated	volume: 2022	CC&V Provided	Estimate		
Source	of estimated swe		Handbook			
	Material Purcha					
	To	tal Cost: \$0.00	J			
HOURLY PRO	DUCTION					
	DUCTION					
Truck Capacity:	100					
Truck Payload (weig Material w			Pounds/LCY	•		

Pounds

Description:

Rated Payload:

Top Soil 200,000

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fi	nal Truck Volum	ne Based on Number o	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: N	NA	
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:		Other - rock/di		0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY	,	,		_
Job Condition Correctio	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HE	·		
Net Correction:	0.830	0.813				
Loading Tool Cycle Tim	ne: Numb	per of Loading Tool Pa	asses Required to	Fill Truck:	4 1	passes
	ne: Numb		asses Required to	Fill Truck:	1	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Numb	per of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Numb ovels: e vs. Job Conditi ne within this Ba s – Material Desc	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	ne: Numbovels: e vs. Job Conditine within this Base – Material Description.):	oer of Loading Tool Parison Rating: NA NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min	Numbovels: e vs. Job Conditing within this Bases – Material Description.):	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.10		
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader	vels: e vs. Job Condition we within this Bass – Material Description.	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA	· 	Dump: 0.10	00 0.625 min	
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Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	e vs. Job Conditing within this Bass – Material Description.	oer of Loading Tool Particles on Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Ti	ime (load, dump, 1	Dump: 0.10 maneuver): (Factor (min.)	00 0.625 min	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader: Cycle Time Factor Materia	e vs. Job Condition within this Base – Material Description.): The second of the within this Base – Material Description.): The second of the within this Base – Material Description.	oer of Loading Tool Pation Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02	ime (load, dump, nable 0.00	Dump: 0.10 maneuver): (Factor (min.) 0.020	00 0.625 min Source (Cat HB)	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile	e vs. Job Conditing within this Bas – Material Description.): The viscous distribution of the viscous distributio	tion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Total 0.02 ent - factor not applic	ime (load, dump, nable 0.00	Dump: 0.10 maneuver): 0.00 Factor (min.) 0.020 0.000	00 0.625 min Source (Cat HB) (Cat HB)	
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Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	e vs. Job Condition within this Base – Material Description.): The viscosity of viscosity of the viscosity of the viscosity of the viscosity of viscosity of viscosity of viscosity of viscosity of viscosity of	oer of Loading Tool Parison Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whereship of trucks and peration -0.04 rget 0.00 Net Cycle Tierial Tool Parison Par	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	e vs. Job Condition within this Base – Material Description.): The viscosity of viscosity of the viscosity of the viscosity of the viscosity of viscosity of viscosity of viscosity of viscosity of viscosity of	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	e vs. Job Condition within this Base – Material Description.): The viscosity of viscosity of the viscosity of the viscosity of the viscosity of viscosity of viscosity of viscosity of viscosity of viscosity of	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile Truck Ownership Operation	e vs. Job Condition within this Base – Material Description.): The viscosity of viscosity of the viscosity of the viscosity of the viscosity of viscosity of viscosity of viscosity of viscosity of viscosity of	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	e vs. Job Condition within this Bass – Material Description.): The second of the seco	ion Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and overation -0.04 rget 0.00 Net Cycle Tierial Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0.10 maneuver): 0.10 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	vels: e vs. Job Conditi ne within this Ba s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustme o: Common ov n: Constant op t: Nominal tar me: 0.80	ion Rating: Sic Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not applice wnership of trucks and peration -0.04 rget 0.00 Net Cycle Tierial Adjusted Load Telephone (Net Load Telephone)	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0.10 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3821.00	-4.20	3.00	-1.20	3503	1.174

Haul Time: 1.174 minutes

Return Route:

11000111111						
Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel
	(Ft)		(%)	(%)	(fpm)	Time
						(min)
1	3821.00	4.20	3.00	7.20	2398	1.806

Return Time: 1.806 minutes
Total Truck Cycle Time: 6.812 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

Coptimal No. of Trucks:

2 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 514.70 LCY/Hour Coptimal No. of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,544.09 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____64.57 Hours

Unit cost: \$1.846 /LCY Total job cost: **\$158,789**

Task description:	SGVLF	- Topsoil - Lift 7	- Transport					
Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244		
PROJECT IDEN	NTIFICATION	<u>I</u>						
2:30:		State: Colora County: Teller	ado	Ab	breviation: No M2	ne 244-A1108		
User: <u>ZTT</u> Agency of	r organization nar	ne: DRMS						
HOURLY EQU	IPMENT COST	 <u>Г</u>		Shift bas	is: 1 per day			
	Equipment Description							
,	Truck Loader Tea		777F					
Supp	oort Equipment -I		Γ 992K D10T - 10SU					
	-D	ump Area: NA						
Road M	Iaintenance –Mot		Γ 16M er Tanker, 7,000	Gal				
-	***	ner fruek. Wat	er ranker, 7,000	Gui.				
Cost Breakdown:		ader Team	1.1	Equipment		ce Equipment		
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck		
%Utilization-machine:	100	100	100	NA	25	25		
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29		
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44		
%Utilization-riper: Ripper own. cost/hour:	NA NA	\$0.00	NA \$0.00	NA NA	NA \$0.00	NA \$0.00		
Ripper op. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00		
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12		
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86		
Number of Units:	3	1	1	0	1	1		
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85		
Total work team co	st/hour: \$2,459.	<u> 17 </u>						
MATERIAL QU	JANTITIES							
Initial volume Loose volume		CCY LCY	Swell	factor: 1.215				
	ource of estimated e of estimated swe Material Purch	ell factor: Cat H	CC&V Provided Iandbook	Estimate				
		otal Cost: \$0.00						
HOURLY PRO	DUCTION							
Truck Capacity: Truck Payload (we			Downd- /I CV					
Material Desc	weight: $\frac{1,600}{\text{Top So}}$	oil	Pounds/LCY					
Rated P	<u> </u>		Pounds					

Payload Capacity:	125.00	LC	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number	r of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: _	NA	_
Rated Capacity:	16.000	LCY (heaped	d)			
Bucket Fill Factor:	1.100	Other - rock/	dirt mixtures (100	-120%) 1.100		
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	n <u>s:</u>		Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.813				
Net Correction:			Passas Paguirad to	Fill Truck	4	naccac
Loading Tool Cycle Time	:: Numbe		Passes Required to	Fill Truck:	4I	passes
Loading Tool Cycle Time Excavators and Front Show	els: Numbe	er of Loading Tool	Passes Required to	Fill Truck:	4I	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4I	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base Material Desc	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4I	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Base Material Desc	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to	Fill Truck:	4I	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	vels: vs. Job Condition within this Base Material Desc):	er of Loading Tool on Rating: NA sic Rating: NA	Passes Required to		<u>4</u> I	passes
Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Base Material Desc):	er of Loading Tool on Rating: NA sic Rating: NA cription: NA		Dump: 0.1		
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Base Material Desc): S - Unadjusted B	er of Loading Tool on Rating: NA sic Rating: NA cription: NA		Dump: 0.1	100	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Base Material Desc :): S - Unadjusted B	er of Loading Tool on Rating: NA sic Rating: NA cription: Maneuver: NA sasic Loader Cycle		Dump: 0.1	100 0.625 minu	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	vels: vs. Job Condition within this Base — Material Desc): s - Unadjusted B Mixed mater No adjustme	er of Loading Tool on Rating: NA sic Rating: NA cription: NA dasic Loader Cycle rial 0.02 ent - factor not appl	Time (load, dump, 1	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000	0.625 minus Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc b): s - Unadjusted B Mixed mater No adjustme Common ow	on Rating: NA Sic Rating: NA Stription: NA Stription: NA Stription: NA Stasic Loader Cycle of the Indian C	Time (load, dump, 1	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040	0.625 minus Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	er of Loading Tool on Rating: NA sic Rating: Maneuver: Maneuver: NA sasic Loader Cycle rial 0.02 ent - factor not appl wnership of trucks a eration -0.04	Time (load, dump, 1	Dump: 0.1 maneuver):	0.625 minus Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Stription: NA S	Time (load, dump, 1 icable 0.00 and loaders -0.04	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.625 minus Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Seription: NA State Loader Cycle of the Fraction of trucks a seration -0.04 Section of the Cycle of the	Time (load, dump, 1 icable 0.00 and loaders -0.04	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Seription: NA	Time (load, dump, 1 icable 0.00 und loaders -0.04 Time Adjustment: pader Cycle Time:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Seription: NA	Time (load, dump, 1 icable 0.00 and loaders -0.04	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.625 minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc a): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA Sic Rating: NA Sic Rating: NA Seription: NA	Time (load, dump, 1 icable 0.00 und loaders -0.04 Time Adjustment: pader Cycle Time:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	vels: vs. Job Condition within this Base — Material Desc b): G - Unadjusted B Mixed mater No adjustme Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: NA Sic Rating: NA Seription: NA	Time (load, dump, 1 icable 0.00 ind loaders -0.04 Time Adjustment: bader Cycle Time: d Time per Truck:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	vels: vs. Job Condition within this Base — Material Desc b): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope Nominal targ	on Rating: NA Sic Rating: NA Sic Rating: NA Seription: NA	Time (load, dump, 1 icable 0.00 and loaders -0.04 Time Adjustment: bader Cycle Time: d Time per Truck:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565 1.795	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2908.00	-8.90	3.00	-5.90	1870	1.713

Haul Time: 1.713 minutes

Return Route:

rectarii rec	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2908.00	8.90	3.00	11.90	1628	1.918

Return Time: 1.918 minutes
Total Truck Cycle Time: 7.463 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

Truck Unit Production

566.02 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 469.80 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,409.39 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 50.18
 Hours

 Unit cost:
 \$1.846
 /LCY
 Total job cost:
 \$123,405

Task description:	SGVLF	- Topsoil - Lift 8	- Transport			
Site: Cresson Project	t	Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	<u>I</u>				
		State: Colora County: Teller	ado	Ab	breviation: No M2	ne 244-A1109
User: ZTT						
Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS	<u> </u>			is: <u>1 per day</u>	
	Truck Loader Tea		Equipment Descri 777F	ption		
		-Loader: CA	Г 992К			
Sup	port Equipment -I	Load Area: Cat ump Area: NA	D10T - 10SU			
Road N	Taintenance –Mot	1	Г 16М			
	-Wa	ater Truck: Wat	er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment
O O D T WHITE THE	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Ripper op. cost/hour: Operator cost/hour:	\$33.71	\$0.00 \$40.71	\$0.00 \$41.30	NA NA	\$0.00 \$28.56	\$0.00 \$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA NA	\$271.99	\$135.86
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,671.11	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,459.	17				
MATERIAL QU	<u>JANTITIES</u>					
Initial volume Loose volume		CCY D7 LCY	Swell	factor: 1.215		
	ource of estimated		CC&V Provided Iandbook	Estimate		
Source	Material Purch					
	To	otal Cost: \$0.00)			
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity: Truck Payload (we	ight) Basis:					
Material	weight: 1,600		Pounds/LCY			
Desc Rated P	ription: Top So ayload: 200,00		Pounds			

Payload Capacity:	125.00	I	.CY					
Tours Ded (column) Design								
Truck Bed (volume) Basis: Struck Volume:	60.60	LCV						
Heaped Volume:	78.80	LCY LCY						
Average Volume:	69.70	LCY						
Adjusted Volume:	78.80	LCY						
rajusteu vorame.	70.00	201						
	Truck Volume	Based on Numb	per of Loader Pass	ses:	70.40		LCY	
Loading Tool Capacity					~			
	4 4 9 9 9	1 4		Bucket Size	Class:	NA		
Rated Capacity:	16.000	LCY (heap		(100 1200()	1 100			
Bucket Fill Factor:	1.100		k/dirt mixtures	(100-120%)	1.100			
Adjusted Capacity:	17.600	LCY						
Job Condition Corrections:	_		Site Altitude (1	ft.): <u>9500</u> feet	į			
	Truck	Loader	Sou	ırce				
Altitude Adj:	1.000	0.980	(CAT	Г НВ)				
Job Efficiency:	0.830	0.830	(CAT	Г НВ)				
Net Correction:	0.830	0.813						
Net Correction:			ol Passes Require	d to Fill True	k·	Δ		nasses
Loading Tool Cycle Time:	Numbe		ol Passes Required	d to Fill Truc	k:	4		passes
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs	Numbes: S. Job Condition	or of Loading Too	<u>.</u>	d to Fill Truc	k:	4		passes
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v	Numbes: s. Job Condition within this Basi	on Rating: NA	<u>.</u>	d to Fill Truc	k:	4		passes
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs Selected Value v Track Loaders –	Numbes: s. Job Condition within this Basi	on Rating: NA	<u>.</u>	d to Fill Truc	k:	4		passes
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs Selected Value v Track Loaders –	Numbe s. Job Conditio vithin this Basi Material Desci	on Rating: NA	- \ \	d to Fill Truc	_	100		passes
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.):	Numbe s: s. Job Conditio vithin this Basi Material Descr	on Rating: NA ic Rating: NA ription: Maneuver: NA	<u> </u>	Dum	p: _0.			passes
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders –	Numbe s: s. Job Conditio vithin this Basi Material Descr	on Rating: NA ic Rating: NA ription: Maneuver: NA	<u> </u>	Dum mp, maneuve	p: <u>0.</u>	100	mi	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors	Numbe s: s. Job Conditio within this Basi Material Descr M Unadjusted Ba	on Rating: NA ic Rating: NA ription: Maneuver: NA assic Loader Cycl	<u> </u>	Dum mp, maneuve	p: 0. r):	100 0.625	mi Source	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material:	Numbe S: S. Job Condition Within this Basic Material Descript M Unadjusted Basic Mixed mater	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycl	de Time (load, dur	Dummp, maneuve	p: 0. r): or (min.)	0.625	mi Source (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	Numbe s: s. Job Condition within this Basis Material Descript Munadjusted Basis Mixed mater No adjustment	on Rating: NA	le Time (load, dur	Dummp, maneuve	p: 0. r):	0.625	mi Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material:	Numbe s: s. Job Condition within this Basis Material Descript Munadjusted Basis Mixed mater No adjustment	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycl ial 0.02 nt - factor not ap mership of trucks	de Time (load, dur	Dum mp, maneuve Facto 0 0 4	p: 0. r): or (min.) .020 .000	0.625	mi Source (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbe S: S. Job Condition Vithin this Basis Material Description Material Description Mixed Mixed Material No adjustment Common ow	on Rating: NA ic Rating: NA ription: NA asic Loader Cycl ial 0.02 nt - factor not ap mership of trucks eration -0.04	le Time (load, dur	Dum mp, maneuve	p: 0. r): or (min.) .020 .000 .040	0.625	Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: S	on Rating: NA ic Ration: NA ic Ration: NA ic Ration: NA ic Ration	de Time (load, dur oplicable 0.00 s and loaders -0.0	Dum mp, maneuve	p: 0. r):	0.625	mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: S	on Rating: NA ic Ration: NA ic Ration: NA ic Ration: NA ic Ration	le Time (load, dur pplicable 0.00 s and loaders -0.0 e Time Adjustment	Dummp, maneuver Factor 0	p: 0. r): 0.020 0.040 0.040 0.060 0.565	0.625	mii Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: S	on Rating: NA ic Ration: NA ic Ration: NA ic Ration: NA ic Ration	de Time (load, dur oplicable 0.00 s and loaders -0.0	Dummp, maneuver Factor 0	p: 0. r):	0.625	mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbe S: S	on Rating: NA ic Ration: NA ic Ration: NA ic Ration: NA ic Ration	le Time (load, dur pplicable 0.00 s and loaders -0.0 e Time Adjustment	Dummp, maneuver Factor 0	p: 0. r): 0.020 0.040 0.040 0.060 0.565	0.625	mii Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value v Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Numbers: s. Job Condition within this Basis Material Description of Material Description of Mixed maters and	on Rating: NA ic Ration: NA ic Ration: NA ic Ration: NA ic Ration	le Time (load, dur pplicable 0.00 s and loaders -0.0 e Time Adjustment Loader Cycle Time and Time per Truc	Dummp, maneuver Factor 0	p: 0. r): 0.020 0.000 0.040 0.040 0.060 0.565 0.795	0.625	mii Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	nutes
Loading Tool Cycle Time: Excavators and Front Shovel Machine Cycle Time vs. Selected Value vs. Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Numbers: s. Job Condition within this Basis Material Description Material Description Material Description Mixed material No adjustment Common ow Constant open Nominal targetics: 0.80	on Rating: NA ic Ration: NA ic Ration: NA ic Ration: NA ic Ration Net Cycle Adjusted Net Lo	de Time (load, dur oplicable 0.00 s and loaders -0.0 e Time Adjustmer Loader Cycle Time and Time per Truc	Dummp, maneuver Factor 0	p: 0. r): or (min.) .020 .000 .040 .040 .040 .060 .565 .795	0.625	mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Truck Travel (Haul & Return) Time: maintained 3.0

Page 3 of 3

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4903.00	-7.30	3.00	-4.30	2545	2.028

Haul Time: 2.028 minutes

Return Route:

Retuin Roue.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4903.00	7.30	3.00	10.30	1789	2.878

Return Time: 2.878 minutes
Total Truck Cycle Time: 8.738 minutes

Loading Tool unit

Production Truck Unit Production

Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 401.24 LCY/Hour Optimal No. of Trucks: 3 Truck(s)

Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 1,203.73 LCY/Hour Adjusted single truck/loader team production: 1,203.73 LCY/Hour Adjusted multiple truck/loader team production: 1,203.73 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 48.68
 Hours

 Unit cost:
 \$2.043
 /LCY
 Total job cost:
 \$119,711

Task description:	SGVLF	- Topsoil - Lift 9	- Transport			
Site: Cresson Project	<u>t</u>	Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	<u>I</u>				
2:32:		State: Colora County: Teller		Ab	breviation: No M2	ne 244-A1110
User: ZTT		DDMC				
Agency of	r organization nai	ne: DRMS				
HOURLY EQU	IPMENT COS	<u>r</u>		Shift bas	is: 1 per day	
,	Truck Loader Tea		Equipment Descri 777F	ption		
		-Loader: CA	Г 992К			
Supp	oort Equipment -I D-	Load Area: Cat ump Area: NA	D10T - 10SU			
Road M	Iaintenance – Mot	or Grader: CA	Г 16М			
	-Wa	ater Truck: Wat	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper: Ripper own. cost/hour:	NA NA	\$0.00	NA \$0.00	NA NA	NA \$0.00	NA \$0.00
Ripper op. cost/hour:	NA NA	\$0.00	\$0.00	NA NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	4	1	1	0	1	1
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint:	\$407.85
Total work team co	ost/hour: \$2,859.	46				
MATERIAL QU	JANTITIES					
Initial volume Loose volume		CCY 06 LCY		factor: 1.215		
	ource of estimated e of estimated swe	ell factor: Cat H	CC&V Provided Handbook	Estimate		
	Material Purch	ase Cost: \$0.00 otal Cost: \$0.00				
		φοιου	·			
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity: Truck Payload (we			Pounds/I CV			
Material Desc.	weight: $1,600$ ription: Top So	oil	Pounds/LCY			
Rated P	<u> </u>		Pounds			

Payload Capacity:	125.00	LC'	Y			
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fina	al Truck Volume	e Based on Number	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buck	ket Size Class:	NA	_
Rated Capacity:	16.000	LCY (heaped	l)			
Bucket Fill Factor:	1.100	Other - rock/o	dirt mixtures (100	-120%) 1.100		-
Adjusted Capacity:	17.600	LCY				
Job Condition Correction	n <u>s:</u>		Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	3)		
Job Efficiency:	0.830	0.830	(CAT HB	3)		
N · C	0.020	0.012				
Net Correction:	0.830	0.813				
			Passas Raquirad to	Fill Truck	4 .	naccac
Loading Tool Cycle Time	:: Numbe		Passes Required to	Fill Truck:	4	passes
	els: Numbe	er of Loading Tool l	Passes Required to	Fill Truck:	4F	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	e: Number vels: vs. Job Condition within this Bas	on Rating: NA ic Rating: NA	Passes Required to	Fill Truck:	4r	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders	e: Number vels: vs. Job Condition within this Base Material Desc	on Rating: NA ic Rating: NA	Passes Required to	Fill Truck:	4I	passes
Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value	vels: vs. Job Condition within this Base Material Desc.):	on Rating: NA ic Rating: NA	Passes Required to		4 I	passes
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Loading Tool Cycle Time Excavators and Front Show Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min. Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vels: vs. Job Condition within this Bas — Material Desc b): S - Unadjusted B Mixed mater No adjustme Common ow Constant ope	on Rating: NA ic Rating: NA ription: NA asic Loader Cycle Tal 0.02 ont - factor not application -0.04 get 0.00 Net Cycle Tal Adjusted Loading Tool 1	Fime (load, dump, roadle 0.00 nd loaders -0.04 crime Adjustment: ader Cycle Time:	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
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<u>Truck Travel (Haul & Return) Time:</u> maintained 3.0

Truck(s)

Haul Route:

Tiuui Itou	ic.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5285.00	-8.70	3.00	-5.70	1870	2.975

Haul Time: 2.975 minutes

Return Route:

recturn rec	rute.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5285.00	8.70	3.00	11.70	1628	3.372

Return Time: __ 3.372 minutes Total Truck Cycle Time: 10.179 minutes

Selected Number of Trucks: 4

Loading Tool unit

Adjusted for job efficiency: 1,332.22 LCY/Hour Production ___ 1,605.09 LCY/Hour Truck Unit Production 414.99 LCY/Hour Adjusted for job efficiency: 344.44 LCY/Hour

> Adjusted hourly truck team production: 1,377.76 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour LCY/Hour

Adjusted multiple truck/loader team production: 1,332.22

JOB TIME AND COST

Optimal No. of Trucks: 4

Fleet size: 1 Team(s) Total job time: 39.49 Hours

Unit cost: \$2.146 Total job cost: **\$112,912** /LCY

Truck(s)

Site: Cresson Project	t	Permit Act	ion: 2023		Permit/Job#:	M1980244
PROJECT IDE	NTIFICATION	[
Task #:A111		State: Color		Ab	breviation: N	Vone
		County: Telle	r		Filename: N	И244-A1111
User: $\frac{2.553}{ZTT}$	27 PM					
Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS	Γ		Shift has	is: <u>1 per day</u>	
HOCKET EQU	HIVILIVI COD	≛	Equipment Descri		is. <u>i per day</u>	
	Truck Loader Tea	m -Truck: Ca	t 777F	рион		
		-Loader: CA	AT 992K			
Supp	port Equipment -L		t D10T - 10SU			
Pond N	-Di Iaintenance –Mot	ump Area: NA	AT 16M			
Road N			ater Tanker, 7,000	Gal.		
Cost Breakdown:		ader Team	11	Equipment		ance Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	5 25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	·
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	
%Utilization-riper:	NA	0	NA	NA	NA to oc	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	· ·
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	· · · · · · · · · · · · · · · · · · ·
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	<u> </u>
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	-
Number of Units:	4	1	1	0		1 1
Group Subtotals:	Work:	\$2,071.40	Support:	\$380.21	Maint	: \$407.85
Total work team co	ost/hour: \$2,859.	46				
MATERIAL QU	JANTITIES					
Initial volume	e: 38,594	CC	Y Swell	factor: 1.215		
Loose volume						
So	ource of estimated	volume: 202	2 CC&V Provided	Estimate		
	e of estimated swe		Handbook			
	Material Purch					
	То	otal Cost: \$0.0	00			
HOURLY PRO	DUCTION					
	<u>Decilon</u>					
Truck Capacity: Truck Payload (we	ight) Racie:					
Material			Pounds/LCY	•		

Pounds

Description:

Rated Payload:

Top Soil

200,000

Payload Capacity	7: 125.00	LCY				
Truck Bed (volume) Basi		I CIV				
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	78.80	LCY				
F	inal Truck Volum	ne Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity						
Rated Capacity	7: 16.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor		Other - rock/di		-120%) 1.100		_
Adjusted Capacity		LCY	it illixtures (100	-120/0) 1.100		<u> </u>
Job Condition Correction	ons:	S	Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
		l l				
Net Correction:	0.830	0.813				
_		1	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh	ne: Numb	0.813 oer of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin	ne: Numb ovels: ne vs. Job Conditi	per of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numb	oer of Loading Tool Parison Rating: NA Sic Rating: NA	asses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tin Selected Val	ne: Numbovels: ne vs. Job Condition lue within this Bacters – Material Description	oer of Loading Tool Parison Rating: NA Sic Rating: NA	asses Required to	Fill Truck:	4	passes
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Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Numb ovels: ne vs. Job Conditi lue within this Ba rs – Material Desc in.): ers - Unadjusted I ors al: Mixed mate le: No adjustm	oer of Loading Tool Pation Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tierial 0.02	ime (load, dump, 1	Dump: 0. maneuver): Factor (min.) 0.020	.100 0.625 mir Source (Cat HB)	
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<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

1100111100						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	7928.00	-7.10	3.00	-4.10	2545	3.279

Haul Time: 3.279 minutes

Return Route:

rectarii rec	ate.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	7928.00	7.10	3.00	10.10	1789	4.563

Return Time: 4.563 minutes
Total Truck Cycle Time: 11.674 minutes

Loading Tool unit

Production 1,605.09 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Truck Unit Production 361.84 LCY/Hour Adjusted for job efficiency: 300.33 LCY/Hour

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 1,201.31 LCY/Hour Adjusted single truck/loader team production: 1,201.31 LCY/Hour Adjusted multiple truck/loader team production: 1,201.31 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 39.03 Hours

Unit cost: \$2.380 /LCY Total job cost: \$111,615

Task description:	SGVLF	' - Topsoil - Lift 1	1 - Transport			
Site: Cresson Project		Permit Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #: A111 Date: 11/22	.2	State: Colora County: Teller	ado	Ab	breviation: No Filename: M2	ne 244-A1112
Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS	<u>r</u>		Shift bas	is: 1 per day	
	Truck Loader Tea		Equipment Descri 777F	ption		
	Truck Loader Tea		777F Г 992K			
Supp	oort Equipment -I	Load Area: Cat	D10T - 10SU			
		ump Area: NA	7.40.6			
Road M	Iaintenance –Mot Wa-		Γ 16M er Tanker, 7,000	Gal		
	***	tter fruek. Wat	er ranker, 7,000	Our.		
Cost Breakdown:		ader Team		Equipment		ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	5 W. 1	f2 471 60	1	0	1	0.407.05
Group Subtotals:	Work:	\$2,471.69	Support:	\$380.21	Maint:	\$407.85
Total work team co		<u>75 </u>				
Initial volume	e: 38,532	CCY	Swell	factor: 1.215		
Loose volume				<u> </u>		
	ource of estimated e of estimated swe Material Purch	ell factor: Cat H		Estimate		
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity:						
Truck Payload (we			D			
Material Desc	weight: $1,600$ ription: Top So	nil	Pounds/LCY			
Rated P	<u> </u>		Pounds			

125								
y: 125.	.00		LCY					
ie.								
).60	LCY						
		LCY						
	3.80	LCY						
inal Truc	k Volume	Based on Nun	nber of Loader F	asses:	70.40	1	LCY	
v:	16.000	LCY (hea	aned)	Bucket Siz	ze Class:	NA		
				(100-1209	6) 1.100			
y:	17.600	LCY						
ons:			Site Altitud	e (ft.): <u>9500</u> f	feet			
Tri	nck	Loade	r 9	Source				
			,					
0.8	330	0.813						
me:	Numbe	r of Loading T	ool Passes Requ	ired to Fill T	ruck:	4		passes
		_	=					_
ovels:								
ne vs. Job	o Conditio n this Basi							
ne vs. Job	n this Basi	ic Rating: N						
ne vs. Job		ic Rating: N						
ne vs. Job lue within rs – Mate	n this Basi erial Descr	ic Rating: N	A	D	ump: <u>0</u>	.100		
ne vs. Job lue within rs – Mate in.):	n this Basi erial Descr M	ic Rating: N ription: N Anneuver: N	A		· —	.100	 mii	nutes
ne vs. Job lue within rs – Mate in.):	n this Basi erial Descr M	ic Rating: N ription: N Anneuver: N	A	dump, maneu	iver):	0.625		nutes
ne vs. Job lue within rs – Mate in.): ers - Unac	n this Basi erial Descr M	ic Rating: N ription: N Maneuver: N asic Loader Cy	A	dump, maneu	· —	0.625	mii Source Cat HB)	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Mi:	n this Basi erial Descr M djusted Ba xed mater	ic Rating: N ription: N Maneuver: N asic Loader Cy ial 0.02	A	dump, maneu	ver):	0.625	Source	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Mi: le: No ip: Cor	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow	ic Rating: N ription: N faneuver: N asic Loader Cy ial 0.02 nt - factor not a nership of true	A A cle Time (load, o	dump, maneu Fa	ver): 0.020 0.000 -0.040	0.625	Source Cat HB) Cat HB)	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Min le: No ip: Con	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow nstant ope	Ic Rating: Note that it is a single of the content	A Cle Time (load, outpolicable 0.00)	dump, maneu Fa	octor (min. 0.020 0.000 -0.040 -0.040	0.625	Source Cat HB) Cat HB) Cat HB)	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Mi: le: No ip: Coi	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow	Ic Rating: Naneuver: Naneu	A cle Time (load, of applicable 0.00 ks and loaders -0	dump, maneu Fa	over):	0.625	Source Cat HB) Cat HB) Cat HB) Cat HB) Cat HB)	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Min le: No ip: Con	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow nstant ope	Maneuver: Nasic Loader Cy ial 0.02 nt - factor not anership of tructoration -0.04 get 0.00 Net Cyc	A cle Time (load, on applicable 0.00 ks and loaders - on the cle Time Adjusti	dump, maneu Fa	octor (min. 0.020 0.000 -0.040 0.000 -0.060	0.625	Source Cat HB) Cat HB) Cat HB) Cat HB) Cat HB) minutes	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Min le: No ip: Con	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow nstant ope	Anneuver: Nasic Loader Cyvial 0.02 nt - factor not anership of tructeration -0.04 get 0.00 Net Cyc Adjusted	A cle Time (load, on the policable 0.00) ks and loaders - on the cle Time Adjustration of the cle Time	nent:	nver):	0.625	Source Cat HB) Cat HB) Cat HB) Cat HB) Cat HB) minutes minutes	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Min le: No ip: Con	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow nstant ope	Anneuver: Nasic Loader Cyvial 0.02 nt - factor not anership of tructeration -0.04 get 0.00 Net Cyc Adjusted	A cle Time (load, on applicable 0.00 ks and loaders - on the cle Time Adjusti	nent:	octor (min. 0.020 0.000 -0.040 0.000 -0.060	0.625	Source Cat HB) Cat HB) Cat HB) Cat HB) Cat HB) minutes	nutes
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Mi: le: No ip: Con on: Con et: No	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow nstant ope minal targ	Aneuver: N Maneuver: N Masic Loader Cy ial 0.02 nt - factor not a nership of true ration -0.04 get 0.00 Net Cyc Adjusted Net I	A cle Time (load, on the period of the peri	nent:	nver):	0.625	Source Cat HB) Cat HB) Cat HB) Cat HB) Cat HB) minutes minutes minutes	
ne vs. Job lue within rs – Mate in.): ers - Unac ors al: Min le: No ip: Con	n this Basi erial Descr M djusted Ba xed mater adjustmen mmon ow nstant ope	Anneuver: Nasic Loader Cyvial 0.02 nt - factor not anership of tructeration -0.04 get 0.00 Net Cyc Adjusted	A cle Time (load, of applicable 0.00 ks and loaders - of all Loader Cycle The coad Time per The Adjustration of the Cycle The Cyc	nent:	nver):	0.625	Source Cat HB) Cat HB) Cat HB) Cat HB) Cat HB) minutes minutes	nutes Minute Minute
	78 69 78 78 78 78 78 78 78 78 78 78 78 78 78	60.60 78.80 69.70 78.80 Final Truck Volume 78.80	60.60 LCY	60.60 LCY	Const Cons	Const Cons	60.60 LCY	60.60 LCY LCY 169.70 LCY LCY 169.70 LCY Example Example

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Tiuui Itou	ic.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	7725.00	-8.50	3.00	-5.50	1870	4.348

Haul Time: 4.348 minutes

Return Route:

rectarii rec	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	7725.00	8.50	3.00	11.50	1628	4.865

Return Time: 4.865 minutes
Total Truck Cycle Time: 13.045 minutes

Loading Tool unit

Production Truck Unit Production

323.81 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 268.76 LCY/Hour Optimal No. of Trucks: 5 Truck(s)

Selected Number of Trucks: 5 Truck(s)

Adjusted hourly truck team production: 1,343.82 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: _____1 Team(s) Total job time: _____35.14 Hours

Unit cost: \$2.447 /LCY Total job cost: **\$114,553**

Task description	on:	SGVLF	- Topsoil -	Lift 1	2 - Transport			
Site: Cresson Pro	oject		Permi	t Actio	on: 2023		Permit/Job#:	M1980244
PROJECT I	DENTIFIC	ATION	<u>[</u>					
	A1113		State:	Colora	ado	Ab		None
	1/22/2023 2:35:06 PM		County:	Teller			Filename: N	M244-A1113
User:2	ZTT							
Agen	cy or organiza	ation nar	ne: DRM	1S				
HOURLY E	QUIPMEN'	r cos	<u>r</u>				sis: <u>1 per day</u>	
	Truck Lo	ndor Ton	m -Truck:		Equipment Descri 777F	ption		
	TIUCK LO	auei iea	-Loader:		Т 992К			
-	Support Equip			Cat	D10T - 10SU			
	13.6		ump Area:	NA	7101			
Ro	ad Maintenan		or Grader: iter Truck:		Γ 16M ter Tanker, 7,000	Gal		
		- ** 2	iter Truck.	wat	ter ranker, 7,000	Gai.		
Cost Breakdo	<u>wn</u> : T	ruck/Lo	ader Team		Support l	Equipment	Mainten	ance Equipment
	Tru	ck	Loader		Load Area	Dump Area	Motor Grade	r Water Truck
%Utilization-machin	ne:	100		100	100	NA	2:	5 25
Ownership cost/ho	ur: \$2	206.48	\$22	9.24	\$178.69	NA	\$212.2	1 \$86.29
Operating cost/ho	ur: \$	160.10	\$20	0.29	\$160.22	NA	\$31.22	2 \$28.44
%Utilization-rip	er:	NA		0	NA	NA	N/	A NA
Ripper own. cost/ho	ur:	NA	\$	0.00	\$0.00	NA	\$0.00	0 \$0.00
Ripper op. cost/ho		NA	\$	0.00	\$0.00	NA	\$0.00	,
Operator cost/ho	ur:	\$33.71	\$4	0.71	\$41.30	NA	\$28.50	6 \$21.12
Unit Subtota	ls: \$4	400.29	\$47	0.24	\$380.21	NA	\$271.99	9 \$135.86
Number of Uni	ts:	5		1	1	0		1
Group Subtota	ls:	Work:	\$2,471.69)	Support:	\$380.21	Maint	t: \$407.85
Total work tea	m cost/hour:	\$3,259.	75					
MATERIAL	QUANTIT	<u>IES</u>						
Initial vo	lume: 27,4	09		CCY	Swell	factor: 1.215		
Loose vo	lume:	33,30)2	LCY				
	Source of e	stimated	volume:	2022	CC&V Provided	Estimate		
So	ource of estim		_		Handbook	254111410		
	Materi	al Purch	ase Cost:	\$0.00)			
		To	otal Cost:	\$0.00)			

HOURLY PRODUCTION

Truck Capacity:
Truck Payload (weight) Basis:

Material weight: 1,600 Pounds/LCY

Description: Top Soil Rated Payload: 200,000 Pounds

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Fin	al Truck Volume	e Based on Number of	f Loader Passes:	70.40	LCY	
Loading Tool Capacity						
			Buc	ket Size Class: N	NA	_
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:	1.100	Other - rock/dir	t mixtures (100	0-120%) 1.100		_
Adjusted Capacity:	17.600	LCY		,		_
Job Condition Correction	ns:	Si	te Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE			
N. G.	0.020	0.012				
Net Correction:	0.830	11 X 1 3				
Net Correction:	0.830	0.813				
Loading Tool Cycle Tim	e: Numbe	er of Loading Tool Pa	sses Required to	Fill Truck:	4 1	passes
	e: Numbe	1	sses Required to	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	e: Numbe	er of Loading Tool Pa	sses Required to	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Time Selected Value	e: Numbe vels: vs. Job Conditio e within this Bas	er of Loading Tool Pa on Rating: NA sic Rating: NA	sses Required to	Fill Truck:	41	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Time Selected Value	e: Number vels: e vs. Job Condition within this Base – Material Desc	er of Loading Tool Pa on Rating: NA sic Rating: NA	sses Required to	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	e: Numbervels: e vs. Job Condition e within this Base — Material Desc .):	er of Loading Tool Pa on Rating: NA sic Rating: NA	sses Required to	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	e: Number vels: e vs. Job Condition e within this Bas – Material Desc .):	on Rating: NA Sic Rating: NA Stription: NA		Dump: 0.10		
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA	e: Number vels: e vs. Job Condition e within this Base — Material Desc .): No. 1	on Rating: NA Sic Rating: NA Stription: NA		Dump: 0.10	0	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader	e: Number vels: e vs. Job Condition e within this Bas — Material Desc .): Note: Material Section of the sec	on Rating: NA Sic Rating: NA Stription: NA Station: NA Station: NA Station: NA Station N		Dump: 0.100	0 0.625 min	
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Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): s - Unadjusted Base — Mixed material Mixed material Desc.	er of Loading Tool Paton Rating: NA Sic Rating: NA Paription: Maneuver: NA Passic Loader Cycle Tire Parial 0.02	ne (load, dump, 1	Dump: 0.100000000000000000000000000000000000	0 0.625 min Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in the second of the second	on Rating: NA Sic Rating: NA Sic Rating: NA Stription: NA Stription: NA Stasic Loader Cycle Timerial 0.02 Sent - factor not application reship of trucks and seration -0.04	ne (load, dump, 1	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040	0	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in the second of the second	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prisic Loader Cycle Tire rial 0.02 Pont - factor not applicate vereship of trucks and eration -0.04 get 0.00	me (load, dump, 1 ble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in the second of the second	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prial 0.02 Part - factor not application of trucks and geration -0.04 get 0.00 Net Cycle Tin	me (load, dump, 1 ble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in the second of the second	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prisic Loader Cycle Tine Prial 0.02 Pont - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tine Adjusted Load	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in the second of the second	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prisic Loader Cycle Tine Prial 0.02 Pont - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tine Adjusted Load	me (load, dump, 1 ble 0.00 loaders -0.04	Dump: 0.100 maneuver): 0.020 0.000 -0.040 -0.040 0.000 -0.060	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in the second of the second	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prisic Loader Cycle Tine Prial 0.02 Pont - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tine Adjusted Load	ble 0.00 loaders -0.04 ne Adjustment: er Cycle Time:	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material in No adjustme — Common ow — Constant ope — Nominal targ	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prisic Loader Cycle Tine Prial 0.02 Pont - factor not application application of trucks and geration -0.04 get 0.00 Net Cycle Tine Adjusted Load	ble 0.00 loaders -0.04 me Adjustment: er Cycle Time: ime per Truck:	Dump: 0.100 maneuver): 0.100 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.565	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: e vs. Job Condition within this Base — Material Desc. .): S - Unadjusted Base — Mixed material No adjustme — Common ow — Constant ope — Nominal target — Nomi	on Rating: NA Sic Rating: NA Pription: Maneuver: NA Prisic Loader Cycle Tire Prial 0.02 Pent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tire Adjusted Load Net Load T	me (load, dump, 1) ble 0.00 loaders -0.04 me Adjustment: er Cycle Time: ime per Truck:	Dump: 0.100 maneuver): (Continuo)	O.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

Truck Travel (Haul & Return) Time: maintained 3.0

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	8359.00	-9.10	3.00	-6.10	1870	4.705

Haul Time: **4.705** minutes

Return Route:

recturn rec	rute.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	8359.00	9.10	3.00	12.10	1628	5.273

Return Time: 5.273 minutes Total Truck Cycle Time: 13.810 minutes

Loading Tool unit

Adjusted for job efficiency: 1,332.22 LCY/Hour Production 1,605.09 LCY/Hour Truck Unit Production 305.87 LCY/Hour Adjusted for job efficiency: 253.87 LCY/Hour Optimal No. of Trucks: 5 Truck(s) Selected Number of Trucks: 5 Truck(s)

> Adjusted hourly truck team production: 1,269.37 LCY/Hour Adjusted single truck/loader team production: 1,269.37 LCY/Hour Adjusted multiple truck/loader team production: 1,269.37 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 26.23 Hours Unit cost: \$2.568 Total job cost: **\$85,519**

/LCY

CIRCES Cost Estimating Software

Site: Cresson Project		Permit Action	on: 2023		Permit/Job#:	M1980244
PROJECT IDENT Task #: A1114	<u> </u>	State: Colora	ado	Ab	breviation: N	Ione
Date: 11/22/2		County: Teller				1244-A1114
User: $\frac{2:35:55}{ZTT}$	PM				_	
	organization nar	ne: DRMS				
HOURLY EQUIP	MENT COST	<u> </u>		Shift bas	is: <u>1 per day</u>	
		_	Equipment Descri	ption		
Tr	uck Loader Tea		777F	<u>r</u> · ·		
			T 992K			
Suppor	rt Equipment -L	oad Area: Cat amp Area: NA	D10T - 10SU			
Road Mai	ים- intenance –Mot		T 16M			
			ter Tanker, 7,000	Gal.		
Cost Breakdown:		ader Team		Equipment		ance Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
6Utilization-machine:	100	100	100	NA	25	5 25
Ownership cost/hour:	\$206.48	\$229.24	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$160.10	\$200.29	\$160.22	NA	\$31.22	2 \$28.44
%Utilization-riper:	NA	0	NA	NA	NA	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	
Unit Subtotals:	\$400.29	\$470.24	\$380.21	NA	\$271.99	\$135.86
Number of Units:	6	1	1	0	1	
Group Subtotals:	Work:	\$2,871.98	Support:	\$380.21	Maint	: \$407.85
Total work team cost.	/hour: \$3,660.	04				
MATERIAL QUA	<u>NTITIES</u>					
Initial volume:	17,859	CCY		factor: 1.215		
Loose volume:	21,69	9 LCY				
Sour	rce of estimated		CC&V Provided	Estimate		
Source of	of estimated swe		Handbook			
	Material Purch					
	т.	stal Costs CO M				
	To	otal Cost: \$0.00)			

Pounds/LCY

Pounds

Material weight:

Description: Rated Payload: 1,600

Top Soil 200,000

Payload Capacity:	125.00	LCY				
Truck Bed (volume) Basis		I CIV				
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY LCY				
Average Volume: Adjusted Volume:	69.70 78.80	LCY				
Adjusted Volume.	76.60	LC1				
Fir	nal Truck Volum	e Based on Number of	of Loader Passes:	70.40	LCY	
Loading Tool Capacity			D.	1 C' Cl	NIA	
Rated Capacity:	16.000	LCY (heaped)		ket Size Class:	NA	<u></u>
Bucket Fill Factor:	1.100	Other - rock/di	irt mixtures (100	0-120%) 1.100		
Adjusted Capacity:	17.600	LCY				
Job Condition Correctio	ns:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source	!		
Altitude Adj:	1.000	0.980	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HI	3)		
too Emerency.						
Net Correction:	0.830	0.813				
Net Correction:			asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim	ne: Numbe	0.813 er of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool Pa	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool Parties on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition the within this Bases – Material Desc	er of Loading Tool Parties on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.):	er of Loading Tool Parties on Rating: NA sic Rating: NA	asses Required to		.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min	ne: Number ovels: e vs. Job Condition within this Bases — Material Description.):	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0	.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.): The state of	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0	.100 0.625 m	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): rs - Unadjusted Bases	on Rating: NA		Dump: 0	.100 0.625 m	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	ne: Number ovels: e vs. Job Condition us within this Bases – Material Descent.): rs - Unadjusted Bases – U	on Rating: NA	ime (load, dump, l	Dump: 0 maneuver): Factor (min.	.100 0.625 m) Source	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition us within this Bases – Material Descent.): rs - Unadjusted Buses: li Mixed material Mixed material Mixed material Common ow	on Rating: NA sic Rating: NA ription: NA sasic Loader Cycle Ti rial 0.02 ent - factor not applic	ime (load, dump, rable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040	.100 0.625 m Source (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle To rial 0.02 ent - factor not applic vership of trucks and eration -0.04	ime (load, dump, rable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100 0.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Tierial 0.02 ent - factor not applice whership of trucks and eration -0.04 get 0.00	ime (load, dump, 1	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 O.625 m Source (Cat HB) (Cat H	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Ti rial 0.02 ent - factor not applic vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Press - Unadjusted Bases It is Mixed material Mixed material Common own: Constant opens	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition us within this Bases — Material Descent.): The second of the	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vinership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	inutes
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Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition us within this Bass s – Material Description.): The second of the second o	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vinership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck: Adjusted	Dump: 0 maneuver): Factor (min. 0.020	.100 O.625 m Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	inutes

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Tiuui Itou	ic.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9638.00	-8.40	3.00	-5.40	1870	5.425

Haul Time: 5.425 minutes

Return Route:

Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel
	(Ft)		(%)	(%)	(fpm)	Time (min)
1	9638.00	8.40	3.00	11.40	1734	5.716

Return Time: 5.716 minutes
Total Truck Cycle Time: 14.973 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

282.11 LCY/Hour Adjusted for job efficiency: 1,332.22 LCY/Hour Adjusted for job efficiency: 234.16 LCY/Hour Optimal No. of Trucks: 6 Truck(s) Selected Number of Trucks: 6 Truck(s)

Adjusted hourly truck team production: 1,404.93 LCY/Hour Adjusted single truck/loader team production: 1,332.22 LCY/Hour Adjusted multiple truck/loader team production: 1,332.22 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 16.29 Hours

Unit cost: \$2.747 /LCY Total job cost: **\$59,613**

BULLDOZER WORK

Task description: SGVLF -Topsoil - Life	ft 1 - 13	- Dozer Spreading		
: Cresson Project Permit A	Action: _	2023	Permit/Job#:	M1980244
PROJECT IDENTIFICATION				
Task #: A1115 State: Co	olorado		Abbreviation:	None
	eller		Filename:	M244-A1115
10:41:10 PM				
User: ZTT			-	
Agency or organization name: DRMS				
HOURLY EQUIPMENT COST				
Basic Machine: Cat D7R DS Series II LGP		_		
Horsepower: 240		_		
Blade Type: Straight		_		
Attachment: NA		_		
Shift Basis: 1 per day		_		
Data Source: (CRG)		_		
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour: \$1	114.76	NA		
Operating Cost/Hour: \$	91.98	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	25		
Operator Cost/Hour: \$	\$41.30	NA		
MATERIAL QUANTITIES Initial Values 440 655				
Initial Volume: 449,655				
Swell factor: 1.215				
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F		Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Source of estimated swell factor: Cat Handbook		Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F		Estimate ——		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Source of estimated swell factor: Cat Handbook		Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Cat Handbook HOURLY PRODUCTION		Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr	C .	Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet	C .	Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr	C .	Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Loose stock	C .	Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Loose stock Average push gradient: -30 %	C .	Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Loose stock Average push gradient: -30 % Average site altitude: 9,500 feet	C .	Estimate		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Loose stock Average push gradient: -30 % Average site altitude: 9,500 feet Material weight: 1,600 lbs/LCY Weight description: Top Soil Job Condition Correction Factor	C .	Source		
Swell factor: 1.215 Loose volume: 546,331 LCY Source of estimated volume: 2022 CC&V F Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Average push distance: 145 feet Unadjusted hourly production: 381.4 LCY/hr Materials consistency description: Loose stock Average push gradient: -30 % Average site altitude: 9,500 feet Material weight: 1,600 lbs/LCY Weight description: Top Soil	C .			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.3758

Adjusted unit production: 524.73 LCY/hr
Adjusted fleet production: 524.73 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.473/LCY

Total job time: 1,041.17 Hours
Total job cost: \$258,253

BULLDOZER RIPPING WORK

	Task description:	SGV	LF - Topsoil - Lift 1 - 13	- Ripping				
Site:	Cresson Project		Permit Action:	2023	Peri	mit/Job#:	M1980	0244
	PROJECT IDEN	NTIFICATION NECESTICATION NECE	<u>ON</u>					
	Task #: A111	6	State: Colorado		Abbrey	viation:	None	
	Date: 11/21 2:14:	/2023 10 PM	County: Teller			ename:	M244-	A1116
	User: ZTT	· organization	name: DRMS					
	HOURLY EQUI	C						
					11		240	
	Basic Ma Ripper Attacl		D7R DS Series II LGP hank Ripper	<u> </u>	Horsepower: Shift Basis:		240 per day	
	Ripper Attach	11111CHL. <u>3-3</u>	папк Кіррсі		Data Source:		CRG)	
	Cost Breakdown:					·	-	
					Utilization %			
		Ownership Co		\$114.76	NA 188			
	D'	Operating Co		\$91.98	100			
		Ownership Co Operating Co		\$9.06 \$5.02	NA 100			
	Kippei	Operator Co		\$41.30	NA			
		Total Unit Co		\$262.12	1111			
		Total Fleet Co	ost/Hour: \$262) 12				
								
	MATERIAL QU		Sele	cted estimating	method: Area			
	Alternate Methods:							
mic:	NA	<u></u>	Bank Volume:	NA	BCY		NA	
Area:	557.39	acres	Rip Depth (ft):	2.50	Volume: 2,2	248,140		BCY or 0
	S	Source of estir	nated quantity: 2022 C	C&V Provided	Estimate			
	HOURLY PROI	<u>DUCTION</u>						
	Seismic:	_						
	<u>Beisime.</u>	S	Seismic Velocity:	NA	feet/secon	ıd		
	A		, <u> </u>					
	Area:	Δverag	e Ripping Depth:	2.45	feet/pass			
			e Ripping Width:	6.50	feet/pass			
			Ripping Length:	245.00	feet/pass			
		Avera	age Dozer Speed:	88.00	feet/minut	te		
			Maneuver Time:	0.25	minutes/p			
		Product	ion per unit area:	0.723	acres/hour	r		
	Job Condition Corre	ection Factors						
	Unad	justed Hourly	Unit Production:	0.723	Acres/hr			
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HB	*		
			Job Efficiency:	0.83	(1 shift/da	•		
			Net Correction:	0.83	multiplier			
			Hourly Unit Production:	0.60	Acres/hr			
		ū	Hourly Fleet Production:	0.60	Acres/hr			
	JOB TIME AND	COST						_
	Fleet size:	1	Grader(s)	Total job tim	e: 928	3.90	F	Iours
	Unit cost:	\$436.825	Per acre	Total job cos	st: \$243	182		

BULLDOZER RIPPING WORK

	Task description:	TR113	AGVLF - Leach Cell	Footprint - Rip	pping		
Site	Cresson Proje	ect	Permit Action:	2023	Permit/Job	o#: <u>M198024</u>	4
	PROJECT ID	ENTIFICATIO	<u>N</u>				
	Task #: A1	117	State: Colorado		Abbreviation	: None	
	Date: 11/	21/2023	County: Teller		Filename		117
		5:45 PM					
	User: ER						
	Agency	or organization na	me: DRMS				
	HOURLY EQ	UIPMENT COS	<u> </u>				
			10T - 10SU		Horsepower:	574	
	Ripper Att	achment: 3-Sha	nk Ripper			1 per day	_
					Data Source:	(CRG)	
	Cost Breakdown:			1	Utilization %		
		Ownership Cost	/Hour:	\$178.69	NA		
		Operating Cost		\$160.22	100		
		er Ownership Cost		\$24.49	NA		
	Ripp	per Operating Cost		\$11.23	100		
		Operator Cost Total Unit Cost		\$41.30 \$415.93	NA		
		Total Fleet Cost	/Hour: \$41	5.93			
	MATERIAL (<u>UANTITIES</u>	Sele	ected estimating	method: Area		
	Alternate Method	<u>ls:</u>					
Seismic:	NA		Bank Volume:	NA	BCY	NA	
Area:	1.68	acres	Rip Depth (ft):	2.50	Volume: 6,776		BCY or CCY
		Source of estima	ted quantity: TR113	1			
	HOURLY PRO	ODUCTION					
	Seismic:						
	<u>Seisinic.</u>	Sei	smic Velocity:	NA	feet/second		
	A						
	Area:	Average l	Ripping Depth:	2.87	feet/pass		
			Ripping Width:	8.67	feet/pass		
			ipping Length:	348.00	feet/pass		
			e Dozer Speed:	88.00	feet/minute		
			Ianeuver Time:	0.25	minutes/pass		
			n per unit area:	0.988	acres/hour		
	Job Condition Co	orrection Factors					
	Un	adjusted Hourly U	nit Production:	0.988	Acres/hr		
			Site Altitude:	9,500	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day)		
			Net Correction:	0.83	multiplier		
			ourly Unit Production:	0.82	Acres/hr		
		·	ourly Fleet Production:	0.82	Acres/hr		
	JOB TIME AN						
	Fleet size:	1	Grader(s)	Total job time	e: 2.05	Hou	rs
	Unit cost:	\$506.990	Per acre	Total job cos	st: \$852		

Task description:		AGVLF - 9400					
Site:	te: Cresson Project		Peri	mit Action: 2023	Permit/Job#:	M1980244	
]	PROJECT	IDENTIFIC	<u>CATION</u>				
	Task #:	A2000	State:	Colorado	Abbreviation:	None	
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2000	
		2:36:52 PM					
	User:	ZTT					
<u>1</u>		ency or organi EQUIPMEN		RMS	Shift basis: 1 per day		
<u>]</u>				Equipment Description	Shift basis: 1 per day		
<u>1</u>		EQUIPMEN		Equipment Description	Shift basis: 1 per day		
<u>]</u>		EQUIPMEN	NT COST	Equipment Description: KOMATSU 830E	Shift basis: 1 per day		
<u>]</u>		EQUIPMENT Truck L	NT COST Loader Team -Truck	Equipment Description : KOMATSU 830E : LETOURNEAU L2350	Shift basis: 1 per day		
<u>]</u>		EQUIPMENT Truck L	NT COST Loader Team -Truck -Loader	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU	Shift basis: 1 per day		
<u>]</u>	HOURLY	Truck L Support Equ	NT COST Loader Team -Truck -Loader Lipment -Load Area	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU : Cat D10T - 10SU	Shift basis: 1 per day		

Cost Breakdown:	n: Truck/Loader Team		Support 1	Equipment	Maintenance Equipment		
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck	
%Utilization-machine:	100	100	100	100	25	25	
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29	
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44	
%Utilization-riper:	NA	0	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12	
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86	
Number of Units:	4	1	1	1	1	1	
Group Subtotals:	Work:	\$3,644.80	Support:	\$760.42	Maint:	\$407.85	

Total work team cost/hour: \$4,813.07

MATERIAL QUANTITIES

Initial volume: 340,405 CCY Swell factor: 1.000

Loose volume: 340,405 LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Truck/Loader Worksheet Co.	nt´d	1 ask # A2000			Page 2 of 3	
Payload Capacity:	175.79	LCY				
Truck Bed (volume) Basis:						
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	175.79	LCY				
Final	Truck Volume	Based on Number of	Loader Passes:	143.10	LCY	
Loading Tool Capacity						
			Buck	tet Size Class: 1	NA	
Rated Capacity:	53.000	LCY (heaped)				_
Bucket Fill Factor:	0.675		oorly blasted (60	- 75%) 0.675		_
Adjusted Capacity: _	35.775	LCY				
Job Condition Corrections:	<u>L</u>	Sit	e Altitude (ft.): 9	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB)		
Job Efficiency:	0.830	0.830	(CAT HB)		
Net Correction:	0.830	0.813				
Loading Tool Cycle Time:	Number	of Loading Tool Pas	ses Required to F	Fill Truck:	4	passes
Excavators and Front Shove			1			•
Machine Cycle Time v		n Rating: NA				
Selected Value						
Track Loaders –		-				
Cycle Time Elements (min.):						
Load: NA	M	aneuver: NA		Dump: 0.10	0	
Wheel and Track Loaders -	Unadjusted Ba	sic Loader Cycle Tim	ne (load, dump, m	naneuver):	0.725 min	utes
Cycle Time Factors]			Factor (min.)	Source	
Material:	Mixed materi	al 0.02		0.020	(Cat HB)	
Stockpile:		t - factor not applicat	ole 0.00	0.000	(Cat HB)	_
Truck Ownership:	•	nership of trucks and		-0.040	(Cat HB)	
Operation:	Constant oper	ration -0.04		-0.040	(Cat HB)	
Dump Target:	Nominal targe			0.000	(Cat HB)	_
		Net Cycle Tim	_	-0.060	minutes	
		Adjusted Loade		0.665	minutes	
		Net Load Ti	me per Truck: _	2.095	minutes	
Truck Cycle Time:						
Truck Exchange Time	: 0.80	Minutes	Adjusted	for site altitude:	0.800	Minute
Truck Load Time	: 2.095	Minutes	Adjusted	for site altitude:	2.138	Minute:
ck Maneuver and Dump Time	: 1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
1						TVIIII GUC.

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4374.00	8.20	3.00	11.20	724	6.136

Haul Time: 6.136 minutes

Return Route:

return re	rate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4374.00	-8.20	3.00	-5.20	3450	1.307

Return Time: 1.307 minutes
Total Truck Cycle Time: 11.581 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 2,461.46 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 140.33 Hours

Unit cost: \$1.984 /LCY Total job cost: **\$675,406**

7	Гask descrip	otion: A(GVLF - 9500			
Site:	Cresson l	Project	Perr	mit Action: 2023	Permit/Job#:	M1980244
<u>]</u>	PROJECT	TIDENTIFICAT	<u> TION</u>			
	Task #:	A2001	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2001
		2:37:35 PM				
	User:	ZTT	_			
	Α .			MC		
<u>I</u>		ency or organization		MS	Shift basis: 1 per day	
<u>1</u>				EMS Equipment Description		
<u>1</u>		EQUIPMENT (Equipment Description		
<u>]</u>		EQUIPMENT (COST	Equipment Description : KOMATSU 830E		
<u>]</u>		EQUIPMENT (COST er Team -Truck -Loader	Equipment Description : KOMATSU 830E : LETOURNEAU L2350		
<u>]</u>		EQUIPMENT (COST er Team -Truck -Loader	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU		
<u>]</u>	HOURLY	EQUIPMENT (er Team -Truck -Loader nent -Load Area -Dump Area	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU : Cat D10T - 10SU		

Cost Breakdown:	Truck/Lo	ader Team	Support l	Equipment	Maintenan	ce Equipment
	Truck Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	3	1	1	1	1	1
Group Subtotals:	Work:	\$3,118.36	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$4,286.63

MATERIAL QUANTITIES

Initial volume: 437,763 CCY Swell factor: 1.000

Loose volume: 437,763 LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity:	175.79	LCY				
Truck Bed (volume) Basis	<u>::</u>					
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fi	nal Truck Volume	e Based on Number of	of Loader Passes:	143.10	LCY	
Loading Tool Capacity						
Rated Capacity:	53.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:			poorly blasted (60) - 75%) () 675		_
Adjusted Capacity:		LCY	poorly blasted (or	7 - 73 /0 / 0.073		
Adjusted Capacity.	33,773	LCI				
Job Condition Correction	ns:		Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
	0.830	0.830	(CAT HE	3)		
Job Efficiency:	0.000					
Job Efficiency: Net Correction:	0.830	0.813				
Net Correction:	0.830		asses Required to	Fill Truck:	4	passes
·	0.830 ne: Numbe	0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	0.830 ne: Number ovels: e vs. Job Condition	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	0.830 ne: Number ovels: e vs. Job Condition this Base	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	0.830 Number ovels: e vs. Job Condition this Bases – Material Description	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	0.830 Number ovels: e vs. Job Condition this Bases – Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to		.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min	0.830 ne: Number ovels: e vs. Job Condition within this Bases – Material Description.):	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0	.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader	0.830 ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Number ovels: e vs. Job Condition of the within this Bases – Material Descent.):	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0	.100 0.725 mi	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	0.830 Number ovels: e vs. Job Condition within this Bases – Material Descent.): The condition of the cond	on Rating: NA		Dump: 0 maneuver): Factor (min.	.100 0.725 mi) Source	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia	0.830 ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Number ovels: e vs. Job Condition of	on Rating: NA	ime (load, dump, l	Dump: 0	.100 mi) Source (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile	0.830 ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): ns - Unadjusted Bases	on Rating: NA	ime (load, dump, rable 0.00	Dump: 0 maneuver): Factor (min. 0.020	.100 0.725 mi) Source	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia	0.830 ne: Number ovels: e vs. Job Condition within this Bases = Material Descent.): ns - Unadjusted Best Mixed material is No adjustments No adjustments Common owents	on Rating: NA Sic Rating: NA Pription: NA Sasic Loader Cycle Telepideric Cycle Telep	ime (load, dump, rable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.725 mi Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Descent.): No adjusted Bases - Unadjusted Bases - Un	on Rating: NA	ime (load, dump, notes able 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.725 mi) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Descent.): No adjusted Bases - Unadjusted Bases - Un	on Rating: NA	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040	.100 0.725 mi) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Descent.): No adjusted Bases - Unadjusted Bases - Un	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.665	.100 0.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Descent.): No adjusted Bases - Unadjusted Bases - Un	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 0.725 mi) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Descent.): No adjusted Bases - Unadjusted Bases - Un	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.665	.100 0.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	0.830 Number ovels: e vs. Job Condition within this Bases – Material Descent.): Number ovels: e vs. Job Condition of the within this Bases – Material Descent.): Number of the within this Bases – Material Descent.): Number of the within this Bases – Material Descent. Number of the within th	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.665	.100 O.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	0.830 ne: Number ovels: e vs. Job Condition within this Bases = Material Description.): ns - Unadjusted Buses = No adjustment	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vinership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.725 mi	nutes

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3782.00	5.80	3.00	8.80	925	4.221

Haul Time: 4.221 minutes

Return Route:

rectarii rec	rate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3782.00	-5.80	3.00	-2.80	3503	1.113

Return Time: 1.113 minutes
Total Truck Cycle Time: 9.472 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production 906.48 LCY/Hour Adjusted for job efficiency: 752.38 LCY/Hour

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 2,257.15 LCY/Hour Adjusted single truck/loader team production: 2,257.15 LCY/Hour Adjusted multiple truck/loader team production: 2,257.15 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 193.95 Hours

Unit cost: \$1.899 /LCY Total job cost: **\$831,372**

:	Cresson	Project	Perr	nit Action: 2023	Permit/Job#:	M1980244
Ī	PROJECT	TIDENTIFICA	ATION			
	Task #:	A2002	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023 2:38:21 PM	County:	Teller	Filename:	M244-A2002
	User:	ZTT				
	Ag	ency or organiza	tion name: DR	MS		
<u>I</u>					Shift basis: 1 per day	
<u>I</u>		ency or organiza		Equipment Description	Shift basis: 1 per day	
<u>I</u>		ency or organiza	COST	Equipment Description KOMATSU 830E	Shift basis: 1 per day	
<u>]</u>		ency or organiza EQUIPMENT Truck Loa	CCOST der Team -Truck	Equipment Description KOMATSU 830E LETOURNEAU L2350	Shift basis: 1 per day	
<u>I</u>		ency or organiza EQUIPMENT Truck Loa	CCOST der Team -Truck -Loader	Equipment Description KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU	Shift basis: 1 per day	
<u>I</u>	HOURLY	EQUIPMENT Truck Loa Support Equip	der Team -Truck -Loader ment -Load Area	Equipment Description KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU Cat D10T - 10SU	Shift basis: 1 per day	

Cost Breakdown:	Truck/Loa	Truck/Loader Team		Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
				400		
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$2,591.92	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$3,760.19

MATERIAL QUANTITIES

CCY Initial volume: Swell factor: 1.000

Loose volume: 669,112 LCY

> Source of estimated volume: 2022 CC&V Provided Estimate

Cat Handbook Source of estimated swell factor:

> Material Purchase Cost: \$0.00

\$0.00

Total Cost:

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity:	175.79	LCY	•			
Truck Bed (volume) Basis	<u>s:</u>					
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fi	nal Truck Volume	e Based on Number	of Loader Passes:	143.10	LCY	
Loading Tool Capacity						
Rated Capacity:	53.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:			poorly blasted (60) - 75%) () 675		_
Adjusted Capacity:		LCY	poorly blasted (or	7 - 73/0) 0.073		_
Adjusted Capacity.	33,773	LCI				
Job Condition Correction	ns:		Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI	,		
I a la IVIII a la casa a casa	0.830	0.830	(CAT HE	3)		
Job Efficiency:						
Net Correction:	0.830	0.813				
Net Correction:			asses Required to	Fill Truck:	4	passes
·	ne: Numbe	0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition this Bases — Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
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Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition us within this Bases — Material Descent.): More - Unadjusted Bases — Mixed material Descent. Il: Mixed material Descent — No adjustment of Common owent — Constant open — Constant open — Number of Constant open —	on Rating: NA Sic Rating: NA Pription: NA Stating: NA Pription: NA Stating: NA	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	.100 0.725 mi) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition us within this Bases — Material Descent.): More - Unadjusted Bases — Mixed material Descent. Il: Mixed material Descent — No adjustment of Common owent — Constant open — Constant open — Number of Constant open —	on Rating: NA Sic Rating: NA Pription: NA Stating: NA Pription: NA Stating: NA	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020	.100 0.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition us within this Bases – Material Descent.): Mars - Unadjusted Bases – Unadjusted Bases It Mixed material is No adjustment of Common own is Constant opent.	on Rating: NA Sic Rating: NA Pription: NA Stating: NA Pription: NA Stating: NA	ime (load, dump, page 2000) d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): Mars - Unadjusted Bases Mixed material Descent. Mixed material Descent. No adjustment Common owner Constant opent. Nominal target. Nom	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not application -0.04 Reget 0.00 Net Cycle Ti Adjusted Loa Net Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes

Hauf Rou	ic.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2074.00	3.90	3.00	6.90	1160	1.965

Haul Time: 1.965 minutes

Return Route:

IXCIUI II	Return Route.							
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)		
1	3782.00	-5.80	3.00	-2.80	3503	1.113		

Return Time: 1.113 minutes
Total Truck Cycle Time: 7.216 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production 1,189.90 LCY/Hour Adjusted for job efficiency: 987.61 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 1,975.23 LCY/Hour Adjusted single truck/loader team production: 1,975.23 LCY/Hour Adjusted multiple truck/loader team production: 1,975.23 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 338.75 Hours

Unit cost: \$1.904 /LCY Total job cost: \$1,273,771

7	Γask descrip	otion:	AGVLF - 9700			
Site:	Cresson Project Permit		mit Action: 2023	Permit/Job#:	M1980244	
<u>]</u>	PROJECT	<u> IDENTIFI</u>	<u>CATION</u>			
	Task #:	A2003	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2003
		2:39:09 PM			<u> </u>	
	User:	ZTT				
						
<u>I</u>		ency or organi EQUIPMEN		RMS	Shift basis: 1 per day	
<u>I</u>		, ,		Equipment Description	Shift basis: 1 per day	
<u>1</u>		EQUIPMEN		Equipment Description	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN	NT COST	Equipment Description: KOMATSU 830E	Shift basis: 1 per day	
]		EQUIPMENT Truck L	NT COST	Equipment Description : KOMATSU 830E : LETOURNEAU L2350	Shift basis: 1 per day	
<u>]</u>		EQUIPMENT Truck L	NT COST Oader Team -Truck -Loader	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU	Shift basis: 1 per day	
<u>]</u>	HOURLY	EQUIPMENT Truck L	NT COST oader Team -Truck -Loader tipment -Load Area	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU : Cat D10T - 10SU	Shift basis: 1 per day	

Cost Breakdown:	Truck/Loa	Truck/Loader Team		Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$2,591.92	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$3,760.19

MATERIAL QUANTITIES

CCY Initial volume: Swell factor: 1.000

Loose volume: 924,083 LCY

> Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

> Material Purchase Cost: \$0.00

\$0.00 Total Cost:

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity	: 175.79	LCY				
Truck Bed (volume) Basi		I CV				
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fi	nal Truck Volum	e Based on Number of	of Loader Passes:	143.10	LCY	
Loading Tool Capacity						
Rated Capacity	: 53.000	LCY (heaped)	Buck	ket Size Class:	NA	
Bucket Fill Factor			poorly blasted (60	75%) 0.675		_
Adjusted Capacity		LCY	poorry blasted (00	- 13/0) 0.013		_
Job Condition Correction			ite Altitude (ft.): 9	9 <u>500</u> feet		
A14'4 1. A 1'.	Truck	Loader	Source	1)		
Altitude Adj: Job Efficiency:	1.000	0.980	(CAT HB	<u></u>		
Job Efficiency:	0.830	0.830	(CAT HB)		
,						
Net Correction:	0.830	0.813				
·		0.813 er of Loading Tool Pa	asses Required to l	Fill Truck:	4	passes
Net Correction:	ne: Numbe		asses Required to l	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir	ne: Number ovels: ne vs. Job Condition	er of Loading Tool Pa	asses Required to l	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val	ne: Number ovels: ne vs. Job Condition ue within this Bas	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to l	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val	ne: Number ovels: ne vs. Job Condition ue within this Bases – Material Description	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to l	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader	ne: Number ovels: ne vs. Job Condition ue within this Bases – Material Descent.):	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to l		100	passes
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Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Number ovels: ne vs. Job Condition ue within this Bases – Material Descent.): Pers - Unadjusted Bases – Unadjusted Bases	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Ti rial 0.02	me (load, dump, n	Dump: 0. naneuver): Factor (min.) 0.020	100 0.725 min Source (Cat HB)	
Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Number ovels: ne vs. Job Condition us within this Bases – Material Description.): ers - Unadjusted Bases – Unadjusted Base	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti rial 0.02 ent - factor not applica	me (load, dump, n	Dump: 0. naneuver): Factor (min.) 0.020 0.000	100 0.725 min Source (Cat HB) (Cat HB)	
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Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tirr Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi	ne: Number ovels: ne vs. Job Condition ue within this Bases – Material Description.): pers - Unadjusted Bases – Unadjusted Bases – Wixed material Description ovel in Constant open.	on Rating: NA sic Rating: NA eription: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application of trucks and eration -0.04 get 0.00	me (load, dump, nable 0.00	Dump: _0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	0.725 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
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Net Correction: Loading Tool Cycle Tir Excavators and Front Sh Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatior Dump Targer	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): Pers - Unadjusted Bases – Unadjusted Bases	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load	me (load, dump, nable 0.00 di loaders -0.04 di loaders -0	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665	0.725 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Tir Excavators and Front She Machine Cycle Tir Selected Val Track Loader Cycle Time Elements (mit Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownershi Operatior Dump Targer	ne: Number ovels: ne vs. Job Condition within this Bases – Material Description.): ors - Unadjusted Bases – Wind Mixed material in Mixed material in Mixed material in Common over in Constant oper in Constant oper in Nominal targetime: 0.80	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application application of trucks and eration -0.04 get 0.00 Net Cycle Tin Adjusted Load Net Load T	me (load, dump, nable 0.00 dl loaders -0.04 dl loaders -0	Dump: 0. maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665 2.095	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1628.00	-4.90	3.00	-1.90	3450	0.556

Haul Time: 0.556 minutes

Return Route:

Ttotal II Ito	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1628.00	4.90	3.00	7.90	2327	1.206

Return Time: 1.206 minutes
Total Truck Cycle Time: 5.900 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production

1,455.31 LCY/Hour Adjusted for job efficiency: 1,207.91 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 2,415.82 LCY/Hour Adjusted single truck/loader team production: 2,415.82 LCY/Hour Adjusted multiple truck/loader team production: 2,415.82 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **382.51** Hours

Unit cost: \$1.556 /LCY Total job cost: **\$1,438,321**

7	Γask descrip	otion:	AGVLF - 9800			
Site:	Cresson	Project	Perr	mit Action: 2023	Permit/Job#:	M1980244
]	PROJECT	TIDENTIFIC	<u>CATION</u>			
	Task #:	A2004	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2004
		2:39:52 PM				
	User:	ZTT				
<u>]</u>		gency or organi		MS	Shift basis: 1 per day	
<u>]</u>				MS Equipment Description	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN		Equipment Description	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN	NT COST	Equipment Description : KOMATSU 830E	Shift basis: 1 per day	
<u>]</u>		EQUIPMENT Truck L	NT COST Loader Team -Truck	Equipment Description : KOMATSU 830E : LETOURNEAU L2350	Shift basis: 1 per day	
<u>]</u>		EQUIPMENT Truck L	NT COST Loader Team -Truck -Loader	Equipment Description KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU	Shift basis: 1 per day	
<u>]</u>	HOURLY	Truck L Support Equ	NT COST Loader Team -Truck -Loader Lipment -Load Area	Equipment Description KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU Cat D10T - 10SU	Shift basis: 1 per day	

Cost Breakdown:	Truck/Loa	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	3	1	1	1	1	1
Group Subtotals:	Work:	\$3,118.36	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$4,286.63

MATERIAL QUANTITIES

Initial volume: 511,553 CCY Swell factor: 1.000

Loose volume: 511,553 LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity:	175.79	LCY	7			
Truck Bed (volume) Basis						
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fi	nal Truck Volume	e Based on Number	of Loader Passes:	143.10	LCY	
Loading Tool Capacity						
Rated Capacity:	53.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:			poorly blasted (60) - 75%) () 675		
Adjusted Capacity:		LCY	poorry blasted (oc	7 - 7370) 0.073		
Adjusted Capacity.	33,113	LCI				
Job Condition Correction	ns:		Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI	,		
	0.830	0.830	(CAT HE	3)		
Job Efficiency:						
Job Efficiency: Net Correction:	0.830	0.813				
Net Correction:	0.830		Passes Required to	Fill Truck:	4	passes
·	0.830 ne: Numbe	0.813 er of Loading Tool P	Passes Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	0.830 ne: Number ovels: e vs. Job Condition	er of Loading Tool P	easses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	0.830 ne: Number ovels: e vs. Job Condition within this Base	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	0.830 Number ovels: e vs. Job Condition this Bases – Material Description	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders	0.830 Number ovels: e vs. Job Condition this Bases – Material Description.):	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to		0.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA	0.830 ne: Number ovels: e vs. Job Condition us within this Bass as – Material Description.):	er of Loading Tool P on Rating: Sic Rating: NA rription: Maneuver: NA		Dump: 0	0.100	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader	0.830 ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): n.): rs - Unadjusted B	er of Loading Tool P on Rating: Sic Rating: NA rription: Maneuver: NA		Dump: 0	0.100 0.725 m	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor	0.830 ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): press - Unadjusted Bases	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T		Dump: 0 maneuver): Factor (min.	0.100 0.725 m .) Source	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia	0.830 ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): ns - Unadjusted Bases Sample of the second of the	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T	ime (load, dump, i	Dump: 0 maneuver): Factor (min. 0.020	0.100 0.725 m .) Source (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile	0.830 ne: Number ovels: e vs. Job Condition within this Bases — Material Description.): rs - Unadjusted Bases	on Rating: NA	ime (load, dump, sable 0.00	Dump: 0 maneuver): Factor (min. 0.020 0.000	0.100 0.725 m Source (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia	0.830 ne: Number ovels: e vs. Job Condition within this Bases = Material Description.): rs - Unadjusted Buses = Mixed material is Mixed material is No adjustments = Common own	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T	ime (load, dump, a	Dump: 0 maneuver): Factor (min. 0.020	0.100 0.725 m .) Source (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Description.): rs - Unadjusted Bases - William States - Unadjusted Bases - William States - Unadjusted Bases	on Rating: NA Sic Rating: NA Pription: NA Basic Loader Cycle T rial 0.02 ent - factor not applicy vership of trucks an eration -0.04 get 0.00	ime (load, dump, note that the cable 0.00 doaders -0.04	Dump: 0 maneuver): Factor (min. 0.020	0.725 m .) Source (Cat HB) (Cat HB) (Cat HB)	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Description.): rs - Unadjusted Bases - William States - Unadjusted Bases - William States - Unadjusted Bases	on Rating: NA Sic Rating: NA Sic Rating: NA Waneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti	rime (load, dump, reable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020	0.725 m .) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Description.): rs - Unadjusted Bases - William States - Unadjusted Bases - William States - Unadjusted Bases	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not application of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020	0.725 m .) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Description.): rs - Unadjusted Bases - William States - Unadjusted Bases - William States - Unadjusted Bases	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not application of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	rime (load, dump, reable 0.00 d loaders -0.04	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060	0.725 m .) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader: Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	0.830 ne: Number ovels: e vs. Job Condition within this Bases - Material Description.): rs - Unadjusted Bases - William States - Unadjusted Bases - William States - Unadjusted Bases	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not application of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020	0.725 m .) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	0.830 Number ovels: e vs. Job Condition within this Bases – Material Description.): The second of	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not application of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	cable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	0.725 m .) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	inutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	0.830 Number ovels: e vs. Job Condition within this Bases = Material Description.): Mars - Unadjusted Bases = No adjusted Bases No adjusted B	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not application of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa Net Load	ime (load, dump, reable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time: Time per Truck: Adjusted	Dump: 0 maneuver): Factor (min. 0.020	0.725 m O.725 m O.725 (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 2: 0.800 2.138	inutes

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3194.00	-7.50	3.00	-4.50	2545	1.373

Haul Time: 1.373 minutes

Return Route:

1100011111						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time
	(11)		(70)	(70)	(триг)	(min)
1	3194.00	7.50	3.00	10.50	1789	2.162

Return Time: 2.162 minutes
Total Truck Cycle Time: 7.673 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production

1,119.02 LCY/Hour Adjusted for job efficiency: 928.79 LCY/Hour

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 2,786.37 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 210.88 Hours

Unit cost: \$1.767 /LCY Total job cost: **\$903,968**

7	Гask descri _l	ption:	AGVLF - 9900			
ite:	Cresson	Project	Perr	mit Action: 2023	Permit/Job#:	M1980244
j	PROJECT	Γ IDENTIFIC	<u>CATION</u>			
	Task #:	A2005	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2005
		2:41:05 PM				
	User:	ZTT				
<u>]</u>		gency or organiz EQUIPMEN		MS	Shift basis: 1 per day	
<u>]</u>				MS Equipment Description	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN		Equipment Description	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN	T COST	Equipment Description: KOMATSU 830E	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN Truck Lo	T COST pader Team -Truck	Equipment Description : KOMATSU 830E : LETOURNEAU L2350	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN Truck Lo	T COST pader Team -Truck -Loader	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU	Shift basis: 1 per day	
<u>]</u>	HOURLY	Truck Lo Support Equi	T COST Dader Team -Truck -Loader Ipment -Load Area	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU : Cat D10T - 10SU	Shift basis: 1 per day	

Cost Breakdown:	Truck/Loa	ader Team	Support l	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$3,644.80	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$4,813.07

MATERIAL QUANTITIES

Initial volume: 291,740 CCY Swell factor: 1.000

Loose volume: 291,740 LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Truck/Loader Worksheet Con	t'd	1 ask # A2005			Page 2 of 3	
Payload Capacity:	175.79	LCY				
Truck Bed (volume) Basis:						
Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	175.79 I	LCY				
Final 7	Fruck Volume l	Based on Number of	Loader Passes:	143.10	LCY	
Loading Tool Capacity						
			Buck	tet Size Class: N	IA .	
Rated Capacity:	53.000	LCY (heaped)				
Bucket Fill Factor:	0.675	Blasted rock - po	orly blasted (60	- 75%) 0.675		_
Adjusted Capacity:	35.775	LCY				
Job Condition Corrections:		Site	Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB)		
Job Efficiency:	0.830	0.830	(CAT HB			
Net Correction:	0.830	0.813				
Loading Tool Cycle Time:	Number	of Loading Tool Pass	ses Required to I	Fill Truck:	4	passes
Excavators and Front Shovels		2	1		·	1
Machine Cycle Time vs		Rating: NA				
Selected Value w						
Track Loaders – N	Material Descrip	ption:				
Cycle Time Elements (min.):						
Load: NA	Ma	aneuver: NA		Dump: 0.100	0	
Wheel and Track Loaders -	Unadjusted Bas	sic Loader Cycle Tim	e (load, dump, n	naneuver): 0	0.725 min	utes
Cycle Time Factors			- 1	Factor (min.)	Source	
Material:	Mixed materia	1 0.02		0.020	(Cat HB)	_
Stockpile:		t - factor not applicab	le 0.00	0.000	(Cat HB)	
Truck Ownership:		ership of trucks and l		-0.040	(Cat HB)	_
Operation:	Constant opera	ation -0.04		-0.040	(Cat HB)	_
Dump Target:	Nominal targe			0.000	(Cat HB)	
		Net Cycle Time	_	-0.060	minutes	
		Adjusted Loader		0.665	minutes	
		Net Load Ti	ne per Truck:	2.095	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
Truck Load Time:	2.095	Minutes	Adjusted	for site altitude:	2.138	Minutes
ck Maneuver and Dump Time:	1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
-		_		_		_

Truck(s)

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4981.00	-8.80	3.00	-5.80	1870	2.804

Haul Time: 2.804 minutes

Return Route:

rectarii rec	acc.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4981.00	8.80	3.00	11.80	1628	3.455

Return Time: 3.455 minutes
Total Truck Cycle Time: 10.397 minutes

Selected Number of Trucks: 4

Loading Tool unit

Optimal No. of Trucks:

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production 825.83 LCY/Hour Adjusted for job efficiency: 685.44 LCY/Hour

Adjusted hourly truck team production: 2,741.77 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour

Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

4

Truck(s)

Fleet size: _____1 Team(s) Total job time: _____120.27 Hours

Unit cost: \$1.984 /LCY Total job cost: \$578,848

	Γask descri _l	otion:	AGVLF - 10000			
te:	Cresson	Project	Perr	mit Action: 2023	Permit/Job#:	M1980244
]	PROJECT	T IDENTIFIC	CATION			
	Task #:	A2006	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023 2:43:02 PM	County:	Teller	Filename:	M244-A2006
	User:	ZTT				
	Ag	gency or organi	zation name: DR	MS		
Ţ		gency or organic			Shift basis: 1 per day	
<u>]</u>		EQUIPMEN	NT COST	Equipment Description	•	
<u>]</u>		EQUIPMEN		Equipment Description: KOMATSU 830E	•	
<u>]</u>		EQUIPMEN Truck L	NT COST oader Team -Truck	Equipment Description : KOMATSU 830E : LETOURNEAU L2350	•	
<u>]</u>		EQUIPMEN Truck L	NT COST oader Team -Truck -Loader	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU	•	
<u>]</u>	HOURLY	Truck L Support Equ	oader Team -Truck -Loader ipment -Load Area	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU : Cat D10T - 10SU : CAT 16M	•	

Cost Breakdown:	Truck/Loa	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
	400	100	100	100	2.7	2.7
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$3,644.80	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$4,813.07

MATERIAL QUANTITIES

Initial volume: 84,553 CCY Swell factor: 1.000 Loose volume: 84,553 LCY

Source of estimated volume: 2022 CC&V Provided Estimate
Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Truck/Loader Worksheet Con	t d	1 ask # A2006			Page 2 of 3	
Payload Capacity:	175.79	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	153.00 L	.CY				
Heaped Volume:	192.00 L	.CY				
Average Volume:	172.50 L	.CY				
Adjusted Volume:	175.79 L	CY				
Final 7	Гruck Volume I	Based on Number of Lo	oader Passes:	143.10	LCY	
Loading Tool Capacity				al al v		
		1	Buck	ket Size Class: N	A	_
Rated Capacity:	53.000	LCY (heaped)				_
Bucket Fill Factor:	0.675	Blasted rock - poor	rly blasted (60	- 75%) 0.675		_
Adjusted Capacity:	35.775	LCY				
Job Condition Corrections:		Site A	Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	3)		
Job Efficiency:	0.830	0.830	(CAT HB	,		
				,		
Net Correction:	0.830	0.813				
Loading Tool Cycle Time:	Number	of Loading Tool Passes	s Required to l	Fill Truck:	4	passes
Excavators and Front Shovels	<u>s:</u>					
Machine Cycle Time vs Selected Value w						
Track Loaders – N		-				
Cycle Time Elements (min.):	viatoriai Descrip					
Load: NA	Ma	neuver: NA		Dump: 0.100)	
Wheel and Track Loaders -	Unadjusted Bas	ic Loader Cycle Time	(load, dump, n	naneuver): 0	.725 min	utes
Cycle Time Factors	3	•		-	1	
Material:	Mixed materia	1 0 02		Factor (min.) 0.020	Source (Cat HB)	_
Stockpile:		- factor not applicable	0.00	0.000	(Cat HB)	_
Truck Ownership:	•	ership of trucks and loa		-0.040	(Cat HB)	_
Operation:	Constant opera	*		-0.040	(Cat HB)	
Dump Target:	Nominal target			0.000	(Cat HB)	
1 5		Net Cycle Time A	Adjustment:	-0.060	minutes	_
		Adjusted Loader (0.665	minutes	
		Net Load Time	e per Truck:	2.095	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
Truck Load Time:	2.095	Minutes	Adjusted	for site altitude:	2.138	Minutes
ck Maneuver and Dump Time:	1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
		=		_		_

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6981.00	-8.60	3.00	-5.60	1870	3.930

Haul Time: 3.930 minutes

Return Route:

rectarii rec	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6981.00	8.60	3.00	11.60	1628	4.632

Return Time: 4.632 minutes
Total Truck Cycle Time: 12.700 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour

Truck Unit Production
676.08 LCY/Hour Adjusted for job efficiency: 561.14 LCY/Hour

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 2,244.57 LCY/Hour Adjusted single truck/loader team production: 2,244.57 LCY/Hour Adjusted multiple truck/loader team production: 2,244.57 LCY/Hour LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 37.67 Hours

Unit cost: \$2.144 /LCY Total job cost: \$181,308

	Task descrij	ption:	AGVLF - 9920			
Site:	Cresson	Project	Permi	it Action: 2023	Permit/Job#:	M1980244
	PROJECT	Γ IDENTIFIC	<u>CATION</u>			
	Task #:	A2007	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023 2:43:50 PM	County:	Teller	Filename:	M244-A2007
	User:	ZTT				
		gency or organi EQUIPMEN		1S	Shift basis: 1 per day	
				Equipment Description		
		Truck L	oader Team -Truck:	KOMATSU 830E		
			-Loader:	LETOURNEAU L2350		
		Support Equ	ipment -Load Area:	Cat D10T - 10SU		
_			-Dump Area:	Cat D10T - 10SU		
		Road Maintena	ance –Motor Grader:	CAT 16M		
			-Water Truck:	Water Tanker, 7,000 Gal.		

Cost Breakdown:	Truck/Loa	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$3,644.80	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$4,813.07

MATERIAL QUANTITIES

Initial volume: 6,599,307 CCY Swell factor: 1.000

Loose volume: **6,599,307** LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity	: 175.79	LCY	•			
Truck Bed (volume) Basis						
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fi	nal Truck Volume	e Based on Number of	of Loader Passes:	143.10	LCY	
Loading Tool Capacity						
Rated Capacity	53.000	LCY (heaped)		ket Size Class:	NA	<u></u> -
Bucket Fill Factor			poorly blasted (60) - 75%) () 675		_
Adjusted Capacity		LCY	poorly blasted (or	7 - 73/0) 0.073		_
Adjusted Capacity	. 33.773	LC1				
Job Condition Correction	ons:	S	Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HE			
Lab Efficience	0.830	0.830	(CAT HI	3)		
Job Efficiency:						
Net Correction:	0.830	0.813				
Net Correction:			asses Required to	Fill Truck:	4	passes
·	ne: Numbe	0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim Selected Val	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value Track Loader	ne: Number ovels: e vs. Job Condition ue within this Bas s – Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim Selected Val	ne: Number ovels: e vs. Job Condition the within this Bases – Material Descent.):	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to		.100	passes
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Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia	ne: Number ovels: e vs. Job Condition ue within this Bases – Material Descent.): rs - Unadjusted Bases It Mixed material	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T	ime (load, dump, i	Dump: 0 maneuver): Factor (min. 0.020	.100 0.725 mi) Source (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Vala Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpill	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): rs - Unadjusted Bases – Unad	er of Loading Tool P on Rating: NA sic Rating: NA rription: NA Basic Loader Cycle T rial 0.02 ent - factor not applic	ime (load, dump, page 1881)	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.725 mi Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Vala Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpill Truck Ownershi	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): Press – Unadjusted Bases	er of Loading Tool P on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T rial 0.02 ent - factor not applic	ime (load, dump, page 1881)	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040	.100 0.725 mi) Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Vala Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpile	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases Mixed material Description over the control of t	er of Loading Tool P on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle T rial 0.02 ent - factor not applic wnership of trucks an eration -0.04	ime (load, dump, page 1881)	Dump: 0 maneuver): Factor (min. 0.020 0.000	.100 0.725 mi Source (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Vala Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Factor Materia Stockpill Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases Mixed material Description over the control of t	on Rating: NA	ime (load, dump, page 1881)	Dump: 0 maneuver): Factor (min. 0.020	.100 0.725 mi) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valanta Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases Mixed material Description over the control of t	on Rating: NA sic Rating: NA eription: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 -0.040 0.000	.100 0.725 mi) Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valanta Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases Mixed material Description over the control of t	on Rating: NA sic Rating: NA eription: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04	Dump: _0 maneuver): Factor (min. 	.100 0.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valanta Loader Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): rs - Unadjusted Bases Mixed material Description over the control of t	on Rating: NA sic Rating: NA eription: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0 maneuver): Factor (min. 0.020	0.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valanta Loader Cycle Time Elements (mi Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownership Operation Dump Targer	ne: Number ovels: e vs. Job Condition within this Bases – Material Descent.): The second of the se	on Rating: NA sic Rating: NA eription: NA Basic Loader Cycle T rial 0.02 ent - factor not applic vnership of trucks an eration -0.04 get 0.00 Net Cycle Ti Adjusted Loa	ime (load, dump, page 2000) d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	0.725 mi Source	nutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valanta Loader Cycle Time Elements (minus) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil Truck Ownership Operation Dump Targer	ne: Number ovels: e vs. Job Condition within this Bases – Material Description.): It is - Unadjusted Bases: No adjustment of Common own: Constant opent: Nominal targetime: Nominal targetime: 0.80	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Basic Loader Cycle To rial 0.02 ent - factor not applicate and trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	0.725 mi	

Tiuui Itou	ic.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4606.00	5.20	3.00	8.20	985	4.817

Haul Time: 4.817 minutes

Return Route:

rectarii rec	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4606.00	-5.20	3.00	-2.20	3503	1.356

Return Time: 1.356 minutes
Total Truck Cycle Time: 10.311 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production

_____832.72 LCY/Hour Adjusted for job efficiency: ____691.16 LCY/Hour

Optimal No. of Trucks: _____ 4 ___ Truck(s) Selected Number of Trucks: ____ 4 ___ Truck(s)

Adjusted hourly truck team production: 2,764.64 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 2,720.48 Hours

Unit cost: \$1.984 /LCY Total job cost: **\$13,093,843**

	Task descrij	otion:	AGVLF - 10020			
Site:	Cresson	Project	Perm	it Action: 2023	Permit/Job#:	M1980244
	PROJECT	Γ IDENTIFIC	CATION			
	Task #:	A2008	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2008
		2:45:27 PM				
	User:	ZTT				
		gency or organize		MS	Shift basis: 1 per day	
				Equipment Description		
_		Truck L	oader Team -Truck:	KOMATSU 830E		
			-Loader:	LETOURNEAU L2350		
		Support Equ	ipment -Load Area:	Cat D10T - 10SU		
			-Dump Area:	Cat D10T - 10SU		
		Road Maintena	nce –Motor Grader:	CAT 16M	·	
			-Water Truck:	Water Tanker, 7,000 Gal.		

Cost Breakdown:	Truck/Loa	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	3	1	1	1	1	1
Group Subtotals:	Work:	\$3,118.36	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$4,286.63

MATERIAL QUANTITIES

Initial volume: 4,040,912 CCY Swell factor: 1.000

Loose volume: **4,040,912** LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity	7: 175.79	L	CY			
Truck Bed (volume) Bas		LOW				
Struck Volume:		_ LCY				
Heaped Volume: Average Volume:		_ LCY LCY				
Adjusted Volume:		LCY				
Adjusted Volume.	173.79	_ LC1				
	inal Truck Volu	me Based on Numb	per of Loader Passes:	143.10	LCY	
Loading Tool Capacity			Ruc	ket Size Class:	NA	
Rated Capacity	7:53.000		ped)		IW	_
Bucket Fill Factor		Blasted roc	ck - poorly blasted (60) - 75%) 0.675		_
Adjusted Capacity	<i>y</i> : 35.775	LCY				
Job Condition Correcti	ons:		Site Altitude (ft.):	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HI			
Job Efficiency:	0.830	0.830	(CAT HI	3)		
Net Correction:	0.830	0.813				
·		1	ol Passes Required to	Fill Truck:	4 1	passes
Net Correction:	ne: Nun	1	ol Passes Required to	Fill Truck:	41	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin	ne: Nun	nber of Loading Too		Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va	ne: Nun ovels: ne vs. Job Cond	nber of Loading Too ition Rating: NA Basic Rating: NA		Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va	me: Nunovels: ne vs. Job Condlue within this Ers – Material De	nber of Loading Too ition Rating: NA Basic Rating: NA		Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade	me: Nunovels: ne vs. Job Condlue within this Ers – Material De	nber of Loading Too ition Rating: NA Basic Rating: NA	<u>, </u>		100	passes
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m	ne: Nunovels: ne vs. Job Condue within this Enter Material Defin.):	ition Rating: Basic Rating: Sescription: Maneuver: NA	<u></u>	Dump: 0.1		
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA	ne: Nun ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted	ition Rating: Basic Rating: Sescription: Maneuver: NA	<u></u>	Dump: 0.1	100 0.725 min	
Net Correction: Loading Tool Cycle Time Excavators and Front Shadchine Cycle Time Selected Vander Track Loade Cycle Time Elements (management) Load: NA Wheel and Track Loade	me: Numovels: ne vs. Job Condue within this Ens — Material Defin.): ers - Unadjustedors	ition Rating: Basic Rating: Sescription: Maneuver: NA	<u></u>	Dump: 0.1	100 0.725 min	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Factor	ne: Nun ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma	ition Rating: Basic Rating: NA escription: Maneuver: NA Basic Loader Cycl	e Time (load, dump,	Dump: 0.1 maneuver): Factor (min.)	0.725 min	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownersh	ne: Num ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust p: Common	ition Rating: NA Basic	e Time (load, dump,	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040	0.725 min Source (Cat HB) (Cat HB) (Cat HB)	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operation	me: Num ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust: p: Common on: Constant of	nber of Loading Too ition Rating: NA Basic Rating: NA escription: NA I Basic Loader Cycl aterial 0.02 ment - factor not ap ownership of trucks operation -0.04	e Time (load, dump,	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	0.725 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
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Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operation	me: Num ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust: p: Common on: Constant of	nber of Loading Too ition Rating: NA Basic Rating: NA escription: NA I Basic Loader Cycl aterial 0.02 ment - factor not ap ownership of trucks operation -0.04 arget 0.00 Net Cycle	e Time (load, dump, plicable 0.00 s and loaders -0.04 e Time Adjustment:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.725 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operation	me: Num ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust: p: Common on: Constant of	nber of Loading Too ition Rating: NA Basic Rating: NA escription: NA I Basic Loader Cycl aterial 0.02 ment - factor not ap ownership of trucks operation -0.04 arget 0.00 Net Cycle Adjusted I	e Time (load, dump, plicable 0.00 s and loaders -0.04 e Time Adjustment: Loader Cycle Time:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operation	me: Num ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust: p: Common on: Constant of	nber of Loading Too ition Rating: NA Basic Rating: NA escription: NA I Basic Loader Cycl aterial 0.02 ment - factor not ap ownership of trucks operation -0.04 arget 0.00 Net Cycle Adjusted I	e Time (load, dump, plicable 0.00 s and loaders -0.04 e Time Adjustment:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	0.725 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operation	ne: Nun ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust: p: Common on: Constant of	nber of Loading Too ition Rating: NA Basic Rating: NA escription: NA I Basic Loader Cycl aterial 0.02 ment - factor not ap ownership of trucks operation -0.04 arget 0.00 Net Cycle Adjusted I	e Time (load, dump, plicable 0.00 s and loaders -0.04 e Time Adjustment: Loader Cycle Time:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operatio Dump Targ	ne: Nun ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust: p: Common on: Constant of et: Nominal t	ition Rating: NA Basic Loader Cycl	e Time (load, dump, plicable 0.00 s and loaders -0.04 e Time Adjustment: Loader Cycle Time: bad Time per Truck:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Net Correction: Loading Tool Cycle Tin Excavators and Front Sh Machine Cycle Tin Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Loade Cycle Time Facto Materi Stockpi Truck Ownershi Operatio Dump Targ	me: Num ovels: ne vs. Job Cond lue within this E rs – Material De in.): ers - Unadjusted ors al: Mixed ma le: No adjust: p: Common on: Constant of et: Nominal t	ition Rating: NA Basic Loader Cycle Basi	e Time (load, dump, plicable 0.00 s and loaders -0.04 e Time Adjustment: Loader Cycle Time: bad Time per Truck:	Dump: 0.1 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665 2.095	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	utes

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4269.00	2.30	3.00	5.30	1550	3.077

Task # A2008

Haul Time: 3.077 minutes

Return Route:

Return Route.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4269.00	-2.30	3.00	0.70	3503	1.447

Return Time: 1.447 minutes
Total Truck Cycle Time: 8.662 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production

____991.25 LCY/Hour Adjusted for job efficiency: 822.74 LCY/Hour

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 3 Truck(s)

Adjusted hourly truck team production: 2,468.22 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 1,665.81 Hours

Unit cost: \$1.767 /LCY Total job cost: \$7,140,720

	Гask descri _l	ption:	AGVLF - 10100			
ite:	Cresson	Project	Perm	nit Action: 2023	Permit/Job#:	M1980244
ļ	PROJECT	r identific	ATION			
	Task #:	A2009	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2009
		2:46:23 PM				
	User:	ZTT				
	Ag	gency or organiz	ation name: DR	MS		
]	HOURLY	EQUIPMEN	T COST		Shift basis: 1 per day	
<u>]</u>	HOURLY			Equipment Description	Shift basis: 1 per day	
<u>]</u>	HOURLY		T COST pader Team -Truck:	1 1 1	Shift basis: 1 per day	
<u>]</u>	HOURLY			KOMATSU 830E	Shift basis: 1 per day	
<u>]</u>	HOURLY	Truck Lo	oader Team -Truck:	KOMATSU 830E LETOURNEAU L2350	Shift basis: 1 per day	
<u>]</u>	HOURLY	Truck Lo	oader Team -Truck: -Loader:	KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU	Shift basis: 1 per day	
<u>]</u>		Truck Lo	oader Team -Truck: -Loader: pment -Load Area:	KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU Cat D10T - 10SU	Shift basis: 1 per day	

Cost Breakdown:	Truck/Lo	Truck/Loader Team		Support Equipment		ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$2,591.92	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$3,760.19

MATERIAL QUANTITIES

3,919,057 **CCY** Initial volume: Swell factor: 1.000

Loose volume: 3,919,057 LCY

> Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost:

\$0.00 \$0.00 Total Cost:

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity	: 175.79	LCY	•			
Truck Bed (volume) Basis	s:					
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fi	nal Truck Volum	ne Based on Number of	of Loader Passes:	143.10	LCY	
Loading Tool Capacity			Ruel	cet Size Class:	NA	
Rated Capacity	53.000	LCY (heaped)		cet bize class.	11/14	_
Bucket Fill Factor			poorly blasted (60	- 75%) 0.675		_
Adjusted Capacity		LCY	poorty blasted (00	1370) 0.013		_
rajusted capacity						
Job Condition Correction	ons:		Site Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	·		
Job Efficiency:	0.830	0.830	(CAT HB	5)		
N G	0.020	0.042				
Net Correction:	0.830	0.813				
Loading Tool Cycle Tim	ne: Numb	er of Loading Tool P	asses Required to l	Fill Truck:	4	passes
	ne: Numb		asses Required to l	Fill Truck:	4	passes
Loading Tool Cycle Tin Excavators and Front Sho Machine Cycle Tim	ne: Numb	per of Loading Tool P	asses Required to l	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Val	<u>ne:</u> Numb ovels: e vs. Job Conditi	oer of Loading Tool P ion Rating: NA sic Rating: NA	asses Required to l	Fill Truck:	4	passes
Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Val	ne: Numb ovels: e vs. Job Conditi ue within this Bas s – Material Desc	oer of Loading Tool P ion Rating: NA sic Rating: NA	asses Required to l	Fill Truck:	4	passes
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Loading Tool Cycle Tine Excavators and Front Sho Machine Cycle Time Selected Val Track Loader Cycle Time Elements (mine) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpil	ne: Numb ovels: e vs. Job Conditi ue within this Bas s – Material Desc n.): rs - Unadjusted E rs l: Mixed mate e: No adjustme	oer of Loading Tool P ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle T crial 0.02 ent - factor not applic	ime (load, dump, n	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000	00 0.725 min Source (Cat HB) (Cat HB)	
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Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: e vs. Job Conditi ue within this Bas s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustme o: Common oven: Constant op	oer of Loading Tool P ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Toerial 0.02 ent - factor not application with the company of trucks and t	ime (load, dump, n	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	ne: Numb ovels: e vs. Job Conditi ue within this Bas s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustme o: Common oven: Constant op	oer of Loading Tool P ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Toerial 0.02 ent - factor not application with the company of trucks and t	ime (load, dump, noable 0.00 d loaders -0.04	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Tim Excavators and Front She Machine Cycle Tim Selected Val Track Loader Cycle Time Elements (mi Load: NA Wheel and Track Loade Cycle Time Facto Materia Stockpil Truck Ownershi Operatio Dump Targe	ne: Numb ovels: e vs. Job Conditi ue within this Bas s – Material Desc n.): rs - Unadjusted E rs l: Mixed mate e: No adjustme o: Common ov n: Constant op t: Nominal tar	oer of Loading Tool P ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Toerial 0.02 ent - factor not application of trucks and overation -0.04 rget 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, note that the content of the conte	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Time Excavators and Front She Machine Cycle Time Selected Val Track Loader Cycle Time Elements (mine) Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpill Truck Ownershing Operation Dump Targer	ne: Numb ovels: e vs. Job Conditi ue within this Bas s – Material Desc n.): rs - Unadjusted E s l: Mixed mate e: No adjustme o: Common ov n: Constant op t: Nominal tar	ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Terial 0.02 ent - factor not applicate whership of trucks and peration -0.04 rget 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, reable 0.00 d loaders -0.04 der Cycle Time: Time per Truck:	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665 2.095	OO Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1495.00	-4.00	3.00	-1.00	3503	0.508

Haul Time: 0.508 minutes

Return Route:

Return Route.						
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time
						(mın)
1	1495.00	4.00	3.00	7.00	2398	1.000

Return Time: 1.000 minutes
Total Truck Cycle Time: 5.646 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour

Truck Unit Production

1,520.79 LCY/Hour Adjusted for job efficiency: 1,262.25 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 2,524.51 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 1,615.58 Hours

Unit cost: \$1.550 /LCY Total job cost: **\$6,074,884**

	Task descrip	otion:	AGVLF - 10190			
Site:	Cresson	Project	Perm	it Action: 2023	Permit/Job#:	M1980244
ļ	PROJECT	Γ IDENTIFIC	<u>CATION</u>			
	Task #:	A2010	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2010
		2:49:07 PM			<u> </u>	
	User:	ZTT				
	Ag	gency or organiz	ation name: DRM	MS		
<u>]</u>	HOURLY	EQUIPMEN	T COST		Shift basis: 1 per day	
<u>]</u>	HOURLY	EQUIPMEN	T COST	Equipment Description	Shift basis: 1 per day	
]	HOURLY	-	T COST pader Team -Truck:		Shift basis: 1 per day	
<u>]</u>	HOURLY	-			Shift basis: 1 per day	
<u>]</u>	HOURLY	Truck Lo	oader Team -Truck:	KOMATSU 830E LETOURNEAU L2350	Shift basis: 1 per day	
<u>]</u> 	HOURLY	Truck Lo	oader Team -Truck: -Loader:	KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU	Shift basis: 1 per day	
<u>]</u>		Truck Lo	pader Team -Truck: -Loader: pment -Load Area:	KOMATSU 830E LETOURNEAU L2350 Cat D10T - 10SU Cat D10T - 10SU	Shift basis: 1 per day	

<u>Cost Breakdown:</u>	Truck/Loa	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck	
%Utilization-machine:	100	100	100	100	25	25	
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29	
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44	
%Utilization-riper:	NA	0	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12	
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86	
Number of Units:	2	1	1	1	1	1	
Group Subtotals:	Work:	\$2,591.92	Support:	\$760.42	Maint:	\$407.85	

Total work team cost/hour: \$3,760.19

MATERIAL QUANTITIES

Initial volume: 3,562,003 CCY Swell factor: 1.000

Loose volume: **3,562,003** LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Payload Capacity:	175.79	LCY	•			
Truck Bed (volume) Basis	<u>s:</u>					
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fir	nal Truck Volume	e Based on Number of	of Loader Passes:	143.10	LCY	
Loading Tool Capacity						
Rated Capacity:	53.000	LCY (heaped)		ket Size Class:	NA	
Bucket Fill Factor:			poorly blasted (60) - 75%) 0.675		
Adjusted Capacity:		LCY	poorly oranged (or	, , , , , , , , , , , , , , , ,		
Job Condition Correctio	nc•		Site Altitude (ft.):	9500 feet		
Job Condition Correction						
A 14:4 J - A J:	Truck	Loader	Source			
Altitude Adj:	1.000 0.830	0.980 0.830	(CAT HE			
	0.830	0.830	(CAI III	3)		
Job Efficiency:						
Net Correction:	0.830	0.813				
· ·		0.813 er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction:	ne: Numbe		asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim	ne: Numbe ovels: e vs. Job Conditio	er of Loading Tool P	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition ue within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Value	ne: Number ovels: e vs. Job Condition within this Bases — Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	4	passes
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Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia	ne: Number ovels: e vs. Job Conditions within this Bases – Material Descent.): press - Unadjusted Bases –	on Rating: NA	ime (load, dump, 1	Dump: 0 maneuver): Factor (min. 0.020	.100 mi) Source (Cat HB)	
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Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition in this Bases — Material Descent.): Mars - Unadjusted Bases: It: Mixed material: No adjustment in Constant opent: Nominal target.	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vinership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, reable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe Truck Cycle Time: Truck Exchange Ti	ne: Number ovels: e vs. Job Condition within this Bases — Material Descent.): Mars - Unadjusted Bases It is Mixed material Mixed material Common own in Constant open in Constant open in Nominal target in N	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Sasic Loader Cycle Townership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load Minutes	ime (load, dump, i able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020 0.000 -0.040 0.000 -0.060 0.665 2.095	.100 O.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes minutes	nutes
Net Correction: Loading Tool Cycle Tim Excavators and Front Sho Machine Cycle Tim Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe	ne: Number ovels: e vs. Job Condition is within this Bases – Material Descent.): Mars - Unadjusted Bases: It: Mixed material: No adjustmes: No adjustmes: Common own: Constant opens: Nominal targetimes: Nominal targetimes: 0.80 me: 0.80 me: 2.095	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vinership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, 1 cable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Time per Truck:	Dump: 0 maneuver): Factor (min. 0.020	.100 O.725 mi Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Tiuui Itou	ic.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3784.00	-6.60	3.00	-3.60	2545	1.600

Haul Time: 1.600 minutes

Return Route:

Return Route.						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	3784.00	6.60	3.00	9.60	1789	2.355

Return Time: 2.355 minutes
Total Truck Cycle Time: 8.093 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour

Truck Unit Production
1,060.95 LCY/Hour Adjusted for job efficiency: 880.59 LCY/Hour

Optimal No. of Trucks: 3 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 1,761.18 LCY/Hour Adjusted single truck/loader team production: 1,761.18 LCY/Hour Adjusted multiple truck/loader team production: 1,761.18 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 2,022.51 Hours

Unit cost: \$2.135 /LCY Total job cost: \$7,605,040

,	Task descrij	otion:	AGVLF - 10280			
Site:	Cresson	Project	Perm	it Action: 2023	Permit/Job#:	M1980244
	PROJECT	T IDENTIFIC	<u>CATION</u>			
	Task #:	A2011	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023 2:50:03 PM	County:	Teller	Filename:	M244-A2011
	User:	ZTT			_	
		gency or organi EQUIPMEN		MS	Shift basis: 1 per day	
				Equipment Description		
		Truck L	oader Team -Truck:	KOMATSU 830E		
			-Loader:	LETOURNEAU L2350		
		Support Equ	ipment -Load Area:	Cat D10T - 10SU		
			-Dump Area:	Cat D10T - 10SU		
	•	Road Maintena	nce –Motor Grader:	CAT 16M		
			-Water Truck:	Water Tanker, 7,000 Gal.		

Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	\$178.69	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	\$160.22	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	\$380.21	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$3,644.80	Support:	\$760.42	Maint:	\$407.85

Total work team cost/hour: \$4,813.07

MATERIAL QUANTITIES

3,477,782 **CCY** Initial volume: Swell factor: 1.000

Loose volume: 3,477,782 LCY

> Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

> Material Purchase Cost: \$0.00

> > \$0.00 Total Cost:

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Truck/Loader worksheer	Zoni u	1 ask # A2011			rage 2 01 3	
Payload Capacity:	175.79	LCY				
Truck Bed (volume) Basis	:					
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fii	nal Truck Volume	e Based on Number of	Loader Passes:	143.10	LCY	
Loading Tool Capacity			D .1	d' Classic	NT A	
Data 1 Committee	52,000	LCV (11)	Виск	tet Size Class:	NA	_
Rated Capacity: Bucket Fill Factor:	53.000	LCY (heaped)	andriblated (60	750/ \ 0.675		_
Adjusted Capacity:	35.775	LCY	oorly blasted (60	- 73%) 0.073		_
Aujusted Capacity.	35.775	LCI				
Job Condition Correction	ns:	Sit	e Altitude (ft.): 9	<u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	,		
Job Efficiency:	0.830	0.830	(CAT HB)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tim		0.813 er of Loading Tool Pas	ses Required to I	Fill Truck:	4	passes
	<u>e:</u> Numbe	1	sses Required to I	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	e: Numbe	er of Loading Tool Pas	ses Required to I	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Numbe vels: e vs. Job Conditio e within this Bas	er of Loading Tool Pas on Rating: NA sic Rating: NA	sses Required to I	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Number vels: e vs. Job Condition e within this Base — Material Desc	er of Loading Tool Pas on Rating: NA sic Rating: NA	sses Required to I	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	e: Number vels: e vs. Job Condition e within this Base - Material Descent.):	er of Loading Tool Pas on Rating: NA sic Rating: NA	sses Required to I	Fill Truck:		passes
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Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Material Stockpile Truck Ownership Operation Dump Target Truck Cycle Time: Truck Exchange Time	e: Number vels: e vs. Job Condition within this Base — Material Descrit.): S - Unadjusted Buses: Mixed materials: No adjustme: Common ower: Constant oper: Nominal targetime: 0.80 me: 0.80 me: 2.095	er of Loading Tool Pas on Rating: NA ription: Maneuver: NA rasic Loader Cycle Time rial 0.02 ent - factor not applicate vnership of trucks and eration -0.04 get 0.00 Net Cycle Time Adjusted Loade Net Load Ti Minutes	ne (load, dump, noble 0.00 loaders -0.04 loaders -0.04 loaders -me per Truck:	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.665 2.095 for site altitude:	OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO	utes

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6052.00	-7.60	3.00	-4.60	1870	3.407

Haul Time: 3.407 minutes

Return Route:

rectarii rec	ate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	6052.00	7.60	3.00	10.60	1734	3.804

Return Time: 3.804 minutes
Total Truck Cycle Time: 11.349 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour Truck Unit Production

756.56 LCY/Hour Adjusted for job efficiency: 627.94 LCY/Hour

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 2,511.78 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: 1,433.67 Hours

Unit cost: \$1.984 /LCY Total job cost: \$6,900,350

7	Task description:		Remove ROM			
te:	Cresson Project		Peri	mit Action: 2023	Permit/Job#:	M1980244
<u>]</u>	PROJECT	TIDENTIFIC	CATION			
	Task #:	A2100	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023 2:52:57 PM	County:	Teller	Filename:	M244-A2100
	User:	ZTT			<u> </u>	
	Ag	gency or organiz	zation name: DR	MS		
<u>]</u>		ency or organiz			Shift basis: 1 per day	
<u>]</u>		EQUIPMEN	TT COST	Equipment Description	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN		Equipment Description: KOMATSU 830E	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN Truck Lo	TT COST Dader Team -Truck	Equipment Description : KOMATSU 830E : LETOURNEAU L2350	Shift basis: 1 per day	
<u>]</u>		EQUIPMEN Truck Lo	OT COST Dader Team -Truck -Loader	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU	Shift basis: 1 per day	
<u>]</u>	HOURLY	Truck Lo	oader Team -Truck -Loader ipment -Load Area	Equipment Description : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU : NA	Shift basis: 1 per day	

Cost Breakdown:	Truck/Loa	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$2,591.92	Support:	\$380.21	Maint:	\$407.85

Total work team cost/hour: \$3,379.98

MATERIAL QUANTITIES

Initial volume: 12,587 CCY Swell factor: 1.000

Loose volume: 12,587 LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

Truck/Loader worksheet C	on u	1 ask # A2100			rage 2 01 3	
Payload Capacity:	175.79	LCY				
Truck Bed (volume) Basis						
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
Fir	al Truck Volume	e Based on Number of	Loader Passes:	143.10	LCY	
Loading Tool Capacity			D1	Class	NT A	
D. (. 1 C	52,000	LCV (1	Buck	tet Size Class:	NA	_
Rated Capacity: Bucket Fill Factor:	53.000	LCY (heaped)	andry blooted (60	750/ \ 0.675		_
Adjusted Capacity:	35.775	Blasted rock - po	borry brasted (60	- 73%) 0.073		_
Aujusted Capacity.	33.113	LCI				
Job Condition Correction	ns:	Sit	e Altitude (ft.): 9	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB	,		
Job Efficiency:	0.830	0.830	(CAT HB)		
Net Correction:	0.830	0.813				
Net Correction: Loading Tool Cycle Tim		0.813 er of Loading Tool Pas	ses Required to I	Fill Truck:	41	passes
	e: Numbe		ses Required to I	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	e: Numbe	er of Loading Tool Pas	ses Required to I	Fill Truck:	4	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Numbe	er of Loading Tool Pas on Rating: NA sic Rating: NA	ses Required to I	Fill Truck:	41	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Numbervels: vs. Job Condition e within this Bas – Material Desc	er of Loading Tool Pas on Rating: NA sic Rating: NA	ses Required to I	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	e: Numbervels: e vs. Job Condition e within this Base — Material Desc .):	er of Loading Tool Pas on Rating: NA sic Rating: NA	ses Required to I	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	e: Number vels: vs. Job Condition within this Bas Material Desc .):	on Rating: Sic Rating: NA ription: Maneuver: NA		Dump: 0.10		
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Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	e: Number vels: vels: vs. Job Condition e within this Bas – Material Desc .): S - Unadjusted B Mixed mater No adjustme Common ow	on Rating: NA Nic Rating: NA ription: Maneuver: NA rasic Loader Cycle Timerial 0.02 ent - factor not application of trucks and in the control of trucks a	ne (load, dump, n	Dump: 0.10 naneuver): Factor (min.) 0.020 0.000 -0.040	00 0.725 min Source (Cat HB)	
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1100111100						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1126.00	2.00	3.00	5.00	1550	0.996

Haul Time: 0.996 minutes

Return Route:

rectarii rec	ate.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1126.00	-2.00	3.00	1.00	3503	0.562

Return Time: 0.562 minutes
Total Truck Cycle Time: 5.696 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour

Truck Unit Production

1,507.44 LCY/Hour Adjusted for job efficiency: 1,251.17 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 2,502.35 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **5.19** Hours

Unit cost: \$1.393 /LCY Total job cost: **\$17,538**

: _	Cresson Project		Permit Action: _2023		Permit/Job#	M1980244
<u>P</u>	ROJECT	TIDENTIFICA	<u>TION</u>			
	Task #:	A2200	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A2200
		2:53:53 PM				
	User:	ZTT				
		gency or organizati	on name: DR	RMS		
<u>H</u>	Ag				Shift basis: 1 per day	
<u>H</u>	Ag	ency or organizati	COST	Equipment Descript		<u></u>
<u>H</u>	Ag	ency or organizati		Equipment Descript : KOMATSU 830E	ion	<u></u>
<u>H</u>	Ag	ency or organizati	COST	Equipment Descript : KOMATSU 830E : LETOURNEAU L2350	ion	<u></u>
<u>H</u>	Ag	ency or organizati	COST ler Team -Truck -Loader	Equipment Descript : KOMATSU 830E : LETOURNEAU L2350	ion	<u></u>
<u>H</u>	Ag	ency or organizati EQUIPMENT Truck Load	COST ler Team -Truck -Loader	Equipment Descript : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU	ion	<u>L</u>
<u>H</u>	Ag IOURLY	ency or organizati EQUIPMENT Truck Load	COST ler Team -Truck -Loader nent -Load Area -Dump Area	Equipment Descript : KOMATSU 830E : LETOURNEAU L2350 : Cat D10T - 10SU : NA	ion	

Cost Breakdown:	Truck/Loa	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	25	25
Ownership cost/hour:	\$207.26	\$859.02	\$178.69	NA	\$212.21	\$86.29
Operating cost/hour:	\$284.76	\$639.31	\$160.22	NA	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$34.42	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$526.44	\$1,539.04	\$380.21	NA	\$271.99	\$135.86
Number of Units:	2	1	1	0	1	1
Group Subtotals:	Work:	\$2,591.92	Support:	\$380.21	Maint:	\$407.85

Total work team cost/hour: \$3,379.98

MATERIAL QUANTITIES

CCY Initial volume: Swell factor: 1.000

Loose volume: 12,587 LCY

> Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost:

\$0.00 \$0.00 Total Cost:

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,800 Pounds/LCY

Description: Granite - Broken

Rated Payload: 492,200 Pounds

		Task # A2200			Page 2 of 3	
Payload Capacity:	175.79	LCY				
Truck Bed (volume) Basis	<u>:</u>					
Struck Volume:	153.00	LCY				
Heaped Volume:	192.00	LCY				
Average Volume:	172.50	LCY				
Adjusted Volume:	175.79	LCY				
	nal Truck Volum	e Based on Number of	Loader Passes:	143.10	LCY	
<u>Loading Tool Capacity</u>			Buck	et Size Class: N	A	
Rated Capacity:	53.000	LCY (heaped)		<u> </u>		
Bucket Fill Factor:	0.675	Blasted rock - po	oorly blasted (60	- 75%) 0.675		_
Adjusted Capacity:	35.775	LCY				_
Job Condition Correctio	ns:	Sit	e Altitude (ft.): 9	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	0.980	(CAT HB)		
Job Efficiency:	0.830	0.830	(CAT HB			
Net Correction:	0.830	0.813				
Loading Tool Cycle Tim	<u>e:</u> Numbe	er of Loading Tool Pas	ses Required to F	Fill Truck:	4 1	passes
Excavators and Front Sho		er of Loading Tool Pas	ses Required to F	Fill Truck:	1	passes
Excavators and Front Sho Machine Cycle Time	vels:	on Rating: NA	ses Required to F	Fill Truck:	4 1	passes
Excavators and Front Sho Machine Cycle Time Selected Valu	vels: e vs. Job Condition	on Rating: NA NA NA	ses Required to F	Fill Truck:	4 1	passes
Excavators and Front Sho Machine Cycle Time Selected Valu	vels: vs. Job Condition within this Base Material Desc	on Rating: NA NA NA	ses Required to F	Fill Truck:	4 1	passes
Excavators and Front Sho Machine Cycle Time Selected Valu Track Loaders	vels: e vs. Job Condition e within this Base - Material Desc 1.):	on Rating: NA NA NA	ses Required to F	Fill Truck: Dump:0.100		passes
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Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1126.00	2.00	3.00	5.00	1550	0.996

Haul Time: 0.996 minutes

Return Route:

rectarii rec	ate.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1126.00	-2.00	3.00	1.00	3503	0.562

Return Time: 0.562 minutes
Total Truck Cycle Time: 5.696 minutes

Loading Tool unit

Production 2,922.64 LCY/Hour Adjusted for job efficiency: 2,425.79 LCY/Hour

Truck Unit Production
1,507.44 LCY/Hour Adjusted for job efficiency: 1,251.17 LCY/Hour

Optimal No. of Trucks: 2 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 2,502.35 LCY/Hour Adjusted single truck/loader team production: 2,425.79 LCY/Hour Adjusted multiple truck/loader team production: 2,425.79 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Team(s) Total job time: **5.19** Hours

Unit cost: \$1.393 /LCY Total job cost: **\$17,538**

Site: Cresson Project		Permit Acti	on: 2023		Permit/Job#: _	M1980244
PROJECT IDEN' Task #: _A2300		State: Color		Ab		None
Date: 11/22/2		County: Teller	•		Filename: N	M244-A2300
User: $\frac{2:55:33}{ZTT}$	8 PM					
	organization nar	ne: DRMS				
HOURLY EQUIP	PMENT COST	<u>Γ</u>		Shift bas	is: <u>1 per day</u>	
			Equipment Descri	ption		
Ti	ruck Loader Tea		740			
Cunno	ort Equipment -L		T 988H D8T - 8SU			
Suppo		ump Area: NA				
Road Ma	intenance –Mot	1	T 16M			
	-Wa	ter Truck: Wa	ter Tanker, 7,000	Gal.		
			~			
Cost Breakdown:	Truck/Los	ader Team Loader	Support I Load Area	Equipment Dump Area	Mainten Motor Grade	ance Equipment Water Truck
	Truck	Loader	Load Area	Dump Area	Motor Grade	r water fruck
%Utilization-machine:	100	100	100	NA	2:	
Ownership cost/hour:	\$113.82	\$109.98	\$241.38	NA	\$212.2	1 \$86.2
Operating cost/hour:	\$81.91	\$95.55	\$143.92	NA	\$31.2	
%Utilization-riper:	NA	0	NA	NA	N/	
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	
Operator cost/hour:	\$32.98	\$40.71	\$41.30	NA	\$28.5	
Unit Subtotals:	\$228.71	\$246.24	\$426.60	NA	\$271.99	9 \$135.8
Number of Units:	7	1	1	0		1
Group Subtotals:	Work:	\$1,847.21	Support:	\$426.60	Maint	t: \$407.85
Total work team cost		66				
Initial volume:	592	CCY	y Swell	factor: 1.000		
Loose volume:	592			14001. 1.000		
Sou	arce of estimated of estimated swe Material Purch	volume: 2022 ell factor: Cat I	2 CC&V Provided Handbook	Estimate		
HOURLY PRO	To					

Pounds/LCY

Pounds

Material weight:

Description:

Rated Payload:

2,800

87,000

Granite - Broken

Payload Capacity:	31.07	LCY				
Truck Bed (volume) Basis Struck Volume:	24.20	LCY				
Heaped Volume:	31.40	LCY				
Average Volume:	27.80	LCY				
Adjusted Volume:	31.07	LCY				
Fir	nal Truck Volum	e Based on Number of	of Loader Passes:	31.05	LCY	
Loading Tool Capacity			Duol	Irat Ciga Class	NI A	
Rated Capacity:		LCY (heaped)		_	NA	
Bucket Fill Factor:			poorly blasted (60	0 - 75%) 0.675		_
Adjusted Capacity:	6.210	LCY				
Job Condition Correction	ns:	S	Site Altitude (ft.): 9	9500 feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.681	0.789				
Net Correction: Loading Tool Cycle Tim		0.789 er of Loading Tool P	asses Required to	Fill Truck:	5 1	passes
	e: Numbe		asses Required to	Fill Truck:	51	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	vels:	er of Loading Tool P	asses Required to	Fill Truck:	5	passes
Excavators and Front Sho Machine Cycle Time Selected Value	vels: Number of the Number of	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	5	passes
Excavators and Front Sho Machine Cycle Time Selected Value	vels: e vs. Job Condition the within this Bases Material Description	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	5	passes
Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	vels: e vs. Job Condition e within this Base s – Material Descript:	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	vels: e vs. Job Condition this Bases - Material Descent.):	er of Loading Tool Pool Rating: NA Sic Rating: NA Cription: Maneuver: NA		Dump: 0.10		
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute) Load: NA	vels: e vs. Job Condition we within this Bases — Material Descent.): The work of the within this Bases — Material Descent.	er of Loading Tool Pool Rating: NA Sic Rating: NA Cription: Maneuver: NA		Dump: 0.10	00	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mir Load: NA Wheel and Track Loader	vels: e vs. Job Condition we within this Bases a – Material Descent.): es - Unadjusted Bases	er of Loading Tool Pool Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle T		Dump: 0.10	00 0.575 min	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor	vels: e vs. Job Condition we within this Bases — Material Description.): The second of the second	er of Loading Tool Pool Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle T	ime (load, dump, 1	Dump: 0.10 maneuver): Factor (min.)	00 0.575 min	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material	vels: e vs. Job Condition we within this Bases — Material Description.): rs - Unadjusted Bases — Mixed material Description.	er of Loading Tool Property on Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle Tearing 0.02	ime (load, dump, 1	Dump: 0.10 maneuver): Factor (min.) 0.020	00 0.575 min Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile	vels: e vs. Job Condition we within this Bases — Material Description.): rs - Unadjusted Bases — Mixed material Description in the second in	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Taction 10.02 ent - factor not applic	ime (load, dump, 1	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000	00 0.575 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	vels: e vs. Job Condition we within this Bases — Material Description.): The second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the within this Bases — Mater	on Rating: NA sic Rating: NA oription: NA original 0.02 original 0.02 original 0.02 original o	ime (load, dump, 1	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040	00	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases — Material Description.): The second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the within this Bases — Mater	on Rating: NA sic Rating: NA oription: Maneuver: NA Basic Loader Cycle Taxonial 0.02 ent - factor not application of trucks and t	ime (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040	00	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases — Material Description.): The second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the within this Bases — Mater	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ta crial 0.02 ent - factor not applic wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases — Material Description.): The second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the within this Bases — Mater	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ta crial 0.02 ent - factor not applic wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	vels: e vs. Job Condition we within this Bases – Material Description.): The second of the within this Bases – Material Description. If the second of the within this Bases – Material Description. If the second of the within this Bases – Material Description. If the within this Bases – Mater	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ta crial 0.02 ent - factor not applic wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	vels: e vs. Job Condition we within this Bass — Material Desc n.): The search of the	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ta crial 0.02 ent - factor not applic wnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.515	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	vels: e vs. Job Condition the within this Bases — Material Description.): The second of the within this Bases — Material Description. If the second of the within this Bases — Material Description. If the within this Bases — Material Descripti	on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Terrial 0.02 ent - factor not applice whership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, 1 able 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Γime per Truck:	Dump: 0.10 maneuver): Factor (min.) 0.020 0.000 -0.040 0.000 -0.060 0.515 2.160	O0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9300.00	10.00	3.00	13.00	708	13.198

Haul Time: **13.198** minutes Return Route: Haul Distance Grade (%) Roll. Res **Total Res** Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 9300.00 3.00 -7.00 3706 -10.00 2.587

Return Time: 2.587 minutes
Total Truck Cycle Time: 20.010 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

93.10 LCY/Hour Adjusted for job efficiency: 514.51 LCY/Hour Adjusted for job efficiency: 77.28 LCY/Hour Optimal No. of Trucks: 7 Truck(s)

Selected Number of Trucks: 7 Truck(s)

Adjusted hourly truck team production: 540.93 LCY/Hour Adjusted single truck/loader team production: 514.51 LCY/Hour Adjusted multiple truck/loader team production: 514.51 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 1.15
 Hours

 Unit cost:
 \$5.212
 /LCY
 Total job cost:
 \$3,086

BULLDOZER RIPPING WORK

	Task description:	Foun	dations and Building	s - Ripping				
Site:	Cresson Projec	t	Permit Action	: <u>2023</u>	Peri	mit/Job#:	M19802	14
	PROJECT IDE	NTIFICATIO	<u>ON</u>					
	Task #: A300	00	State: Colorad	0	Abbre	viation:	None	
	Date: 11/2	1/2023 :50 PM	County: Teller			ename:	M244-A3	000
	User: ZTT							
		· ·	name: DRMS					
	HOURLY EQU							
	Basic M		D7R DS Series II LGI	•	Horsepower:		240	
	Ripper Attac	chment: 3-S	hank Ripper		Shift Basis:		oer day CRG)	
	Cost Brookdown				Data Source.	((CKU)	_
	Cost Breakdown:				Utilization %			
		Ownership Co	st/Hour:	\$114.76	NA			
		Operating Co		\$91.98	100			
		Ownership Co		\$9.06	NA			
	Rippe	er Operating Co		\$5.02	100			
		Operator Co Total Unit Co		\$41.30 \$262.12	NA			
			·					
		Total Fleet Co	ost/Hour: \$2	262.12				
	MATERIAL QU	<u>UANTITIES</u>	S	elected estimating	g method: Area			
	Alternate Methods	<u>.</u>						
smic:	NA		Bank Volume	: NA	BCY		NA	
Area:	9.89	acres	Rip Depth (ft):		Volume: 39	,890		BCY or 0
		Source of estin	nated quantity: 2022	2 CC&V Provided	l Estimate			
	HOURLY PRO		1 7					
		<u>DUCTION</u>						
	Seismic:		Seismic Velocity:	NA	feet/secon	vd.		
			ecisime velocity.	IVA	icct/secon	iu		
	Area:							
			e Ripping Depth:	2.45	feet/pass			
			e Ripping Width: Ripping Length:	6.50 184.00	feet/pass feet/pass			
			nge Dozer Speed:	88.00	feet/minu	te		
			Maneuver Time:	0.25	minutes/p			
		_	ion per unit area:	0.704	acres/hour			
	Job Condition Corn	rection Factors						
	Unac	djusted Hourly	Unit Production:	0.704	Acres/hr			
			Site Altitude:	9,500	feet			
			Altitude Adj:	1.00	(CAT HB	*		
			Job Efficiency:	0.83	(1 shift/da	•		
			Net Correction:	0.83	multiplier			
			Hourly Unit Productio		Acres/hr			
		· ·	Hourly Fleet Productio	n: 0.58	Acres/hr			
	JOB TIME ANI	D COST						
	Fleet size:	1	Grader(s)	Total job tin	ne: 16	.93	Но	ırs
	Unit cost:	\$448.758	Per acre	Total job co	oct· \$1	438		

Task description:	Founda	tions and Buildin	gs - B&G and To	opsoil - 5.1k Hau	1	
Site: Cresson Projec	t	Permit Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #: A300 Date: 11/2)1	State: Colora County: Teller	ado	Ab	breviation: No Filename: M2	ne 244-A3001
Agency o	r organization naı	ne: DRMS				
HOURLY EQU	IPMENT COS				is: <u>1 per day</u>	
	Truck Loader Tea		Equipment Descri	ption		
	Truck Louder Tee	-Loader: CA	Г 966Н			
Sup	port Equipment -I		D7R DS Series II			
Road N	u Maintenance –Mot	1	D7R DS Series II Γ 16Μ	LGP		
			er Tanker, 7,000	Gal.		
C (D)	T 1 /	1 7	g		24.	F
Cost Breakdown:	Truck/Lo Truck	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenan Motor Grader	water Truck
0/11/11 - 11 - 11 - 11 - 11				•		
%Utilization-machine: Ownership cost/hour:	\$130.23	\$65.69	100 \$114.76	100 \$114.76	\$212.21	\$86.29
Operating cost/hour:	\$77.33	\$48.09	\$91.98	\$91.98	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.54	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$240.10	\$154.49	\$248.04	\$248.04	\$271.99	\$135.86
Number of Units:	6	1	1	1	1	1
Group Subtotals:	Work:	\$1,595.09	Support:	\$496.08	Maint:	\$407.85
Total work team co		02				
Initial volume Loose volume		CCY LCY		factor: 1.215		
	ource of estimated e of estimated swo Material Purch To	ell factor: Cat H		Estimate		
HOURLY PRO	<u>ODUCTION</u>					
Truck Capacity:	ight) Pagig					
<u>Truck Payload (we</u> Material			Pounds/LCY			
	ription: Top So		Pounds			

asses:	LCY NA	asses
Bucket Size Class:	NA	isses
Bucket Size Class:	NA	isses
Bucket Size Class:	NA	isses
Bucket Size Class:	NA	isses
Bucket Size Class:	NA	isses
Bucket Size Class:	NA	isses
(100-120%) 1.100 e (ft.): 9500 feet Source AT HB) AT HB)		isses
(100-120%) 1.100 e (ft.): 9500 feet Source AT HB) AT HB)		isses
e (ft.): 9500 feet Source AT HB) AT HB)		isses
e (ft.): 9500 feet Source AT HB) AT HB)	pa	isses
Source AT HB) AT HB)	ga pa	isses
Source AT HB) AT HB)		isses
AT HB) AT HB)	3 pa	isses
AT HB)	3 pa	usses
<u> </u>	pa	ısses
red to Fill Truck:	pa	ısses
red to Fill Truck:	pa	isses
Dump: 0.1	00	
lump, maneuver):	0.500 minut	es
Factor (min.)	Source	
0.020	(Cat HB)	
0.000	(Cat HB)	
	(Cat HB)	
0.700		
djusted for site altitude:	0.500	Minutes
	0.980	Minutes
djusted for site altitude:	0.900	Minutes
n	dump, maneuver): Factor (min.) 0.020 0.000	Source 0.500 minut Factor (min.) Source 0.020 (Cat HB) 0.000 (Cat HB) 0.04 -0.040 (Cat HB) -0.040 (Cat HB) 0.000 (Cat HB) ment:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5100.00	3.00	3.00	6.00	1171	4.426

Haul Time: 4.426 minutes

Return Ro	oute:			=		
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	5100.00	-3.00	3.00	0.00	3159	1.744

Truck(s)

Return Time: 1.744 minutes Total Truck Cycle Time: 8.550 minutes

Selected Number of Trucks: 6 Truck(s)

Loading Tool unit

Adjusted for job efficiency: 555.20 LCY/Hour Production ____ 668.92 LCY/Hour Truck Unit Production 115.79 LCY/Hour Adjusted for job efficiency: 96.11 LCY/Hour

> Adjusted hourly truck team production: 576.63 LCY/Hour Adjusted single truck/loader team production: 555.20 LCY/Hour Adjusted multiple truck/loader team production: 555.20 LCY/Hour

JOB TIME AND COST

Optimal No. of Trucks: 6

Fleet size: 1 Team(s) Total job time: **69.75** Hours Unit cost: \$4.501 /LCY Total job cost: **\$174,308**

Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244
DDAIECT IDEN	TTIEICATION	T				
PROJECT IDEN		=	. 1.	A 1.	Las tations No.	
Task #: A3002 Date: 11/22		State: Colora County: Teller		Ab	breviation: No Filename: M2	ne 244-A3002
3:01:0		20000			111011111111111111111111111111111111111	
User: ZTT						
Agency or	organization nar	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>r</u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
Т	Truck Loader Tea		725			
Sunn	ort Equipment -I		T 966H D7R DS Series II	I CP		
Бирр			D7R DS Series II			
Road M	aintenance –Mot	or Grader: CA	T 16M			
-	-Wa	ater Truck: Wa	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support]	Equipment	Maintenan	ce Equipment
Cost Breakdown.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$130.23	\$65.69	\$114.76	\$114.76	\$212.21	\$86.29
Operating cost/hour:	\$77.33	\$48.09	\$91.98	\$91.98	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
ipper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.54	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$240.10	\$154.49	\$248.04	\$248.04	\$271.99	\$135.86
Number of Units:	Work:	\$2,315.39	Summant.	\$496.08	1 Maint:	\$407.85
Group Subtotals:		. ,	Support:	\$490.00	Maiit.	\$407.63
Total work team cos	st/hour: \$3,219.	32				
MATERIAL QU	ANTITIES					
•						
Initial volume: Loose volume:		CCY 4 LCY		factor: 1.215		
	urce of estimated of estimated swe		CC&V Provided Handbook	Estimate		
Source	Material Purch					
		otal Cost: \$0.00				
HOURLY PRO	DUCTION					
Truck Capacity:	DUCTION					
Truck Payload (weight	ght) Basis:					
Truck rayload (well						
Material v			Pounds/LCY			

	nt'd	Task # A300	32		Page 2 of 3	
Payload Capacity:	32.50	LCY	7			
Truck Bed (volume) Basis:						
Struck Volume:	14.50	LCY				
Heaped Volume:	18.70	LCY				
Average Volume:	16.60	LCY				
Adjusted Volume:	18.70	LCY				
Final	Truck Volume	e Based on Number of	of Loader Passes:	16.50	LCY	
Loading Tool Capacity						
			Buck	cet Size Class: N	A	_
Rated Capacity:	5.000	LCY (heaped)				
Bucket Fill Factor:	1.100	Other - rock/di	irt mixtures (100	-120%) 1.100		_
Adjusted Capacity:	5.500	LCY				=
Job Condition Corrections	<u>:</u>	S	Site Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB	5)		
Job Efficiency:	0.830	0.830	(CAT HB	5)		
Net Correction:	0.830	0.830				
Net Correction: Loading Tool Cycle Time:		0.830 er of Loading Tool P	asses Required to	Fill Truck:	3 1	oasses
Loading Tool Cycle Time:	Numbe		asses Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Time: Excavators and Front Shove	Numbe	er of Loading Tool P	asses Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Time:	Numberls: S. Job Condition	er of Loading Tool P	asses Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	Numberls: s. Job Condition within this Bas	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	3 1	oasses
Excavators and Front Shove Machine Cycle Time v Selected Value	Numbers Numbers	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	3 1	oasses
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders —	Numberls: S. Job Condition Within this Base Material Desc	er of Loading Tool P on Rating: NA sic Rating: NA	asses Required to	Fill Truck:		passes
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.):	Numbers S. Job Condition Within this Base Material Descent	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0.100		
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA	Numbers S. Job Condition Within this Base Material Descent	on Rating: NA Sic Rating: NA Pription: Maneuver: NA		Dump: 0.100)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders —	Numbers S. Job Condition Within this Base Material Descent	on Rating: NA		Dump: 0.100) min	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors	Numbers Support Numbers Support Numbers Support Numbers Support Numbers Support Numbers Support Numbers Number	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Telephone Tactor not applice	ime (load, dump, r	Dump: 0.100 naneuver): 0.100 Factor (min.)	.500 min	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material:	Numbers Support Numbers Support Numbers Support Numbers Support Numbers Support Numbers Support Numbers Number	on Rating: NA	ime (load, dump, r	Dump: 0.100 naneuver): 0. Factor (min.) 0.020	.500 min Source (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	Number State Number State No. Adjusted Mixed mater No. adjustment Common owners.	on Rating: NA Sic Rating: Maneuver: NA Sasic Loader Cycle Telephone Tactor not applice	ime (load, dump, r	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership:	Number State Number State No. Adjusted Mixed mater No. adjustment Common owners.	on Rating: NA	ime (load, dump, r cable 0.00 d loaders -0.04	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number Is: s. Job Condition within this Base Material Description: Unadjusted B Mixed mater No adjustment Common ow Constant open	on Rating: NA	rime (load, dump, roable 0.00 d loaders -0.04	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number Is: s. Job Condition within this Base Material Description: Unadjusted B Mixed mater No adjustment Common ow Constant open	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number Is: s. Job Condition within this Base Material Description: Unadjusted B Mixed mater No adjustment Common ow Constant open	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	rime (load, dump, roable 0.00 d loaders -0.04	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Number Is: s. Job Condition within this Base Material Description: Unadjusted B Mixed mater No adjustment Common ow Constant open	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, reable 0.00 d loaders -0.04 ime Adjustment: der Cycle Time:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time	Number ls: s. Job Condition within this Base Material Description: Unadjusted B Mixed mater No adjustme Common ow Constant open Nominal targets: 0.50	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Sasic Loader Cycle Townership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load Minutes	ime (load, dump, reable 0.00 d loaders -0.04 dime Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440 0.980 for site altitude:	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders — Cycle Time Elements (min.): Load: NA Wheel and Track Loaders — Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Number ls: s. Job Condition within this Base Material Description: Unadjusted B Mixed mater No adjustment Common own Constant open Nominal targets: 0.50 0.980	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA Prial 0.02 Part - factor not applice vinership of trucks and geration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, reable 0.00 d loaders -0.04 d loaders -0.04 dime Adjustment: der Cycle Time: Time per Truck:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440 0.980	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	8300.00	5.00	3.00	8.00	936	8.915

Haul Time: **8.915** minutes Return Route: Haul Distance Grade (%) Roll. Res **Total Res** Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 8300.00 3.00 -2.00 3159 -5.00 2.709

Return Time: 2.709 minutes
Total Truck Cycle Time: 14.004 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

70.69 LCY/Hour Adjusted for job efficiency: 555.20 LCY/Hour Adjusted for job efficiency: 58.68 LCY/Hour Optimal No. of Trucks: 9 Truck(s)

Selected Number of Trucks: 9 Truck(s)

Adjusted hourly truck team production: 528.08 LCY/Hour Adjusted single truck/loader team production: 528.08 LCY/Hour Adjusted multiple truck/loader team production: 528.08 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 5.75
 Hours

 Unit cost:
 \$6.096
 /LCY
 Total job cost:
 \$18,495

Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDEN	TIFICATION	Ţ				
Task #: A3003		State: Colora	ado	۸h	breviation: No	na
Date: 11/22		County: Teller		A0		244-A3003
3:01:5						
User: ZTT						
Agency or	organization nar	ne: DRMS				
HOURLY EQUI	PMENT COS	<u>r</u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
Т	Truck Loader Tea		725			
Sunn	ort Equipment -I		T 966H D7R DS Series II	I CP		
Зирр			D7R DS Series II			
Road M	aintenance –Mot	or Grader: CA	T 16M			
	-Wa	ater Truck: Wa	ter Tanker, 7,000	Gal.		
Cost Prockdown	Tmrak/Lo	ader Team	Cummont 1	Cavimment	Maintanam	as Equipment
Cost Breakdown:	Truck	Loader	Load Area	Equipment Dump Area	Motor Grader	Water Truck
Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$130.23	\$65.69	\$114.76	\$114.76	\$212.21	\$86.29
Operating cost/hour:	\$77.33	\$48.09	\$91.98	\$91.98	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
ipper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.54	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$240.10	\$154.49	\$248.04	\$248.04	\$271.99	\$135.86
Number of Units:	10	1	1	0.406.00	1	¢407.05
Group Subtotals:	Work:	\$2,555.49	Support:	\$496.08	Maint:	\$407.85
Total work team cos	st/hour: \$3,459.	42				
MATERIAL QU	ANTITIES					
•						
Initial volume:		2 CCY LCY		factor: 1.215		
Loose volume:						
	urce of estimated		CC&V Provided	Estimate		
Source	of estimated swe Material Purch		Handbook			
		otal Cost: $\frac{$0.00}{$0.00}$				
HOURLY PRO	<u>DUCTION</u>					
Truck Capacity:						
Truck Payload (wei			Pounds/LCY	-		
N # 4 1						
Material w	veight: $\frac{1,600}{\text{Top So}}$	oil	Pounds/LC i			

Truck/Loader Worksheet Co		Task # A300	3			
Payload Capacity:	32.50	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	14.50	LCY				
Heaped Volume:	18.70	LCY				
Average Volume:	16.60	LCY				
Adjusted Volume:	18.70	LCY				
Fina	l Truck Volum	ne Based on Number o	of Loader Passes:	16.50	LCY	
Loading Tool Capacity						
<u>.</u>			Rucl	ket Size Class: N	Α	
Rated Capacity:	5.000	LCY (heaped)	Duci	Ket Bize Class. 11	7 1	_
Bucket Fill Factor:	1.100	Other - rock/di	rt miyturos (100	1-120%) 1.100		_
	5.500	LCY	it illixtules (100	-120%) 1.100		-
Adjusted Capacity:	5.500					
Job Condition Corrections			ite Altitude (ft.):	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Net Correction: Loading Tool Cycle Time:		0.830 er of Loading Tool Pa	asses Required to	Fill Truck:	3 1	oasses
Loading Tool Cycle Time:	. Numb		asses Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Time: Excavators and Front Shove	Numb	er of Loading Tool Pa	asses Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Time:	Numbels: vs. Job Conditi	er of Loading Tool Pa	asses Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v	Numbels: vs. Job Conditi within this Bas	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	3 1	passes
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value	Numbels: vs. Job Conditi within this Base Material Desc	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:	3 1	oasses
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders –	Numbels: vs. Job Conditi within this Base Material Desce	er of Loading Tool Pa on Rating: NA sic Rating: NA	asses Required to	Fill Truck:		passes
Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.)	Numbels: vs. Job Conditi within this Base Material Descent	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.100		
Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders	Numbels: vs. Job Conditi within this Base Material Descent	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA		Dump: 0.100	.500 min	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors	Numbels: vs. Job Conditi within this Base Material Descent : - Unadjusted E	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ti		Dump: 0.100 maneuver): 0. Factor (min.)	.500 minu	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material:	Numbels: vs. Job Conditi within this Base Material Descent : - Unadjusted E	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Ti	me (load, dump, r	Dump: 0.100 maneuver): 0. Factor (min.) 0.020	.500 minu Source (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	Numbels: vs. Job Conditi within this Base Material Descent : - Unadjusted E Mixed mate	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti crial 0.02 ent - factor not applica	me (load, dump, r	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000	.500 mino Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	Numbels: vs. Job Conditi within this Base Material Descent : - Unadjusted E Mixed mate No adjustme Common ov	er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ti crial 0.02 ent - factor not applications and single parts of trucks and	me (load, dump, r	Dump: 0.100 maneuver): 0. Factor (min.) 0.020	Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	Numbels: vs. Job Conditi within this Base Material Descent : - Unadjusted E Mixed mate No adjustme Common ov	on Rating: NA sic Rating: NA oription: Maneuver: NA oription: NA original 0.02 original 0.02 original 0.02 original ori	me (load, dump, r	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040	.500 mino Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbels: vs. Job Conditi within this Base Material Descent Unadjusted E Mixed mate No adjustme Common ov Constant op	on Rating: NA Sic Rating: NA Stating: NA S	me (load, dump, r	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbels: vs. Job Conditi within this Base Material Descent Unadjusted E Mixed mate No adjustme Common ov Constant op	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application applicatio	me (load, dump, rable 0.00 d loaders -0.04	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbels: vs. Job Conditi within this Base Material Descent Unadjusted E Mixed mate No adjustme Common ov Constant op	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not application applicatio	me (load, dump, rable 0.00 d loaders -0.04 me Adjustment:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Numbels: vs. Job Conditi within this Base Material Descent Unadjusted E Mixed mate No adjustme Common ov Constant op	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not application of trucks and erration -0.04 get 0.00 Net Cycle Tierial Adjusted Load	me (load, dump, rable 0.00 decided loaders -0.04 decided loaders -	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time of Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Numbels: vs. Job Conditi within this Base Material Descent Unadjusted E Mixed mate No adjustme Common ov Constant op Nominal tar	on Rating: NA Sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Tierial 0.02 ent - factor not application of trucks and erration -0.04 get 0.00 Net Cycle Tierial Adjusted Load	me (load, dump, rable 0.00 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders - Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	Numbels: vs. Job Conditi within this Base-Material Descent - Unadjusted E Mixed mate No adjustme Common ov Constant op Nominal tar	on Rating: on Rating: NA sic Rating: Maneuver: Maneuver: NA Basic Loader Cycle Ti rial 0.02 ent - factor not applicate and erration -0.04 get 0.00 Net Cycle Tin Adjusted Load Net Load T	me (load, dump, rable 0.00 dl loaders -0.04 dl loaders -0.04 dl loaders -Truck:	Dump: 0.100 maneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440 0.980	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	9300.00	10.00	3.00	13.00	586	15.888

Haul Time: **15.888** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 9300.00 3.00 -7.00 3159 -10.00 3.035

Return Time: 3.035 minutes
Total Truck Cycle Time: 21.303 minutes

Loading Tool unit

Production Truck Unit Production

Adjusted for job efficiency: 555.20 LCY/Hour Truck Unit Production

46.47 LCY/Hour Adjusted for job efficiency: 38.57 LCY/Hour Optimal No. of Trucks: 14 Truck(s) Selected Number of Trucks: 10 Truck(s)

Adjusted hourly truck team production: 385.72 LCY/Hour Adjusted single truck/loader team production: 385.72 LCY/Hour Adjusted multiple truck/loader team production: 385.72 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 16.47
 Hours

 Unit cost:
 \$8.969
 /LCY
 Total job cost:
 \$56,970

Site: Cresson Project		Permit Action	on: 2023		Permit/Job#: M	1980244
PROJECT IDEN	TIFICATION	I				
Task #: A3004		State: Colors	ado	Ah	breviation: No	ne
Date: 11/22		County: Teller				244-A3004
	16 PM					
User: ZTT						
Agency or	organization nar	ne: DRMS				
HOURLY EQUI	PMENT COS	<u>r</u>		Shift bas	is: 1 per day	
			Equipment Descri	ption		
Т	Truck Loader Tea		725 T-066H			
Supp	ort Equipment -I		T 966H D7R DS Series II	LGP		
Барр			D7R DS Series II			
Road M	aintenance –Mot		T 16M			
	-Wa	ater Truck: Wa	ter Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo	ader Team	Support 1	Equipment	Maintenan	ce Equipment
OOS DI CHILIO WIII.	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$130.23	\$65.69	\$114.76	\$114.76	\$212.21	\$86.29
Operating cost/hour:	\$77.33	\$48.09	\$91.98	\$91.98	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
ipper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.54	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$240.10	\$154.49	\$248.04	\$248.04	\$271.99	\$135.86
Number of Units:	10 Work:	\$2,555.49	Supports	\$496.08	1 Maint:	\$407.85
Group Subtotals:			Support:	\$490.08	Maint:	\$407.85
Total work team cos	st/hour: \$3,459.	42				
MATERIAL QU	ANTITIES					
Initial volume:		CCY	Swall	factor: 1.215		
Loose volume:				1actor. 1.213		
So	urce of estimated		CC&V Provided	Estimata		
	of estimated swe		Handbook	Estimate		
	Material Purch					
	To	otal Cost: \$0.00)			
HOURLY PRO	DUCTION					
Truck Capacity:						
Truck Payload (wei	ght) Basis:					
•						
Material v		_:1	Pounds/LCY	-		

Payload Capacity:	32.50					
	32.30	LCY				
Truck Bed (volume) Basis:						
Struck Volume: _	14.50	LCY				
Heaped Volume:	18.70	LCY				
Average Volume:	16.60	LCY				
Adjusted Volume:	18.70	LCY				
Final	l Truck Volume	e Based on Number of	Loader Passes:	16.50	LCY	
Loading Tool Capacity						
			Buck	et Size Class: N	A	
Rated Capacity:	5.000	LCY (heaped)				_
Bucket Fill Factor:	1.100	Other - rock/dirt	mixtures (100-	-120%) 1.100		_
Adjusted Capacity:	5.500	LCY	inixtures (100	12070) 1.100		_
rajusted capacity.	2.200					
Job Condition Corrections	_		e Altitude (ft.): 9	500 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB)			
Job Efficiency:	0.830	0.830	(CAT HB))		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Numbe	er of Loading Tool Pas	ses Required to F	Fill Truck:	3 1	passes
Excavators and Front Shove	-1s-					
Lacavators and Front Silove	2151					
Machine Cycle Time v Selected Value	vs. Job Condition					
Machine Cycle Time v	vs. Job Conditions within this Bas	ic Rating: NA				
Machine Cycle Time v Selected Value Track Loaders –	vs. Job Condition within this Base Material Desc	ic Rating: NA				
Machine Cycle Time v Selected Value Track Loaders –	vs. Job Condition within this Base Material Descent	ic Rating: NA		Dump: 0.100		
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.)	vs. Job Condition within this Base Material Descent Material Descent	ic Rating: NA ription: Maneuver: NA	ne (load, dump, m	•	500 min	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA	vs. Job Condition within this Base Material Descent Material Descent	ic Rating: NA ription: Maneuver: NA	ne (load, dump, m	•		utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders	vs. Job Condition within this Base Material Descent Material Descent	ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim	ne (load, dump, m	naneuver): 0.	500 min	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders –	vs. Job Condition within this Base Material Descent : - Unadjusted B Mixed mater	ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tim		naneuver): 0. Factor (min.)	500 min	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors Material:	vs. Job Condition within this Base Material Descent Process Material Descent Process Material Descent Process Material Descent Process Mixed Mixed Material No adjustment Process Material Proces	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Timerial 0.02	ole 0.00	naneuver): 0. Factor (min.) 0.020	500 min Source (Cat HB)	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile:	vs. Job Condition within this Base Material Descent Process Material Descent Process Material Descent Process Material Descent Process Mixed Mixed Material No adjustment Process Material Proces	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Time and 0.02 ont - factor not applications and one of trucks a	ole 0.00	naneuver): 0. Factor (min.) 0.020 0.000	Source (Cat HB) (Cat HB)	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	vs. Job Condition within this Base Material Descent : - Unadjusted B Mixed mater No adjustme Common ow	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Tim rial 0.02 ant - factor not applicate mership of trucks and peration -0.04 get 0.00	ble 0.00 loaders -0.04	Factor (min.) 0.020 0.000 -0.040	Source (Cat HB) (Cat HB) (Cat HB)	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Base Material Descent Programme Material Descent Programme Mixed Base Mixed Mixed Material Programme Programme Mixed Mix	Maneuver: NA Massic Loader Cycle Time Maneuver: NA asic Loader Cycle Time Maneuver: NA Maneuver: NA Asic Loader Cycle Time Maneuver: NA Maneuver: NA Asic Loader Cycle Time Maneuver: NA Maneuver: NA Maneuver: NA Asic Loader Cycle Time Maneuver: NA Maneuver	ole 0.00 loaders -0.04 e Adjustment:	Factor (min.) 0.020 0.000 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Base Material Descent Programme Material Descent Programme Mixed Base Mixed Mixed Material Programme Programme Mixed Mix	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Time rial 0.02 rnt - factor not applicate rnership of trucks and reation -0.04 get 0.00 Net Cycle Time Adjusted Loade	ble 0.00 loaders -0.04 le Adjustment: er Cycle Time:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Base Material Descent Programme Material Descent Programme Mixed Base Mixed Mixed Material Programme Programme Mixed Mix	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Time rial 0.02 rnt - factor not applicate rnership of trucks and reation -0.04 get 0.00 Net Cycle Time Adjusted Loade	ole 0.00 loaders -0.04 e Adjustment:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	vs. Job Condition within this Base Material Descent Programme Material Descent Programme Mixed Base Mixed Mixed Material Programme Programme Mixed Mix	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Time rial 0.02 rnt - factor not applicate rnership of trucks and reation -0.04 get 0.00 Net Cycle Time Adjusted Loade	ble 0.00 loaders -0.04 le Adjustment: er Cycle Time:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	within this Base Material Descentrial Desc	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Time rial 0.02 rnt - factor not applicate rnership of trucks and reation -0.04 get 0.00 Net Cycle Time Adjusted Loade	ble 0.00 loaders -0.04 lee Adjustment: er Cycle Time: me per Truck:	Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time:	ws. Job Condition within this Base Material Descent Material Descent Material Descent Material Descent Mixed Material Mixed Material No adjustment Common ow Constant open Nominal targetics: O.50 O.50	ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Time rial 0.02 nt - factor not applicate rnership of trucks and interaction -0.04 get 0.00 Net Cycle Time Adjusted Loade Net Load Ti	ble 0.00 loaders -0.04 le Adjustment: er Cycle Time: me per Truck: Adjusted	naneuver): 0. Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.440 0.980	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes Minut _ Minut

10300.00

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	10300.00	3.00	3.00	6.00	1171	8.866

Haul Time: **8.866** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min)

3.00

-3.00

Return Time: 3.390 minutes
Total Truck Cycle Time: 14.636 minutes

3159

3.390

Loading Tool unit

Production 668.92 LCY/Hour Adjusted for job efficiency: 555.20 LCY/Hour Truck Unit Production 67.64 LCY/Hour Adjusted for job efficiency: 56.14 LCY/Hour

0.00

Optimal No. of Trucks: 10 Truck(s) Selected Number of Trucks: 10 Truck(s)

Adjusted hourly truck team production: 561.42 LCY/Hour Adjusted single truck/loader team production: 555.20 LCY/Hour Adjusted multiple truck/loader team production: 555.20 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 95.67
 Hours

 Unit cost:
 \$6.231
 /LCY
 Total job cost:
 \$330,955

Task description:	Founda	tions and Buildin	gs - B&G and To	opsoil - 11.4k Ha	ul	
Site: Cresson Projec	<u>t</u>	Permit Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #: A300 Date: 11/2	05	State: Colora County: Teller	ado	Ab	breviation: No Filename: M2	ne 244-A3005
Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS				is: 1 per day	
	Truck Loader Tea		Equipment Descri	ption		
	Truck Loader Tee		Г 966H			
Sup	port Equipment -I		D7R DS Series II			
Poad N	-D Maintenance –Mot	1	D7R DS Series II Γ 16Μ	LGP		
Road N			er Tanker, 7,000	Gal.		
Cost Breakdown:	Truck/Lo Truck	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenan Motor Grader	water Truck
				•		
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$130.23	\$65.69	\$114.76	\$114.76	\$212.21	\$86.29
Operating cost/hour:	\$77.33	\$48.09	\$91.98	\$91.98	\$31.22	\$28.44
%Utilization-riper: Ripper own. cost/hour:	NA NA	\$0.00	NA \$0.00	NA \$0.00	NA \$0.00	NA \$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.54	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$240.10	\$154.49	\$248.04	\$248.04	\$271.99	\$135.86
Number of Units:	9	1	1	1	1	1
Group Subtotals:	Work:	\$2,315.39	Support:	\$496.08	Maint:	\$407.85
Total work team co	ost/hour: \$3,219.	32				
MATERIAL QU		CCV	C 11	C 1 215		
Initial volume Loose volume	e: 477			factor: 1.215		
	ource of estimated e of estimated swo Material Purch To	ell factor: Cat H		Estimate		
HOURLY PRO	<u>ODUCTION</u>					
Truck Capacity: Truck Payload (we			Daniel J. CV			
Material Desc Rated P	ription: Top So		Pounds/LCY Pounds			

Payload Capacit						
	y: 32.50		LCY			
Truck Bed (volume) Bas						
Struck Volume		LCY				
Heaped Volume		LCY				
Average Volume		LCY				
Adjusted Volume	:18.70	LCY				
	Final Truck Vol	ume Based on No	umber of Loader Pa	sses: 16.50	LCY	
<u>Loading Tool Capacity</u>				Bucket Size Class	: NA	
Rated Capacity	y: 5.000	0 LCY (h	leaped)	Bucket Size Class	. NA	
Bucket Fill Facto			rock/dirt mixtures	(100-120%) 1.100		
Adjusted Capacit				(
Job Condition Correcti				(ft.): <u>9500</u> feet		
	Truck	Load		ource		
Altitude Adj:	1.000	1.00	,	T HB)		
Job Efficiency:	0.830	0.83	60 (CA	AT HB)		
Net Correction:	0.830	0.83	30			
Loading Tool Cycle Ti	me: Nu	mber of Loading	Tool Passes Requir	ed to Fill Truck:	3	passes
Excavators and Front Sh			1	_		F
Executators and Front St		dition Rating:	NA			
Machine Cycle Tir						
Machine Cycle Tir Selected Va	alue within this		NA			
Selected Va		Basic Rating:				
Selected Va	alue within this ers – Material D	Basic Rating:				
Selected Va Track Loade	alue within this ers – Material D	Basic Rating:		Dump:	0.100	
Selected Va Track Loade Cycle Time Elements (m	alue within this ers – Material D nin.):	Basic Rating: Description: Maneuver:	NA NA	• _	0.100	- minutes
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load	alue within this ers – Material D nin.): lers - Unadjuste	Basic Rating: Description: Maneuver:	NA NA	ımp, maneuver):	0.500	
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor	alue within this ers – Material D nin.): Hers - Unadjuste	Basic Rating: Description: Maneuver: d Basic Loader C	NA NA	imp, maneuver): Factor (mi	0.500 n.) Source	ce
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor Materia	alue within this ers – Material Dinin.): ders - Unadjuste ors ial: Mixed m	Basic Rating: Description: Maneuver:	NA NA Cycle Time (load, du	ımp, maneuver):	0.500	ce IB)
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor	alue within this ers – Material D nin.): ders - Unadjuste ors ial: Mixed m ile: No adjus	Basic Rating: Description: Maneuver: d Basic Loader Contacterial 0.02	NA NA Cycle Time (load, du	Factor (mi 0.020 0.000	0.500 n.) Source (Cat H	ce IB)
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operation	ers – Material Danin.): ders – Unadjuste ors ial: Mixed mile: No adjuste ip: Common	Basic Rating: Description: Maneuver: d Basic Loader Contacterial 0.02 dtment - factor not ownership of true operation -0.04	NA NA Cycle Time (load, due to applicable 0.00	Factor (mi 0.020 0.000	0.500 n.) Sourc (Cat H	iB)
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh	ers – Material Danin.): ders – Unadjuste ors ial: Mixed mile: No adjuste ip: Common	Basic Rating: Description: Maneuver: d Basic Loader Contacterial 0.02 tment - factor non ownership of tru operation -0.04 target 0.00	NA Cycle Time (load, du t applicable 0.00 acks and loaders -0.	Factor (mi 0.020 0.000 04 -0.040 -0.040 0.000	0.500 n.) Source (Cat H (Cat H (Cat H (Cat H (Cat H (Cat H	ce IB) IB) IB) IB)
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operatio	ers – Material Danin.): ders – Unadjuste ors ial: Mixed mile: No adjuste ip: Common	Basic Rating: Description: Maneuver: d Basic Loader Contacterial 0.02 Internat - factor non ownership of true operation -0.04 target 0.00 Net Contacted Contacterial Con	NA Cycle Time (load, dust applicable 0.00 locks and loaders -0.00 lycle Time Adjustment)	Factor (mi 0.020 0.000 04 -0.040 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.	0.500 n.) Source (Cat H	ce IB) IB) IB) IB) tes
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operatio	ers – Material Danin.): ders – Unadjuste ors ial: Mixed mile: No adjuste ip: Common	Basic Rating: Description: Maneuver: d Basic Loader Contact and the second of the s	NA Cycle Time (load, du t applicable 0.00 acks and loaders -0.00 ycle Time Adjustmed Loader Cycle Ti	Factor (mi 0.020 0.000 04 -0.040 0.000 0.000 ent: -0.060 me: -0.040	0.500 n.) Source (Cat H (Cat H (Cat H (Cat H (Cat H (Cat H minut	ce IB) IB) IB) IB) IB) tes tes
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operatio	ers – Material Danin.): ders – Unadjuste ors ial: Mixed mile: No adjuste ip: Common	Basic Rating: Description: Maneuver: d Basic Loader Contact and the second of the s	NA Cycle Time (load, dust applicable 0.00 locks and loaders -0.00 lycle Time Adjustment)	Factor (mi 0.020 0.000 04 -0.040 0.000 0.000 ent: -0.060 me: -0.040	0.500 n.) Source (Cat H	ce IB) IB) IB) IB) IB) tes tes
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Facto Materi Stockpi Truck Ownersh Operatio	ers – Material Danin.): ders – Unadjuste ors ial: Mixed mile: No adjuste ip: Common	Basic Rating: Description: Maneuver: d Basic Loader Contact and the second of the s	NA Cycle Time (load, du t applicable 0.00 acks and loaders -0.00 ycle Time Adjustmed Loader Cycle Ti	Factor (mi 0.020 0.000 04 -0.040 0.000 0.000 ent: -0.060 me: -0.040	0.500 n.) Source (Cat H (Cat H (Cat H (Cat H (Cat H (Cat H minut	ce IB) IB) IB) IB) IB) tes tes
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor Materi Stockpi Truck Ownersh Operation Dump Targ	ers – Material Danin.): ders – Unadjuste ors ial: Mixed mile: No adjus ip: Common on: Constant get: Nominal	Basic Rating: Description: Maneuver: d Basic Loader Contacterial 0.02 tment - factor non ownership of tru operation -0.04 target 0.00 Net Contacterial 0.00 Net Contacterial 0.00	NA Cycle Time (load, dustance) t applicable 0.00 cks and loaders -0.00 ycle Time Adjustmed Loader Cycle Tite Load Time per True	Factor (mi 0.020 0.000 04 -0.040 0.000 0.000 ent: -0.060 me: -0.040	0.500 n.) Source (Cat H (Cat H (Cat H (Cat H (Cat H minut	ce IB) IB) IB) IB) IB) tes tes tes
Selected Va Track Loade Cycle Time Elements (m Load: NA Wheel and Track Load Cycle Time Factor Materia Stockpi Truck Ownersh Operation Dump Targ	ers – Material Danin.): ders – Unadjuste ors ial: Mixed m ile: No adjus ip: Common on: Constant get: Nominal	Basic Rating: Description: Maneuver: d Basic Loader Content of 1000 attent of 10	NA Cycle Time (load, du t applicable 0.00 acks and loaders -0. ycle Time Adjustmed Loader Cycle Ti t Load Time per Tru Adj	Factor (mi 0.020 0.000 0	0.500 n.) Source (Cat H (Cat H (Cat H (Cat H (Cat H minut minut) minut minut minut minut	ce IB) IB) IB) IB) tes tes tes Minute

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	11400.00	1.00	3.00	4.00	1817	6.456

Haul Time: **6.456** minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 11400.00 3.00 2.00 2978 -1.00 3.973

Return Time: 3.973 minutes
Total Truck Cycle Time: 12.809 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

77.29 LCY/Hour Adjusted for job efficiency: 555.20 LCY/Hour Adjusted for job efficiency: 64.15 LCY/Hour Optimal No. of Trucks: 9 Truck(s)

Selected Number of Trucks: 9 Truck(s)

Adjusted hourly truck team production: 577.35 LCY/Hour Adjusted single truck/loader team production: 555.20 LCY/Hour Adjusted multiple truck/loader team production: 555.20 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 0.86
 Hours

 Unit cost:
 \$5.798
 /LCY
 Total job cost:
 \$2,769

Task description:	Founda	tions and Buildin	gs - B&G and T	opsoil - 20k Haul		
Site: Cresson Projec	<u>t</u>	Permit Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #: A300 Date: 11/2	06 2/2023 :22 PM	State: Colora County: Teller	ado	Ab	breviation: No Filename: M2	ne 244-A3006
Agency o	r organization nai	ne: DRMS				
HOURLY EQU	IPMENT COS				is: 1 per day	
	Truck Loader Tea		Equipment Descri	ption		
	Truck Loader Tea		723 Г 966Н			
Sup	port Equipment -I	Load Area: Cat	D7R DS Series II			
- Dood N	-D Maintenance –Mot	1	D7R DS Series II Γ 16Μ	LGP		
Road N			er Tanker, 7,000	Gal.		
			, , , , , , , , , , , , , , , , , , , ,			
Cost Breakdown:		ader Team		Equipment		nce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$130.23	\$65.69	\$114.76	\$114.76	\$212.21	\$86.29
Operating cost/hour:	\$77.33	\$48.09	\$91.98	\$91.98	\$31.22	\$28.44
%Utilization-riper:	NA NA	\$0.00	NA \$0.00	NA \$0.00	NA \$0.00	NA \$0.00
Ripper own. cost/hour: Ripper op. cost/hour:	NA NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.54	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$240.10	\$154.49	\$248.04	\$248.04	\$271.99	\$135.86
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$634.69	Support:	\$496.08	Maint:	\$407.85
Total work team co	ost/hour: \$1 538	62	11			
Total work team ev	930 Hour. <u>φ1,550.</u>	<u>02</u>				
MATERIAL QU	<u>JANTITIES</u>					
Initial volume	· · · · · · · · · · · · · · · · · · ·	CCY		factor: 1.215		
Loose volume	e: <u>154</u>	LCY				
	ource of estimated		CC&V Provided	Estimate		
Sourc	e of estimated swe		Handbook			
	Material Purch	ase Cost: \$0.00 otal Cost: \$0.00				
	-					
HOURLY PRO	<u>DDUCTION</u>					
Truck Capacity:						
Truck Payload (we						
Material		si1	Pounds/LCY			
	eription: Top So $\frac{\text{Top So}}{52,000}$		Pounds			

				Page 2 of 3	
32.50	LCY				
14.50 L	CY				
18.70 L	CY				
Truck Volume F	Based on Number of Lo	oader Passes:	16.50	LCY	
		Puol	zat Siza Class: N	Α.	
5,000	LCV (baarad)	Buci	det Size Class.	А	_
		ivturas (100	120%) 1 100		_
		ixtures (100	-120%) 1.100		=
3.300					
-	Site A		9 <u>500</u> feet		
			,		
0.830	0.830	(CAT HE	3)		
0.830	0.830				
ls:	-	Required to	THI Truck.	P	oasses
within this Basic	Rating: NA				
Material Descrip	otion:				
Ma	neuver: NA		Dump: 0.100)	
Unadjusted Bas	ic Loader Cycle Time	(load, dump, r	maneuver):0	.500 minu	ites
			Factor (min.)	Source	_
Mixed material	1 0.02		0.020	(Cat HB)	- -
•			0.000	(Cat HB)	
	ership of trucks and loa	ders -0.04	-0.040	(C TID)	_
Constant opera				(Cat HB)	_
			-0.040	(Cat HB)	-
Nominal target	t 0.00		0.000	(Cat HB) (Cat HB)	
	Net Cycle Time A	Adjustment:	0.000 -0.060	(Cat HB) (Cat HB) minutes	- - -
	t 0.00	Adjustment:	0.000	(Cat HB) (Cat HB)	- - -
	t 0.00 Net Cycle Time A Adjusted Loader (Adjustment:	0.000 -0.060 0.440	(Cat HB) (Cat HB) minutes minutes	 - -
	t 0.00 Net Cycle Time A Adjusted Loader (Adjustment: Cycle Time: e per Truck:	0.000 -0.060 0.440	(Cat HB) (Cat HB) minutes minutes	Minutes
Nominal target	t 0.00 Net Cycle Time A Adjusted Loader (Net Load Time	Adjustment: Cycle Time: e per Truck: Adjusted	0.000 -0.060 0.440 0.980	(Cat HB) (Cat HB) minutes minutes minutes	Minutes Minutes
	18.70 I 16.60 I 18.70 I 18.70 I 18.70 I 18.70 I Truck Volume I 5.000 1.100 5.500 Truck 1.000 0.830 Number of the second in the	18.70	18.70	18.70	18.70

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	20000.00	6.00	3.00	9.00	824	24.308

Haul Time: 24.308 minutes Return Route: Haul Distance Grade (%) Roll. Res **Total Res** Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 20000.00 3.00 -3.00 3159 -6.00 6.527

Return Time: 6.527 minutes
Total Truck Cycle Time: 33.215 minutes

Loading Tool unit

Production Production
Truck Unit Production

29.81 LCY/Hour Adjusted for job efficiency: 555.20 LCY/Hour

Adjusted for job efficiency: 24.74 LCY/Hour

Optimal No. of Trucks: 22 Truck(s) Selected Number of Trucks: 2 Truck(s)

Adjusted hourly truck team production: 49.48 LCY/Hour Adjusted single truck/loader team production: 49.48 LCY/Hour Adjusted multiple truck/loader team production: 49.48 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 3.12
 Hours

 Unit cost:
 \$31.097
 /LCY
 Total job cost:
 \$4,798

1	Task descrip	otion:	EMP Ponds			
Site:	Cresson 1	Project	Permi	t Action: 2023	Permit/Job#:	M1980244
	PROJECT	T IDENTIFICA	<u>ATION</u>			
	Task #:	A4000	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023	County:	Teller	Filename:	M244-A4000
		3:05:15 PM	<u></u>			
	User:	ZTT				
		ency or organiza		1S	Shift basis: 1 per day	
				Equipment Description		
		Truck Loa	ader Team -Truck:	Cat 740		
			-Loader:	CAT 988H		
		Support Equip	oment -Load Area:	Cat D8T - 8SU		
			-Dump Area:	Cat D8T - 8SU		
]	Road Maintenan	ce –Motor Grader:	CAT 16M		
			-Water Truck:	Water Tanker, 7,000 Gal.		

Cost Breakdown:	Truck/Loa	ader Team	Support 1	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$113.82	\$109.98	\$241.38	\$241.38	\$212.21	\$86.29
Operating cost/hour:	\$81.91	\$95.55	\$143.92	\$143.92	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.98	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$228.71	\$246.24	\$426.60	\$426.60	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$1,161.08	Support:	\$853.20	Maint:	\$407.85

Total work team cost/hour: \$2,422.13

MATERIAL QUANTITIES

Initial volume: 79,719 CCY Swell factor: 1.000

Loose volume: **79,719** LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,650 Pounds/LCY
Description: Decomposed rock - 25% Rock, 75% Earth
Rated Payload: 87,000 Pounds

Payload Capacity:						
1 1 1	32.83	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	24.20	LCY				
Heaped Volume:	31.40	LCY				
Average Volume:	27.80	LCY				
Adjusted Volume:	31.40	LCY				
Fin	al Truck Volume	e Based on Number of	of Loader Passes:	30.36	LCY	
Loading Tool Capacity			.			
Rated Capacity:	9.200	LCY (heaped)		tet Size Class: N	NA	_
Bucket Fill Factor:	1.100	Other - rock/di		-120%) 1.100		_
Adjusted Capacity:	10.120	LCY	it illixtures (100	12070) 1.100		_
Adjusted Capacity.	10.120	LCI				
Job Condition Correction	ns:	S	Site Altitude (ft.): 9	500 feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB			
Job Efficiency:	0.830	0.830	(CAT HB)		
Net Correction:	0.681	0.789				
Loading Tool Cycle Time Excavators and Front Sho		er of Loading Tool Pa	asses Required to I	Fill Truck:	3	passes
Excavators and Front Show Machine Cycle Time Selected Value	vels: vs. Job Condition within this Bas	on Rating: NA NA NA	asses Required to I	Fill Truck:	3	passes
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders	vels: vs. Job Condition within this Bas Material Desc	on Rating: NA NA NA	asses Required to I	Fill Truck:	3	passes
Excavators and Front Show Machine Cycle Time Selected Value	vels: vs. Job Condition within this Base Material Desc .):	on Rating: NA NA NA	asses Required to I	Fill Truck:		passes
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min	vels: vs. Job Condition within this Bas Material Desc .):	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA		Dump: 0.10	0	passes
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders	vels: vs. Job Condition within this Bas Material Desc i): Unadjusted B	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA		Dump: 0.10	0 0.575 min	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA	vels: vs. Job Condition within this Base Material Desc i): S - Unadjusted B	on Rating: NA Sic Rating: NA Pription: NA Maneuver: NA	ime (load, dump, n	Dump: 0.10	0	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors	vels: vs. Job Condition within this Bas — Material Desc .): S - Unadjusted B Material 1/8	on Rating: NA NA NA ription: NA Maneuver: NA vasic Loader Cycle To 3/4" diameter -0	ime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.)	0 0.575 min Source	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material Stockpile Truck Ownership	vels: vs. Job Condition within this Base Material Desc i.): S - Unadjusted B Material 1/8 Dumped by Common ow	on Rating: NA	ime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040	0 Source (Cat HB) (Cat HB)	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material Stockpile Truck Ownership Operation	vels: vs. Job Condition within this Bas — Material Desc .): S - Unadjusted B Material 1/8 Dumped by Common ow Constant ope	on Rating: NA	ime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040	0 Source (Cat HB) (Cat HB)	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material Stockpile Truck Ownership	vels: vs. Job Condition within this Bas — Material Desc .): S - Unadjusted B Material 1/8 Dumped by Common ow Constant ope	on Rating: NA	ime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material Stockpile Truck Ownership Operation	vels: vs. Job Condition within this Bas — Material Desc .): S - Unadjusted B Material 1/8 Dumped by Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti to 3/4" diameter -0 truck 0.02 vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti	ime (load, dump, n .02 d loaders -0.04 me Adjustment:	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material Stockpile Truck Ownership Operation	vels: vs. Job Condition within this Bas — Material Desc .): S - Unadjusted B Material 1/8 Dumped by Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA Maneuver: NA "to 3/4" diameter -0 truck 0.02 vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, n .02 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loaders Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	vels: vs. Job Condition within this Bas — Material Desc .): S - Unadjusted B Material 1/8 Dumped by Common ow Constant ope	on Rating: NA sic Rating: NA ription: NA Maneuver: NA "to 3/4" diameter -0 truck 0.02 vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load	ime (load, dump, n .02 d loaders -0.04 me Adjustment:	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080	0 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	vels: vs. Job Condition within this Base Material Desc i.): S - Unadjusted B Material 1/8 Dumped by Common ow Constant ope Nominal targ	on Rating: NA ription: Maneuver: NA rasic Loader Cycle Ti ration of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, n .02 d loaders -0.04 me Adjustment: der Cycle Time:	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495 1.090	O.575 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target Truck Cycle Time: Truck Exchange Time	vels: vs. Job Condition within this Base Material Desc i.): S - Unadjusted B ii. Material 1/8 ii. Dumped by iii. Common ow iii. Constant ope iii. Nominal targ	on Rating: NA sic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Ti " to 3/4" diameter -0 truck 0.02 vnership of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load Minutes	ime (load, dump, n .02 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck:	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495 1.090 for site altitude:	O.575 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.732	utes
Excavators and Front Show Machine Cycle Time Selected Valu Track Loaders Cycle Time Elements (min Load: NA Wheel and Track Loader Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	vels: vs. Job Condition within this Bas — Material Desc .): Normal 1/8 Dumped by Common ow Constant ope Nominal targ ne: 0.60 1.090	on Rating: NA ription: Maneuver: NA rasic Loader Cycle Ti ration of trucks and eration -0.04 get 0.00 Net Cycle Ti Adjusted Load Net Load	ime (load, dump, n .02 d loaders -0.04 me Adjustment: der Cycle Time: Fime per Truck: Adjusted Adjusted	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495 1.090	O.575 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	2.323

Haul Time: 2.323 minutes

Return Route:

rectarii re	rate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	1.698

Return Time: 1.698 minutes
Total Truck Cycle Time: 7.120 minutes

Loading Tool unit

Production 969.41 LCY/Hour Adjusted for job efficiency: 804.61 LCY/Hour Truck Unit Production 255.86 LCY/Hour Adjusted for job efficiency: 212.36 LCY/Hour

Optimal No. of Trucks: _____ 4 ___ Truck(s) Selected Number of Trucks: ____ 4 ___ Truck(s)

Adjusted hourly truck team production: 849.45 LCY/Hour Adjusted single truck/loader team production: 804.61 LCY/Hour Adjusted multiple truck/loader team production: 804.61 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 99.08
 Hours

 Unit cost:
 \$3.010
 /LCY
 Total job cost:
 \$239,979

Task description:	EMP Po	onds - Topsoil				
Site: Cresson Project	<u>:</u>	Permit Action	on: <u>2023</u>		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	[
		State: Colora County: Teller		Ab	breviation: No Filename: M2	one 244-A4001
User: ZTT	<u> </u>					
Agency o	r organization nan	me: DRMS				
HOURLY EQU	IPMENT COST	<u>r</u>		Shift bas	sis: 1 per day	
			Equipment Descri	ption		
	Truck Loader Tea		740			
	To in the I		Г 988Н			
Supp	oort Equipment -L		D8T - 8SU D8T - 8SU			
Road M	Iaintenance –Mot	1	T 16M			
			ter Tanker, 7,000	Gal.		
Cost Breakdown:		ader Team		Equipment		nce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$113.82	\$109.98	\$241.38	\$241.38	\$212.21	\$86.29
Operating cost/hour:	\$81.91	\$95.55	\$143.92	\$143.92	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.98	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$228.71	\$246.24	\$426.60	\$426.60	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$1,161.08	Support:	\$853.20	Maint:	\$407.85
Total work team co	ost/hour: \$2,422.	13				
MATERIAL QU	JANTITIES					
Initial volume		CCY	Cwall	factor: 1.215		
Loose volume	,			1actor. 1.213		
	ource of estimated		CC&V Provided	Estimate		
Source	e of estimated swe Material Purch		Handbook			
		otal Cost: \$0.00				
	10		-			
HOURLY PRO	DUCTION					

Truck Capacity:
Truck Payload (weight) Basis:

Material weight: 1,600 Pounds/LCY Description: Top Soil

Rated Payload: 87,000 Pounds

Truck/Loader Worksheet Con	t'd	1 ask # A4001			Page 2 of 3	
Payload Capacity:	54.38	LCY				
Truck Bed (volume) Basis:						
Struck Volume:		.CY				
Heaped Volume:		.CY				
Average Volume:		CY				
Adjusted Volume:	31.40 L	CCY				
Final 7	Гruck Volume E	Based on Number of Load	ler Passes:	30.36	LCY	
Loading Tool Capacity			Ruck	ket Size Class: N	NA	
Rated Capacity:	9.200	LCY (heaped)	Duci	ct Size Class. 1	VA.	_
Bucket Fill Factor:	1.100	Other - rock/dirt mixt	ures (100	-120%) 1.100		_
Adjusted Capacity:	10.120	LCY	uics (100	-120/0) 1.100		_
Adjusted Capacity.	10.120					
Job Condition Corrections:		Site Alt	itude (ft.): <u>9</u>	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB	,		
Job Efficiency:	0.830	0.830	(CAT HB	5)		
Net Correction:	0.681	0.789				
Excavators and Front Shovels Machine Cycle Time vs	. Job Condition					
Selected Value w Track Loaders – I						
Cycle Time Elements (min.):	viateriai Descrip	MOII.				
Load: NA	Ma	neuver: NA	_	Dump: 0.10	0	
Wheel and Track Loaders -	Unadjusted Basi	ic Loader Cycle Time (lo	ad, dump, n	naneuver):(0.575 min	utes
Cycle Time Factors			ĺ	Factor (min.)	Source	
Material:	Material 1/8" to	o 3/4" diameter -0.02		-0.020	(Cat HB)	_
Stockpile:	Dumped by tru			0.020	(Cat HB)	
Truck Ownership:		ership of trucks and loade	rs -0.04	-0.040	(Cat HB)	_
Operation:	Constant opera	tion -0.04		-0.040	(Cat HB)	_
Dump Target:	Nominal target			0.000	(Cat HB)	_
		Net Cycle Time Ad		-0.080	minutes	
		Adjusted Loader Cyc	_	0.495	minutes	
		Net Load Time p	er Truck:	1.090	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.732	Minutes
Truck Load Time:	1.090	Minutes	Adjusted	for site altitude:	1.147	Minutes
ck Maneuver and Dump Time:	1.00	Minutes	Adjusted	for site altitude:	1.220	Minutes
		-		-		_

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	2.323

Haul Time: 2.323 minutes

Return Route:

rectarii re	rate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	1.698

Return Time: 1.698 minutes
Total Truck Cycle Time: 7.120 minutes

Loading Tool unit

Production Production Truck Unit Production

Truck Unit Production

255.86 LCY/Hour Adjusted for job efficiency: 804.61 LCY/Hour Adjusted for job efficiency: 212.36 LCY/Hour Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 849.45 LCY/Hour Adjusted single truck/loader team production: 804.61 LCY/Hour Adjusted multiple truck/loader team production: 804.61 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 6.90
 Hours

 Unit cost:
 \$3.010
 /LCY
 Total job cost:
 \$16,722

Task description:	Crusher Fuel Isla	and Fresh Water Pond			
te: Cresson Project	Pern	nit Action: 2023	Permit/Job#:	M1980244	
PROJECT IDENTII	FICATION				
Task #: A4002	State:	Colorado	Abbreviation:	None	
Date: 11/22/202	Gounty:	Teller	Filename:	M244-A4002	
3:07:03 P	M		_		
User: ZTT Agency or org	anization name: DR	MS			
			Shift basis: 1 per day		
Agency or org	ENT COST	Equipment Description	Shift basis: 1 per day		
Agency or org		Equipment Description Cat 740	Shift basis: 1 per day		
Agency or org HOURLY EQUIPM	ENT COST k Loader Team -Truck:	Equipment Description Cat 740 CAT 988H	Shift basis: 1 per day		
Agency or org HOURLY EQUIPM	ENT COST k Loader Team -Truck: -Loader:	Equipment Description Cat 740 CAT 988H Cat D8T - 8SU	Shift basis: 1 per day		
Agency or org HOURLY EQUIPM Truck Support I	ENT COST k Loader Team -Truck: -Loader: Equipment -Load Area:	Equipment Description Cat 740 CAT 988H Cat D8T - 8SU Cat D8T - 8SU	Shift basis: 1 per day		

Cost Breakdown:	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$113.82	\$109.98	\$241.38	\$241.38	\$212.21	\$86.29
Operating cost/hour:	\$81.91	\$95.55	\$143.92	\$143.92	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.98	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$228.71	\$246.24	\$426.60	\$426.60	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$1,161.08	Support:	\$853.20	Maint:	\$407.85

Total work team cost/hour: \$2,422.13

MATERIAL QUANTITIES

Initial volume: 1,257 CCY Swell factor: 1.000

Loose volume: 1,257 LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook
Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,650 Pounds/LCY
Description: Decomposed rock - 25% Rock, 75% Earth
Rated Payload: 87,000 Pounds

Payload Capacity:	32.83	LCY				
Truck Bed (volume) Basis						
Struck Volume:	24.20	LCY				
Heaped Volume:	31.40	LCY				
Average Volume:	27.80	LCY				
Adjusted Volume:	31.40	LCY				
Fir	al Truck Volume	e Based on Number of	f Loader Passes:	30.36	LCY	
Loading Tool Capacity						
			Buck	et Size Class:	NA	
Rated Capacity:	9.200	LCY (heaped)				
Bucket Fill Factor:	1.100	Other - rock/dir	rt mixtures (100-	120%) 1.100		
Adjusted Capacity:	10.120	LCY				
Job Condition Correction	<u>18:</u>	Si	ite Altitude (ft.): 9	500 feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB))		
Job Efficiency:	0.830	0.830	(CAT HB))		
Net Correction:	0.681	0.789				
Net Correction: Loading Tool Cycle Tim		0.789 er of Loading Tool Pa	usses Required to F	ill Truck:	3	passes
	e: Numbe	1	asses Required to F	ill Truck:	3	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	e: Numbe	er of Loading Tool Pa	usses Required to F	ïll Truck:	3	passes
Excavators and Front Sho Machine Cycle Time Selected Value	e: Numbe vels: vs. Job Condition	on Rating: NA ic Rating: NA	usses Required to F	ill Truck:	3	passes
Excavators and Front Sho Machine Cycle Time Selected Value	e: Numbervels: vs. Job Condition within this Base Material Description	on Rating: NA ic Rating: NA	asses Required to F	ill Truck:	3	passes
Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	e: Numbervels: vs. Job Condition within this Base Material Description.	on Rating: NA ic Rating: NA	asses Required to F		100	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	e: Numbervels: vs. Job Condition within this Bas Material Description.	on Rating: NA In Rating: NA In Rating: NA In NA	·	Dump: 0.	100	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min Load: NA	e: Number vels: vels: vs. Job Condition within this Bas Material Description. Note: Note: Sign Number Num	on Rating: NA ic Rating: NA ription: NA Maneuver: NA asic Loader Cycle Tin	me (load, dump, m	Dump: 0.	100 0.575 mi	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material	e: Number vels: vels: vs. Job Condition e within this Bas – Material Description: N s - Unadjusted Bas Material 1/8	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tin	me (load, dump, m	Dump: 0. naneuver): Factor (min.) -0.020	100 0.575 min Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile	e: Number vels: vels: vs. Job Condition within this Bas Material Description: S - Unadjusted Bas Material 1/83 Dumped by the selection of the selection	on Rating: NA ic Rating: NA ription: Maneuver: NA asic Loader Cycle Tine "to 3/4" diameter -0.0 truck 0.02	me (load, dump, m	Dump: 0. naneuver): Factor (min.) -0.020 0.020	100 0.575 min Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	e: Number vels: vels: vs. Job Condition e within this Bas – Material Description.): S - Unadjusted Bas Material 1/83 Dumped by to Common ow	on Rating: NA ic Rating: NA ic Rating: NA iription: NA asic Loader Cycle Time to 3/4" diameter -0.0 truck 0.02 iription for trucks and	me (load, dump, m	Dump: 0. naneuver): Factor (min.) -0.020 0.020 -0.040	100 0.575 min Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: vels: vs. Job Condition e within this Bas – Material Describe. S - Unadjusted Bas G Material 1/8° Dumped by to Common ow Constant ope	on Rating: NA	me (load, dump, m	Dump: 0. naneuver): Factor (min.) -0.020 0.020 -0.040 -0.040	100 0.575 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	e: Number vels: vels: vs. Job Condition e within this Bas – Material Describe. S - Unadjusted Bas G Material 1/8° Dumped by to Common ow Constant ope	on Rating: NA ic Rating: NA ic Rating: NA ic Rating: NA ription: NA asic Loader Cycle Tiruck 0.02 reship of trucks and eration -0.04 get 0.00	me (load, dump, m	Dump: 0. naneuver):	0.575 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: vels: vs. Job Condition e within this Bas – Material Describe. S - Unadjusted Bas G Material 1/8° Dumped by to Common ow Constant ope	on Rating: Ic Rating: Ic Rating: In NA In I	me (load, dump, m 02 I loaders -0.04 me Adjustment:	Dump:0. naneuver): Factor (min.)	0.575 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: vels: vs. Job Condition e within this Bas – Material Describe. S - Unadjusted Bas G Material 1/8° Dumped by to Common ow Constant ope	on Rating: In Rating: In Rating: In Rating: In Rating: In Rating: In NA In I	me (load, dump, m	Dump: 0. naneuver):	0.575 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation	e: Number vels: vels: vs. Job Condition e within this Bas – Material Describe. S - Unadjusted Bas G Material 1/8° Dumped by to Common ow Constant ope	on Rating: In Rating: In Rating: In Rating: In Rating: In Rating: In NA In I	me (load, dump, m 02 l loaders -0.04 me Adjustment:	Dump: 0. naneuver): Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495	0.575 minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: vels: vs. Job Condition e within this Bas — Material Description.): S - Unadjusted Bas Material 1/83 Dumped by to Common ow Constant ope Nominal targ	on Rating: In Rating:	me (load, dump, m 02 l loaders -0.04 me Adjustment: ler Cycle Time:	Dump: 0. naneuver): Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495 1.090	100 0.575 minutes minutes minutes	nutes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target Truck Cycle Time: Truck Exchange Time	e: Number vels: vels: vs. Job Condition e within this Bas — Material Describes S - Unadjusted Bas G Material 1/8° Dumped by to Common ow Constant ope Nominal targ	on Rating: In Rating:	me (load, dump, m 02 I loaders -0.04 me Adjustment: ler Cycle Time: Cime per Truck: Adjusted	Dump: 0. Saneuver 0. Factor (min.)	100 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes	nutes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	e: Number vels: vels: vs. Job Condition within this Bas — Material Description.): Note: Material 1/83 E Dumped by the Common own constant open constan	on Rating: In Rating:	me (load, dump, m 02 l loaders -0.04 me Adjustment: ler Cycle Time: Time per Truck: Adjusted to	Dump: 0. naneuver): Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495 1.090	0.575 minutes O.575 minutes	nutes

110011100						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	2.323

Haul Time: 2.323 minutes Return Route: Haul Distance Grade (%) Roll. Res **Total Res** Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 4600.00 0.00 3.00 3.00 3005 1.698

Return Time: 1.698 minutes
Total Truck Cycle Time: 7.120 minutes

Loading Tool unit

Production Production

Truck Unit Production

255.86 LCY/Hour Adjusted for job efficiency: 804.61 LCY/Hour

Adjusted for job efficiency: 212.36 LCY/Hour

Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 849.45 LCY/Hour Adjusted single truck/loader team production: 804.61 LCY/Hour Adjusted multiple truck/loader team production: 804.61 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 1.56
 Hours

 Unit cost:
 \$3.010
 /LCY
 Total job cost:
 \$3,784

Task description:	Crushe	r Fuel Island Fres	sh Water Pond -	Topsoil		
Site: Cresson Project	t	Permit Actio	on: 2023		Permit/Job#: M	1980244
PROJECT IDE	NTIFICATION	I				
Task #: A400 Date: 11/2	03	State: Colora County: Teller	do	Ab	breviation: No M2	ne 244-A4003
Agency o	r organization nar	ne: DRMS				
HOURLY EQU	IPMENT COS	<u>r</u>		Shift bas	is: 1 per day	
	Truck Loader Tea		Equipment Descri	ption		
	Truck Loader Tea		Γ 988H			
Sup	port Equipment -I		D8T - 8SU			
Road N	-D Maintenance –Mot	1	D8T - 8SU Γ 16M			
			er Tanker, 7,000 (Gal.		
		_	_	_		
Cost Breakdown:	Truck/Lo	ader Team Loader	Support I Load Area	Equipment Dump Area	Maintenar Motor Grader	nce Equipment Water Truck
				•		
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$113.82 \$81.91	\$109.98 \$95.55	\$241.38 \$143.92	\$241.38 \$143.92	\$212.21 \$31.22	\$86.29 \$28.44
Operating cost/hour: %Utilization-riper:	\$81.91 NA	\$95.55	\$143.92 NA	\$143.92 NA	\$31.22 NA	\$28.44 NA
Ripper own. cost/hour:	NA NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.98	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$228.71	\$246.24	\$426.60	\$426.60	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$1,161.08	Support:	\$853.20	Maint:	\$407.85
Total work team co		13				
Initial volume	e: <u>186</u>	CCY LCY	Swell	factor: 1.215		
So	ource of estimated e of estimated swe Material Purch	l volume: 2022 ell factor: Cat H		Estimate		
HOURLY PRO	<u>ODUCTION</u>					
Truck Capacity: Truck Payload (we	ight) Basis:					
Material	weight: 1,600		Pounds/LCY			
Desc Rated P	ription: Top So ayload: 87,000		Pounds			

Payload Capacity:	54.38	LCY	Y			
Truck Bed (volume) Basis						
Struck Volume:	24.20	LCY				
Heaped Volume:	31.40	LCY				
Average Volume:	27.80	LCY				
Adjusted Volume:	31.40	LCY				
Fir	al Truck Volum	ne Based on Number	of Loader Passes:	30.36	LCY	
Loading Tool Capacity			.			
Rated Capacity:	9.200	LCY (heaped		ket Size Class: N	NA	_
Bucket Fill Factor:	1.100	Other - rock/d	dirt mixtures (100	-120%) 1.100		_
Adjusted Capacity:	10.120	LCY				
Job Condition Correction	<u>18:</u>		Site Altitude (ft.): 9	0 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB	,		
Job Efficiency:	0.830	0.830	(CAT HB			
Net Correction:	0.681	0.789				
Net Correction: Loading Tool Cycle Tim		0.789 per of Loading Tool I	Passes Required to I	Fill Truck:	3 1	passes
	<u>e:</u> Numb		Passes Required to I	Fill Truck:	31	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time	e: Numb	per of Loading Tool I	Passes Required to I	Fill Truck:	31	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Numb vels: vs. Job Conditi	per of Loading Tool I	Passes Required to I	Fill Truck:		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value	e: Numb vels: vs. Job Conditi e within this Ba – Material Desc	per of Loading Tool I	Passes Required to I	Fill Truck:	3	passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders	e: Numb vels: vs. Job Conditi e within this Ba – Material Desc	per of Loading Tool I	Passes Required to I	Fill Truck: Dump:0.10		passes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (min	e: Numb vels: vs. Job Conditi e within this Ba – Material Desc	oer of Loading Tool I		Dump: 0.10		
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (minute) Load: NA	e: Numb vels: vs. Job Conditi e within this Ba – Material Desc .): s - Unadjusted F	oer of Loading Tool I		Dump: 0.10	0	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material	e: Numb vels: vs. Job Conditi e within this Ba – Material Desc .): s - Unadjusted F Material 1/8	oer of Loading Tool II ion Rating: NA sic Rating: NA cription: NA Basic Loader Cycle T 8" to 3/4" diameter -6	Fime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020	0.575 minu Source (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile	e: Numb vels: vs. Job Conditi e within this Ba Material Desc : Unadjusted F : Material 1/8 : Dumped by	oer of Loading Tool Holon Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle To 3/4" diameter - 10 truck 0.02	Fime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020	00 0.575 minu Source (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	e: Numb vels: vs. Job Conditi e within this Ba – Material Desc .): s - Unadjusted F Material 1/8 Dumped by Common ov	oer of Loading Tool Holon Rating: NA Sic Rating: NA Cription: Maneuver: NA Basic Loader Cycle To S' to 3/4" diameter of truck 0.02 When the state of trucks are stated to the state of trucks are stated to the state of trucks are stated to the stated t	Fime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040	00 Source (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Material Stockpile Truck Ownership Operation	e: Numb vels: vs. Job Conditi e within this Ba Material Desc : Unadjusted E s : Material 1/8 : Dumped by : Common ov : Constant op	oer of Loading Tool II fon Rating: NA sic Rating: NA cription: NA Basic Loader Cycle Ta B" to 3/4" diameter - 1 truck 0.02 wnership of trucks are peration -0.04	Fime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership	e: Numb vels: vs. Job Conditi e within this Ba Material Desc : Unadjusted E s : Material 1/8 : Dumped by : Common ov : Constant op	oer of Loading Tool II ion Rating: NA sic Rating: NA cription: NA Basic Loader Cycle To truck 0.02 whership of trucks are peration -0.04 rget 0.00	Fime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Material Stockpile Truck Ownership Operation	e: Numb vels: vs. Job Conditi e within this Ba Material Desc : Unadjusted E s : Material 1/8 : Dumped by : Common ov : Constant op	oer of Loading Tool II ion Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Ta truck 0.02 wnership of trucks are peration -0.04 rget 0.00 Net Cycle T	Fime (load, dump, n 0.02 nd loaders -0.04	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Material Stockpile Truck Ownership Operation	e: Numb vels: vs. Job Conditi e within this Ba Material Desc : Unadjusted E s : Material 1/8 : Dumped by : Common ov : Constant op	oer of Loading Tool II ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ta truck 0.02 wnership of trucks ar oeration -0.04 rget 0.00 Net Cycle Ta Adjusted Loa	Fime (load, dump, n	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Material Stockpile Truck Ownership Operation	e: Numb vels: vs. Job Conditi e within this Ba Material Desc : Unadjusted E s : Material 1/8 : Dumped by : Common ov : Constant op	oer of Loading Tool II ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ta truck 0.02 wnership of trucks ar oeration -0.04 rget 0.00 Net Cycle Ta Adjusted Loa	Time (load, dump, note to 10.02 and loaders -0.04 and loaders -0.04 are to 20.05 and loaders -0.04 are to 20.05 and loaders -0.04 are to 20.05 are t	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loaders Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	e: Numb vels: e vs. Job Conditi e within this Ba — Material Desc a.): s - Unadjusted F S : Material 1/8 : Dumped by : Common ov : Constant op : Nominal tar	oer of Loading Tool II ion Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Ta truck 0.02 wnership of trucks ar oeration -0.04 rget 0.00 Net Cycle Ta Adjusted Loa	Time (load, dump, no 10.02 and loaders -0.04 and loaders -0.04 and loaders -Time Adjustment: Lader Cycle Time: Time per Truck: Lader	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495	00 Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Loading Tool Cycle Time Excavators and Front Sho Machine Cycle Time Selected Value Track Loaders Cycle Time Elements (mine Load: NA Wheel and Track Loader Cycle Time Factor Material Stockpile Truck Ownership Operation Dump Target	e: Numb vels: e vs. Job Conditi e within this Ba — Material Desc b: Unadjusted E S: Material 1/8 Common ov Constant op Nominal tar me: 0.60	ion Rating: NA sic Rating: NA oription: NA original NA original NA original National Net Cycle Tadjusted Load Net Load	Time (load, dump, note of the content of the conten	Dump: 0.10 naneuver): (Factor (min.) -0.020 0.020 -0.040 -0.040 0.000 -0.080 0.495 1.090	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	2.323

Haul Time: 2.323 minutes Return Route: Travel Haul Distance Grade (%) Roll. Res **Total Res** Velocity Seg# Time (Ft) (%) (%) (fpm) (min) 4600.00 0.00 3.00 3.00 3005 1.698

Return Time: 1.698 minutes
Total Truck Cycle Time: 7.120 minutes

Loading Tool unit

Production Production

Truck Unit Production

255.86 LCY/Hour Adjusted for job efficiency: 804.61 LCY/Hour

Adjusted for job efficiency: 212.36 LCY/Hour

Optimal No. of Trucks: 4 Truck(s)

Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 849.45 LCY/Hour Adjusted single truck/loader team production: 804.61 LCY/Hour Adjusted multiple truck/loader team production: 804.61 LCY/Hour

JOB TIME AND COST

Fleet size:	1	Team(s)	Total job time:	0.28	Hours
Unit cost:	\$3.010	/LCY	Total job cost:	\$680	

TRUCK/LOADER TEAM WORK

Task description: Arequa External		Ponds				
Site:	Cresson l	Project	Perm	nit Action: 2023	Permit/Job#:	M1980244
<u>P</u>	ROJECT	T IDENTIFIC	<u>CATION</u>			
	Task #:	A4004	State:	Colorado	Abbreviation:	None
	Date:	11/22/2023 3:08:47 PM	County:	Teller	Filename:	M244-A4004
	User:	ZTT				
<u>H</u>		gency or organi			Shift basis: 1 per day	
				Equipment Description	1	
		Truck L	oader Team -Truck:	Cat 740		
			-Loader:	CAT 988H		
		Support Equ	ipment -Load Area:	Cat D8T - 8SU		
			-Dump Area:	Cat D8T - 8SU		
]	Road Maintena	nce -Motor Grader:	CAT 16M		
			-Water Truck:	Water Tanker, 7,000 Gal.	·	

Cost Breakdown:	Truck/Lo	ader Team	Support l	Equipment	Maintenan	ce Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	100	25	25
Ownership cost/hour:	\$113.82	\$109.98	\$241.38	\$241.38	\$212.21	\$86.29
Operating cost/hour:	\$81.91	\$95.55	\$143.92	\$143.92	\$31.22	\$28.44
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$32.98	\$40.71	\$41.30	\$41.30	\$28.56	\$21.12
Unit Subtotals:	\$228.71	\$246.24	\$426.60	\$426.60	\$271.99	\$135.86
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$1,161.08	Support:	\$853.20	Maint:	\$407.85

Total work team cost/hour: \$2,422.13

MATERIAL QUANTITIES

Initial volume: 85,438 CCY Swell factor: 1.000

Loose volume: **85,438** LCY

Source of estimated volume: 2022 CC&V Provided Estimate

Source of estimated swell factor: Cat Handbook

Material Purchase Cost: \$0.00

Total Cost: \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) Basis:

Material weight: 2,650 Pounds/LCY
Description: Decomposed rock - 25% Rock, 75% Earth
Rated Payload: 87,000 Pounds

CIRCES Cost Estimating Software

Truck/Loader Worksheet Con	t'd	1 ask # A4004			Page 2 of 3	
Payload Capacity:	32.83	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	24.20 L	CY				
Heaped Volume:		CY				
Average Volume:		CY				
Adjusted Volume:	31.40 L	CY				
Final 7	Гruck Volume B	ased on Number of Load	er Passes:	30.36	LCY	
Loading Tool Capacity			Ruck	ket Size Class:	NA	
Rated Capacity:	9.200	LCY (heaped)	Ducr	ct Size Class.	.1/1	_
Bucket Fill Factor:	1.100	Other - rock/dirt mixt	ures (100	-120%) 1.100		_
Adjusted Capacity:	10.120	LCY	uics (100	-120/0) 1.100		_
Adjusted Capacity.	10.120	_ LC1				
Job Condition Corrections:		Site Alti	itude (ft.): <u>9</u>	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB	,		
Job Efficiency:	0.830	0.830	(CAT HB)		
Net Correction:	0.681	0.789				
Excavators and Front Shovels Machine Cycle Time vs	<u>s:</u>	of Loading Tool Passes R Rating: NA				
Selected Value w	rithin this Basic	Rating: NA				
Track Loaders – I Cycle Time Elements (min.):	viateriai Descrip	tion:				
Load: NA	Mar	neuver: NA	_	Dump: 0.10	00	
Wheel and Track Loaders -	Unadjusted Basi	c Loader Cycle Time (loa	ad, dump, n	naneuver):	0.575 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	Material 1/8" to	o 3/4" diameter -0.02		-0.020	(Cat HB)	
Stockpile:	Dumped by tru			0.020	(Cat HB)	_
Truck Ownership:		rship of trucks and loade	rs -0.04	-0.040	(Cat HB)	_
Operation:	Constant opera	tion -0.04		-0.040	(Cat HB)	
Dump Target:	Nominal target			0.000	(Cat HB)	_
		Net Cycle Time Adj	_	-0.080	minutes	
		Adjusted Loader Cyc Net Load Time pe		0.495 1.090	minutes minutes	
Truck Cycle Time:		р	_	2.02		
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.732	Minutes
Truck Load Time:	1.090	Minutes	Adjusted	for site altitude:	1.147	_ Minutes
ck Maneuver and Dump Time:	1.00	Minutes	Adjusted	for site altitude:	1.220	Minutes
				-		_

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	2.323

Haul Time: 2.323 minutes

Return Route:

rectarii re	rate.					
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	1.698

Return Time: 1.698 minutes
Total Truck Cycle Time: 7.120 minutes

Loading Tool unit

Production 969.41 LCY/Hour Adjusted for job efficiency: 804.61 LCY/Hour Truck Unit Production

______ LCY/Hour Adjusted for job efficiency: _____ 212.36 LCY/Hour

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production:
Adjusted single truck/loader team production:
Adjusted multiple truck/loader team production:

849.45
LCY/Hour

804.61
LCY/Hour

Adjusted multiple truck/loader team production:

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 106.19
 Hours

 Unit cost:
 \$3.010
 /LCY
 Total job cost:
 \$257,195

TRUCK/LOADER TEAM WORK

Task description:	Arequa	External P	onds -	- Topsoil				
Site: Cresson Project	<u>t</u>	Permi	t Actio	on: 2023		Permit/Job#:	M1980244	
PROJECT IDE		-						
Task #: A400					Ab			
	2/2023 38 PM	County:	l'eller			Filename:	M244-A4005	,
User: ZTT								
Agency o	r organization nar	ne: DRM	S					
HOURLY EQU	IPMENT COST	<u>T</u>			Shift bas	is: <u>1 per day</u>		
					ption			
	Truck Loader Tea							
	To the total of		_					
Support Equipment -Load Area:								
Road M	Iaintenance –Mot							
				ter Tanker, 7,000	Gal.			
Cost Breakdown:				1.1	<u> </u>			
	Truck	Loader		Load Area	Dump Area	Motor Grade	er water i	ruck
%Utilization-machine:	100		100	100	100	2	25	25
Ownership cost/hour:	\$113.82	\$10	9.98	\$241.38	\$241.38	\$212.2	21 5	\$86.29
Operating cost/hour:	\$81.91	\$9.	5.55	\$143.92	\$143.92	\$31.2	22 9	\$28.44
%Utilization-riper:	NA		0	NA	NA			NA
Ripper own. cost/hour:	NA	\$(0.00	\$0.00	\$0.00	\$0.0	00	\$0.00
Ripper op. cost/hour:	NA	\$(0.00	\$0.00	\$0.00	\$0.0	00	\$0.00
Operator cost/hour:	\$32.98	\$40	0.71	\$41.30	\$41.30	\$28.5	56	\$21.12
Unit Subtotals:	\$228.71	\$24	6.24	\$426.60	\$426.60	\$271.9	99 \$1	135.86
Number of Units:	4		1	1	1		1	1
Group Subtotals:	Work:	\$1,161.08		Support:	\$853.20	Main	it: \$407.85	;
Total work team co	ost/hour: \$2,422.	State County Teller						
MATERIAL QU	JANTITIES		Permit Action: 2023 Permit/Job#: M1980244					
Initial volume	.,				factor: 1.215			
Loose volume	e: 5,63	4	LCY					
So	ource of estimated	volume:	2022	CC&V Provided	Estimate			
Source	e of estimated swe	_						
	Material Purch	_						
	То	otal Cost: _	\$0.00)				
HOURLY PRO	<u>DDUCTION</u>							
Truck Capacity: Truck Payload (we	ight) Rosis:							

Pounds/LCY

Pounds

1,600

Top Soil

87,000

Material weight: Description:

Rated Payload:

CIRCES Cost Estimating Software

Truck/Loader Worksheet Con	t´d	1 ask # A4005			Page 2 of 3	
Payload Capacity:	54.38	LCY				
Truck Bed (volume) Basis:						
Struck Volume:		CY				
Heaped Volume:		CY				
Average Volume:		CY				
Adjusted Volume:	31.40 L	CY				
Final 7	Гruck Volume В	ased on Number of Lo	ader Passes:	30.36	LCY	
Loading Tool Capacity			Ruck	ket Size Class: N	NΑ	
Rated Capacity:	9.200	LCY (heaped)	Duci	et bize ciuss. 1	171	_
Bucket Fill Factor:	1.100	Other - rock/dirt mi	vtures (100	-120%) 1.100		=
Adjusted Capacity:	10.120	LCY	Attaces (100	12070) 1.100		_
ridjusted capacity.	10.120					
Job Condition Corrections:		Site A	Altitude (ft.): 9	9 <u>500</u> feet		
	Truck	Loader	Source			
Altitude Adj:	0.820	0.950	(CAT HB	/		
Job Efficiency:	0.830	0.830	(CAT HB)		
Net Correction:	0.681	0.789				
Excavators and Front Shovels Machine Cycle Time vs			-			
Selected Value w		-				
Track Loaders – I Cycle Time Elements (min.):	viateriai Descrip					
Load: NA	Mai	neuver: NA		Dump: 0.10	0	
Wheel and Track Loaders -	Unadjusted Basi	c Loader Cycle Time (load, dump, n	naneuver):().575 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:	Material 1/8" to	3/4" diameter -0.02		-0.020	(Cat HB)	
Stockpile:	Dumped by true			0.020	(Cat HB)	_
Truck Ownership:		rship of trucks and load	ders -0.04	-0.040	(Cat HB)	_
Operation:	Constant operat	tion -0.04		-0.040	(Cat HB)	
Dump Target:	Nominal target			0.000	(Cat HB)	_
		Net Cycle Time A		-0.080	minutes	
		Adjusted Loader C	-	0.495	minutes	
		Net Load Time	per Truck:	1.090	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.60	Minutes	Adjusted	for site altitude:	0.732	Minutes
Truck Load Time:	1.090	Minutes	Adjusted	for site altitude:	1.147	Minutes
ck Maneuver and Dump Time:	1.00	Minutes	Adjusted	for site altitude:	1.220	Minutes
				=		_

<u>Truck Travel (Haul & Return) Time:</u> <u>maintained 3.0</u>

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	2.323

Haul Time: 2.323 minutes

Return Route:

rectarii rec	ate.					
Seg#	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4600.00	0.00	3.00	3.00	3005	1.698

Return Time: 1.698 minutes
Total Truck Cycle Time: 7.120 minutes

Loading Tool unit

Production 969.41 LCY/Hour Adjusted for job efficiency: 804.61 LCY/Hour Truck Unit Production 255.86 LCY/Hour Adjusted for job efficiency: 212.36 LCY/Hour

Optimal No. of Trucks: 4 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 849.45 LCY/Hour Adjusted single truck/loader team production: 804.61 LCY/Hour Adjusted multiple truck/loader team production: 804.61 LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 7.00
 Hours

 Unit cost:
 \$3.010
 /LCY
 Total job cost:
 \$16,960

TRUCK/LOADER TEAM WORK

Task description:				ond Cleanout			
ite: Cresson Project		Permit A	Action	n: 2023	<u> </u>	Permit/Job#: M	1980244
PROJECT IDEN	TIFICATION	ſ					
Task #: A400		-	olorac	lo	Ab	breviation: Noi	ne
Date: 11/22			eller				44-A4006
	28 PM						
User: ERR							
Agency or	organization nar	ne: DRMS					
HOURLY EQUI	PMENT COST	Γ			Shift bas	is: 1 per day	
		_	E	quipment Descri			
Truck Loader Team -Truck: Generic 15-18 cy, 6x4							
		-Loader:		20D L 9'-6" Sti	ck		
Supp	ort Equipment -L		NA NA				
Road M	aintenance –Mot	1	NA				
	-Wa	ter Truck:	NA				
Cost Breakdown:	Truck/Lo	ader Team		Support I	Equipment	Maintanan	ce Equipment
Cost Breakdown.	Truck	Excavator		Load Area	Dump Area	Motor Grader	Water Truck
Utilization-machine:	100	1	00	NA	NA	NA	NA
Ownership cost/hour:	\$32.13	\$70.		NA NA	NA NA	NA NA	NA NA
Operating cost/hour:	\$73.27	\$50.		NA	NA	NA	NA
%Utilization-riper:	NA	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0	NA	NA	NA	NA
ipper own. cost/hour:	NA	\$0.	.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.	.00	NA	NA	NA	NA
Operator cost/hour:	\$32.54	\$37.		NA	NA	NA	NA
Unit Subtotals:	\$137.94	\$158.		NA	NA	NA	NA
Number of Units:	1	Φ20 < 12	1	0	0	0	0
Group Subtotals:	Work:	\$296.12		Support:	\$0.00	Maint:	\$0.00
Total work team cos	st/hour: \$296.1 2	<u> </u>					
MATERIAL QU	ANTITIES						
•							
Initial volume: Loose volume:			CCY	Swell	factor: 1.250		
	urce of estimated of estimated swe		ΓR124	ndbook			
Bource	Material Purch		50.00	muook			
	To	otal Cost: \$	00.00				
HOUDI WADA	DIIOTION						
HOURLY PRO	DUCTION						
Truck Capacity:	10 B						
Truck Payload (wei Material v				Pounds/LCY			
	iption: 2,800 Clay -	Wet		_ rounds/LC1			
Rated Pa				Pounds			

Payload Capacity: 22.85 LCY	
Truck Bed (volume) Basis:	
Struck Volume:15.00 LCY	
Heaped Volume: 18.00 LCY	
Average Volume:16.50 LCY	
Adjusted Volume: 18.00 LCY	
Final Truck Volume Based on Number of Loader Passes: 17.08	LCY
Loading Tool Capacity	
	mall
	<u> </u>
Rated Capacity: 0.980 LCY (heaped)	
Bucket Fill Factor: 1.025 Bank Clay; Earth (100%-105%) 1.025	
Adjusted Capacity: 1.005 LCY	
Job Condition Corrections: Site Altitude (ft.): 6900 feet	
Truck Loader Source	
Altitude Adj: 1.000 0.900 (CAT HB)	
Job Efficiency: 0.830 0.830 (CAT HB)	
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck:	17 pass
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: SEVERE	
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: Selected Value within this Basic Rating: SEVERE SEVERE	
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: Selected Value within this Basic Rating: Track Loaders – Material Description:	
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA Maneuver: NA Dump: 0.100	
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA Maneuver: NA Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Pactor (min.))
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 1) NA minutes
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA Maneuver: NA Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Na Pactor (min.)	NA minutes
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA NA Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): NA Cycle Time Factors Factor (min.) Material: NA NA Stockpile: NA NA Truck Ownership: NA NA	NA minutes Source (Cat HB) (Cat HB) (Cat HB)
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: SEVERE Cycle Time Elements (min.): NA Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): NA Cycle Time Factors Factor (min.) Material: NA NA NA Stockpile: NA	NA minutes Source (Cat HB) (Cat HB)
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA NA Dump: 0.100 Wheel and Track Loaders – Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Pactor (min.) Cycle Time Factors Factor (min.) Material: NA NA Stockpile: NA NA Truck Ownership: NA NA Operation: NA NA Dump Target: NA NA	NA minutes Source (Cat HB) (Cat HB) (Cat HB)
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: SEVERE Cycle Time Elements (min.): Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Naneuver: Cycle Time Factors Factor (min.) Material: NA NA NA Truck Ownership: NA NA NA Operation: NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA	NA minutes Source (Cat HB) (Cat HB)
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA Dump: 0.100 Wheel and Track Loaders – Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Passet Factor (min.) Material: NA NA Material: NA NA NA	Source (Cat HB)
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: SEVERE Cycle Time Elements (min.): Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Naneuver: Cycle Time Factors Factor (min.) Material: NA NA NA Truck Ownership: NA NA NA Operation: NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA	NA minutes Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Number of Loading Tool Passes Required to Fill Truck:	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Sever E Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Dump: 0.100 Cycle Time Elements (min.): Maneuver: NA NA Wheel and Track Loaders – Unadjusted Basic Loader Cycle Time (load, dump, maneuver): NA NA Cycle Time Factors Factor (min.) NA Material: NA NA Stockpile: NA NA Truck Ownership: NA NA Operation: NA NA NA <	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: SEVERE Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Track Loaders – Waterial Description: Cycle Time Elements (min.): Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Practor (min.) Material: NA Material: NA Stockpile: NA NA NA Truck Ownership: NA NA	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: SEVERE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: SEVERE Cycle Time Elements (min.): Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): Passes Factor (min.) NA Stockpile: NA NA Material: NA NA Stockpile: NA NA Truck Ownership: NA NA NA NA NA NA NA NA NA NA NA Dump Target: NA NA NA NA NA NA<	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes minutes

<u>Truck Travel (Haul & Return) Time:</u> penetration 5.0

Road Condition: Rutted dirt, little maintenance, no water, 2" tire

Haul Route:

11001						
Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	760.00	0.00	5.00	5.00	1867	0.488

Haul Time: 0.488 minutes Return Route: Haul Distance Grade (%) Roll. Res Total Res Velocity Travel Seg# Time (Ft) (%) (%) (fpm) (min) 1560.00 0.00 5.00 5.00 2795 0.592

Return Time: 0.592 minutes
Total Truck Cycle Time: 9.524 minutes

Loading Tool unit

Production Truck Unit Production

Truck Unit Production

107.57 LCY/Hour Adjusted for job efficiency: 112.72 LCY/Hour Adjusted for job efficiency: 89.29 LCY/Hour Optimal No. of Trucks: 1 Truck(s)

Selected Number of Trucks: 1 Truck(s)

Adjusted hourly truck team production: 89.29 LCY/Hour Adjusted single truck/loader team production: 89.29 LCY/Hour Adjusted multiple truck/loader team production: 89.29 LCY/Hour LCY/Hour

JOB TIME AND COST

 Fleet size:
 1
 Team(s)
 Total job time:
 5.36
 Hours

 Unit cost:
 \$3.316
 /LCY
 Total job cost:
 \$1,588

BULLDOZER RIPPING WORK

	Task description:	Anc	illary Areas -	· Topsoil - R	ipping				
Site:	Cresson Project		Perr	nit Action:	2023	P	ermit/Job#	: <u>M198</u>	30244
	PROJECT IDEN	NTIFICATI	<u>ON</u>						
	Task #: A500	12	State:	Colorado		Abb	reviation:	None	
		1/2023	County:	Teller			Filename:		-A5002
		45 PM							
	User: ZTT								
	Agency or	r organization	name: DR	aMS					
	HOURLY EQUI	PMENT CO	OST						
	Basic M	achine: Car	t D7R DS Ser	ies II LGP		Horsepower:		240	
	Ripper Attac		Shank Ripper			Shift Basis:	1 1	per day	
	11		• •		<u> </u>	Data Source:		CRG)	
	Cost Breakdown:								
	Cost Bicardowii.					Utilization %			
		Ownership Co	ost/Hour:		\$114.76	NA			
		Operating Co			\$91.98	100	-		
		Ownership Co			\$9.06	NA	=		
	Ripper	r Operating Co			\$5.02	100	_		
		Operator C			\$41.30	NA	_		
		Total Unit Co	ost/Hour:		\$262.12				
		Total Fleet C	ost/Hour:	\$262	2.12				
	MATERIAL QU	JANTITIES		Sele	cted estimating	method: Area	ı		
	Alternate Methods:				J				
mic:	NA		Banl	« Volume:	NA	BCY		NA	
rea:	1,431.00	acres		Depth (ft):	2.50		5,771,700	1111	BCY or 0
	· · · · · · · · · · · · · · · · · · ·		-		C0 V D	_			
		Source of estil	mated quantit	y: <u>2022 C</u>	C&V Provided	Estimate			
	HOURLY PROI	<u>DUCTION</u>							
	Seismic:								
	<u>Beisine.</u>		Seismic Velo	city:	NA	feet/sec	ond		
					·				
	Area:	A			2.45	C 1 /			
			ge Ripping De ge Ripping Wi		2.45 6.50	feet/pas feet/pas			
			e Ripping Wi		400.00	feet/pas			
			age Dozer Sp		88.00	feet/mii			
			Maneuver T		0.25	minutes			
			tion per unit a		0.747	acres/ho	-		
	Job Condition Corr		•						
		ljusted Hourly	_	tion:	0.747	Acres/h	r		
		J J	Site Altit		9,500	feet			
			Altitude .		1.00	(CAT H	IB)		
			Job Efficie		0.83	(1 shift/	*		
			Net Correct		0.83	multipli	•		
		Adjusted	Hourly Unit	Production:	0.62	Acres/hr			
			Hourly Fleet		0.62	Acres/hr			
	JOB TIME AND	3	,						
	Fleet size:	1	Grader(s)		Total job time	e: 2.	308.63]	Hours
		Φ4 22 0 7 0	_		ū				
	Unit cost:	\$422.878	Per acre		Total job cos	st: \$6	05,138		

BULLDOZER RIPPING WORK

Task description:	Growth Media Piles	s - Topson	ı - Kıppıng				
Site: Cresson Project	Permit	Action: _	2023	Pe	rmit/Job#:	M19802	244
PROJECT IDENTIFI	<u>CATION</u>						
Task #: A5003	State: C	Colorado		Ahhr	eviation:	None	
Date: $\frac{A3003}{11/21/2023}$		Celler			ilename:	M244-A	5003
2:18:43 PM	2						
User: ZTT							
Agency or organ	nization name: DRMS	S					
HOURLY EQUIPME	NT COST						
Basic Machine		II LGP		Horsepower:		240	
Ripper Attachment				Shift Basis:		er day	
•			_	Data Source:		CRG)	
Cost Breakdown:				_			
Cost Breakdown.				Utilization %			
Owner	rship Cost/Hour:		\$114.76	NA			
Opera	ating Cost/Hour:		\$91.98	100			
Ripper Owner	rship Cost/Hour:		\$9.06	NA			
	ating Cost/Hour:		\$5.02	100			
	rator Cost/Hour:		\$41.30	NA			
Total	Unit Cost/Hour:		\$262.12				
Total I	Fleet Cost/Hour:	\$262	.12				
MATERIAL QUANT	<u>ITIES</u>	Sele	cted estimating	method: Area			
Alternate Methods:			C				
smic: NA	Bank V	olume:	NA	BCY		NA	
Area: $\frac{118.80}{118.80}$ acr		_	2.50		79,160	IVA	BCY or Co
		` ′ _			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		201010
Source	of estimated quantity:	2022 C	C&V Provided	Estimate			
HOURLY PRODUCT	<u> TION</u>						
Seismic:							
<u>bersine.</u>							
	Seismic Velocity	v:	NA	feet/seco	ond		
	Seismic Velocity	y:	NA	feet/seco	ond		
Area:	·						
	Average Ripping Depth	n:	2.45	feet/pass			
	Average Ripping Depth Average Ripping Width	1: 1:	2.45 6.50	feet/pass			
	Average Ripping Depth Average Ripping Width Average Ripping Length	1: 1:	2.45 6.50 200.00	feet/pass feet/pass feet/pass			
A	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed	n: n: n: d:	2.45 6.50 200.00 88.00	feet/pass feet/pass feet/min	ute		
A.	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time	n: n: n: d:	2.45 6.50 200.00	feet/pass feet/pass feet/pass	ute pass		
A.	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area	n: n: n: d:	2.45 6.50 200.00 88.00 0.25	feet/pass feet/pass feet/pass feet/min minutes/	ute pass		
A Job Condition Correction	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area	n: n: n: d: e: a:	2.45 6.50 200.00 88.00 0.25 0.710	feet/pass feet/pass feet/min minutes/ acres/ho	ute pass ur		
A Job Condition Correction	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production	n:	2.45 6.50 200.00 88.00 0.25 0.710	feet/pass feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr	ute pass ur		
A Job Condition Correction	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production	n:	2.45 6.50 200.00 88.00 0.25 0.710	feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr feet	ute pass ur		
A Job Condition Correction	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production Site Altitude Altitude Ad	n:	2.45 6.50 200.00 88.00 0.25 0.710 0.710 9,500 1.00	feet/pass feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr feet (CAT H	ute pass ur		
A Job Condition Correction	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production	n:	2.45 6.50 200.00 88.00 0.25 0.710	feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr feet	ute pass ur B) lay)		
Job Condition Correction Unadjusted	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production Site Altitude Altitude Ad Job Efficiency Net Correction	n:	2.45 6.50 200.00 88.00 0.25 0.710 0.710 9,500 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr feet (CAT H (1 shift/c multiplie	ute pass ur B) lay)		
Job Condition Correction Unadjusted	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production Site Altitude Altitude Ad Job Efficiency	n:	2.45 6.50 200.00 88.00 0.25 0.710 0.710 9,500 1.00 0.83	feet/pass feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr feet (CAT H (1 shift/o	ute pass ur B) lay)		
Job Condition Correction Unadjusted	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production Site Altitude Altitude Ad Job Efficiency Net Correction djusted Hourly Unit Producted	n:	2.45 6.50 200.00 88.00 0.25 0.710 0.710 9,500 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr feet (CAT H (1 shift/o multiplied Acres/hr	ute pass ur B) lay)		
Job Condition Correction Unadjusted Add	Average Ripping Depth Average Ripping Width Average Ripping Length Average Dozer Speed Average Maneuver Time Production per unit area Factors Hourly Unit Production Site Altitude Altitude Ad Job Efficiency Net Correction djusted Hourly Unit Producted	n:	2.45 6.50 200.00 88.00 0.25 0.710 0.710 9,500 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/min minutes/ acres/ho Acres/hr feet (CAT H (1 shift/d multiplie Acres/hr Acres/hr	ute pass ur B) lay)	Ho	ours

BULLDOZER WORK

Task description:	Moni	toring Wel	l Pads - Tops	soil/Regrade - Dozer Sp	oreading	
Cresson Project		Per	mit Action:	2023	Permit/Job#:	M1980244
PROJECT IDEN	TIFICATIO	<u>)N</u>				
Task #: A5004 Date: 11/20/	<u> </u>	State: County:	Colorado Teller		Abbreviation: Filename:	None M244-A5004
Agency or	organization ı	name: DI	RMS			
HOURLY EQUI	PMENT CO	<u>ost</u>				
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D7R DS 240 Straight NA 1 per day (CRG)	S Series II L	GP			
Cost Breakdown:	(6113)					
Ownership Cost/Ho Operating Cost/Ho Ripper own. Cost/Ho Ripper op. Cost/Ho Operator Cost/Ho	our:our:		\$114.76 \$91.98 \$0.00 \$0.00 \$41.30	Utilization % NA 100 NA 25 NA		
MATERIAL QUA		, , ,				
Swell factor:	1.429 37,568 LCY					
Source of estimated Source of estimated		Assumed Cat Hand		x 12" per each borehole		
HOURLY PROD	<u>UCTION</u>					
Average push distand Unadjusted hourly p		50 feet 800.0 LCY	/hr			
Materials consistenc	y description:	Compa	icted fill or ei	nbankment 0.9		
Average push gradie Average site altitude		feet				
Material weight:	1,600	lbs/LCY			<u> </u>	
Weight description:	Top So	oil				
Job Condition Corre	ction Factor rator Skill:	0	.750 .900	Source (AVG.) (CAT HB))		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6445

Adjusted unit production: 515.60 LCY/hr
Adjusted fleet production: 515.6 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s) Unit cost: \$0.481/LCY

Total job time: 72.86 Hours \$18,073

BOREHOLE SEALING WORK

	Task description:	Monitoring	Well Closure				
Site:	Cresson Project		Permit Action:	2023	Permit/J	ob#: <u>M1980244</u>	
PROJE	CCT IDENTIFICATION	<u>ON</u>					
Task #	: A6000	State:	Colorado		Abbreviation:	None	
Date	: 11/20/2023 8:53:10 PM	County:	Teller		Filename:	M244-A6000	
User	: ZTT	=					

UNIT COSTS

Agency or organization name: DRMS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Ancillary Areas	Portland cement grout - 4	4"	227	16,117.00	LF	\$5.51	\$88,820.79
(71 Monitoring	in. (labor, equip,						
Holes)	materials)						

Job Hours: 167.88 Total Cost: \$88,821.00

Task description: Ironclad Mine Area - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0001 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0001

11:09:40 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		Cost /Acre \$112.82
Disc marowing, o deep (MZZM 18 82 91 18:22 8180)	Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 26.11
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$60,673.90

Reseeding Job Cost: \$14,432.04

Total Job Cost: \$75,106

Job Hours: 32.60

Task description: SGOSA Mine Area - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0002 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0002

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description		Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$112.82
	Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)	\$1,306.80
Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 172.22
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$400,201.39

Reseeding Job Cost: \$95,192.88

Total Job Cost: \$495,394

Job Hours: 215.30

Task description: N. Cresson Mine Area - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0003 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0003

11:12:16 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)	\$1,306.80
Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 128.72
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$299,116.96

Reseeding Job Cost: \$71,148.69

Total Job Cost: \$370,266

160.90

Task description: N. Cresson Mine Area - Globe Hill HR - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0004 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0004

11:13:45 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre			\$0.00		

JOB TIME AND COST

 No. of Acres:
 40.17
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$93,346.24

Reseeding Job Cost: \$22,203.57

Total Job Cost: \$115,550

50.20

Task description: ECOSA Mine Area - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0005 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0005

11:14:36 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		Cost /Acre \$112.82
	Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 350.85
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$815,298.21

Reseeding Job Cost: \$193,928.83

Total Job Cost: \$1,009,227

Job Hours: 438.60

Task description: E. Cresson Mine Area - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0006 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0006

11:16:18 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)	\$1,306.80
Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 309.52
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$719,256.39

Reseeding Job Cost: \$171,084.08

Total Job Cost: \$890,340

386.90

Task description:	E. Cresson Mine Area - WHEX - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0007 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0007

User: 11:17:29 PM ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 199.66
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$463,965.91

Reseeding Job Cost: \$110,360.07

Total Job Cost: \$574,326

249.60

Task description: E. Cresson Mine Area - Ironclad - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0008 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0008

11:18:26 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre			\$0.00		

JOB TIME AND COST

 No. of Acres:
 14.93
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$34,694.04

Reseeding Job Cost: \$8,252.41

Total Job Cost: \$42,946

18.70

Task description: M. Cresson Mine Area - 10185 - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0009 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0009

11:19:38 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre			\$0.00		

JOB TIME AND COST

 No. of Acres:
 83.2
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$193,338.50

Reseeding Job Cost: \$45,987.97

Total Job Cost: \$239,326

Job Hours: 104.00

Task description: M. Cresson Mine Area - Ruby Rd - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0010 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0010

11:20:53 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		Cost /Acre \$112.82
Disc initiowing, o deep (initial is 22) 113.22 5150)	Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 73.3
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$170,333.07

Reseeding Job Cost: \$40,515.84

Total Job Cost: \$210,849

91.60

rask description:	M. Cresson Mine Area - AJAX - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0011 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0011

11:22:11 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 33.31
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$77,405.11

Reseeding Job Cost: \$18,411.77

Total Job Cost: \$95,817

Job Hours: 41.60

Task description: M. Cresson Mine Area - Crusher - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0012 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0012

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres: 60.61 Cost /Acre: \$2,323.78 Estimated Failure Rate: 25% Cost /Acre*: \$2,210.96

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$140,844.31

Reseeding Job Cost: \$33,501.57

Total Job Cost: \$174,346

75.80

Task description: M. Cresson Mine Area - Pit Bottom - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0013 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0013

11:24:25 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 69.1
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$160,573.20

Reseeding Job Cost: \$38,194.33

Total Job Cost: \$198,768

Job Hours: \$6.40

Task description: M. Cresson Mine Area - S. Cresson HR - Revegetation Permit Action: 2023 Permit/Job#: M1980244

Site: Cresson Project

PROJECT IDENTIFICATION

Task #: B0014 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0014

11:25:51 PM User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre			\$0.00		

JOB TIME AND COST

 No. of Acres:
 30.1
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$69,945.78

Reseeding Job Cost: \$16,637.47

Total Job Cost: \$86,583

Job Hours: 37.60

Task description:

M. Cresson Mine Area - Cresson HR - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0015 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0015

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 30.1
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$69,945.78

Reseeding Job Cost: \$16,637.47

Total Job Cost: \$86,583

Job Hours: 37.60

Task description: Crusher Mine Area - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0016 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0016

User: 11:30:02 PM ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 43.09
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$100,131.68

Reseeding Job Cost: \$23,817.57

Total Job Cost: \$123,949

53.90

Task description: Crusher Mine Area - Delivery Rd - Revegetation

Crusher Mine Area - Delivery Rd - Revegetation

Parmit Action: 2023

Parmit/Joh#: M1080244

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0017 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0017

11:31:24 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 10.22
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$23,749.03

Reseeding Job Cost: \$5,649.00

Total Job Cost: \$29,398

12.80

Task description: Chicago Mine Area - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0018 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0018

11:32:22 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 4.1
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$9,527.50

Reseeding Job Cost: \$2,266.23

Total Job Hours: \$11,794

5.10

Task description:	TR133 WHEX Clay Borrow Area - Revegetation			
G	D : 1 1 2000	D	/T 1 !!	3.610002.44

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B0019 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B0019

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 4.7
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$10,921.77

Reseeding Job Cost: \$2,597.88

Total Job Cost: \$13,520

Job Hours: 5.90

TR 137 WHEX Clay Borrow Area Expansion

Site:	Cresson Project	Permit Action:	2023	Permit/Job#:	M1980244

PROJECT IDENTIFICATION

Task #:B0020State:ColoradoAbbreviation:NoneDate:12/1/2023County:TellerFilename:M244-B0020

User: ERR

Agency or organization name: DRMS

FERTILIZING

Task description:

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials	
			Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36
Flax, Lewis Blue	0.25	1.66	\$4.13

Yarrow, Western	0.06	3.65	\$2.51
Totals Seed N	Mix 25.02	79.43	\$102.71

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 8.2
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: \$19,055.00

Reseeding Job Cost: \$4,532.47

Total Job Cost: \$23,587

10.30

Task description: AGVLF - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B1000 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B1000

11:34:25 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 649.59
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$1,509,504.25

Reseeding Job Cost: \$359,054.38

Total Job Cost: \$1,868,559

Job Hours: 812.00

Task description: SGVLF - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B1001 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B1001

11:45:21 PM

User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description		Cost /Acre
Broadcast seeding [D	1G]	\$267.22
	Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 557.39
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$1,295,251.73

Reseeding Job Cost: \$308,091.75

Total Job Cost: \$1,603,343

Job Hours: 696.70

Task description: Foundations and Buildings - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B2000 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B2000

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User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 13.7
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$31,835.79

Reseeding Job Cost: \$7,572.54

Total Job Cost: \$39,408

17.10

Task description: EMP Ponds - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B3000 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B3000

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 5.7
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$13,245.55

Reseeding Job Cost: \$3,150.62

Total Job Cost: \$16,396

7.10

Task description: Crusher Fuel Island Fresh Water Pond - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B3001 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B3001

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User: ZTT

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

 No. of Acres:
 0.2
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$464.76

Reseeding Job Cost: \$110.55

Total Job Cost: \$575

Job Hours: 0.30

Task description: Arequa External Ponds - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B3002 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B3002

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre			\$0.00		

JOB TIME AND COST

 No. of Acres:
 5.7
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,323.78

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$13,245.55

Reseeding Job Cost: \$3,150.62

Total Job Cost: Job Hours: 7.10

Task description: Ancillary Areas - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B4000 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-B4000

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)	\$1,306.80
Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre			\$0.00		

JOB TIME AND COST

 No. of Acres:
 1431
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$3,325,329.18

Reseeding Job Cost: \$790,970.94

Total Job Cost: \$4,116,300

1,789.00

Task description: Growth Media Piles - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B4001 State: Colorado Abbreviation: None

Date: 11/21/2023 County: Teller Filename: M244-B4001

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre				\$0.00	

JOB TIME AND COST

 No. of Acres:
 118.8
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$276,065.06

Reseeding Job Cost: \$65,665.51

Total Job Hours: \$341,731

149.00

Task description: Monitoring Well Pads - Revegetation

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: B4002 State: Colorado Abbreviation: None

Date: 11/21/2023 County: Teller Filename: M244-B4002

12:02:31 AM

User: ERR

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	400.00	pound	\$0.68	\$272.00
			Total Fertilizer Materials Cost/Acre	\$272.00

Application

Description		Cost /Acre
NA-fertilizer application incl. with hydroseeding		\$262.23
	Total Fertilizer Application Cost/Acre	\$262.23

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.48	4.79	\$9.62
Mountain Brome - Bromar	4.00	6.43	\$15.20
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Rye, Winter - VNS	9.63	3.98	\$5.15
Sheep Fescue - Bighorn	1.44	22.48	\$6.34
Slender Wheatgrass - Native	2.88	10.51	\$13.32
Milk Vetch, Cicer - Monarch	0.96	3.20	\$7.87
Mahogany, Mountain	0.13	0.18	\$4.78
Thickspike Wheatgrass - Critana	3.38	11.95	\$23.24
Rose, Wood's	0.31	0.00	\$6.36

Flax, Lewis Blue	0.25	1.66	\$4.13
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	25.02	79.43	\$102.71

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,306.80
	Total Mulch Application Cost/Acre	\$1,306.80

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 1	Nursery Stoc	k Cost / Acre	\$0.00

JOB TIME AND COST

 No. of Acres:
 16.3
 Cost /Acre:
 \$2,323.78

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$2,210.96

*Selected Replanting Work Items: FERTILIZING, SEEDING, MULCHING

Initial Job Cost: \$37,877.61

Reseeding Job Cost: \$9,009.66

Total Job Cost: Job Hours: 20.00

Task description:	E. Cresson Wild	lhorse - Tree Planting	9			
: Cresson Project	Pe	rmit Action: 2023			Permit/Job#	#: <u>M1980244</u>
PROJECT IDENTI	FICATION					
Task #: B5000 Date: 11/21/20 12:05:30	2	Colorado Teller		Ab	breviation: _ Filename: _	None M244-B5000
User: ZTT	ganization name: DF	RMS				
		AMD				
FERTILIZING Materials						
Description		Units / Acre	Unit	Cos	st / Unit	Cost /Acre
-				\$		\$
				Tot	tal Fertilizer Materials Cost/Acre	\$0.00
Application						
Description						Cost /Acre
						\$
		Total F	ertilizer	Applicatio	on Cost/Acre	\$0.00
<u> </u>						
Description						Cost /Acre
						\$
			r	Fotal Tillin	ng Cost/Acre	\$0.00
SEEDING						
Seed Mix				Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
						\$
		Totals Sec	ed Mix	0.00	0.00	\$0.00
Application						
Description						Cost /Acre

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Currant, Golden or	50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
Yellow		(MEANS)			
Pine, Bristlecone	25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
		(MEANS)			
Spruce, Englemann	25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
		(MEANS)			
Rose, Wood's	50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
		(MEANS)			
		Totala	Numaour Cto	ek Cost / Acre	\$365.00

JOB TIME AND COST

 No. of Acres:
 89
 Cost /Acre:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$32,485.00

Reseeding Job Cost: \$8,121.25

Total Job Cost: \$40,606

111.25

Cresson Project	Pe	rmit Action: 2023			Permit/Job	#: <u>M1980244</u>
PROJECT IDENTIFIC	ATION					
Task #: B5001	State:	Colorado		Ab	breviation:	None
Date: 11/21/2023	County:	Teller			Filename:	M244-B5001
User: $\frac{12:06:59 \text{ AN}}{\text{ZTT}}$	<u>1</u>				-	
		DMC				
Agency or organiz	zation name. Dr	KIVIS				
FERTILIZING						
Materials		TI*4/				
Description		Units / Acre	Unit	Cos	st / Unit	Cost /Acre
				\$		\$
					tal Fertilizer	
				10	Materials	
					Cost/Acre	\$0.00
		Total F	'ertilizer	Application	on Cost/Acre	\$0.00
TILLING						
Description						Cost /Acre
						\$
			,	Total Tillin	ng Cost/Acre	\$0.00
SEEDING						
Seed Mix				Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
						\$
		Totals Se	ed Mix	0.00	0.00	\$0.00
hnlicatio-				<u> </u>		ΨΟ•ΟΟ
Application						
Description						Cost /Acre

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
	m	NT 61		\$365.00
	50 25 25	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 26 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	Solution

JOB TIME AND COST

No. of Acres: 23 Cost /Acre: \$365.00
Estimated Failure Rate: 25% Cost /Acre*: \$365.00
*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$8,395.00

Reseeding Job Cost: \$2,098.75

Total Job Cost: \$10,494

28.75

	I. Cresson - Tr	_				
Cresson Project	Permit Action: 2023 Permit/Job#				#: <u>M1980244</u>	
PROJECT IDENTIFICAT	<u> TION</u>					
Task #: B5002	State:	Colorado		Ab	breviation:	None
Date: 11/21/2023	County:	Teller			Filename:	M244-B5002
12:14:32 AM	_				_	
User: ZTT	_					
Agency or organization	on name: DF	RMS				
ERTILIZING						
Materials						
Description		Units / Acre	Unit	Cos	st / Unit	Cost /Acre
				\$		\$
					. 177	
				To	tal Fertilizer Materials	
					Cost/Acre	\$0.00
				l .		-1
Description						Cost /Acre
						7
		Total F	ertilizer	Application	on Cost/Acre	\$0.00
TILLING						
Description						Cost /Acre
•						\$
						Φ
			ŗ	Fotal Tillir	ng Cost/Acre	\$0.00
SEEDING						
				Rate –		
Seed Mix				PLS	Seeds	Cost /Acre
				LBS /	per SQ.	
				Acre	FT	
						¢.
						\$
		m . 1 ~	135	0.00	0.00	
		Totals Sec	ed Mix	0.00	0.00	\$0.00
application						
						G 4 //
Description						Cost /Acre

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/A	ero do oo
Total Mulch Application Cost/A	cre \$0.00

NURSERY STOCK PLANTING

Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
	m	NT 61		\$365.00
	50 25 25	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 26 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	Solution

JOB TIME AND COST

 No. of Acres:
 59
 Cost /Acre:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$21,535.00

Reseeding Job Cost: \$5,383.75

Total Job Cost: \$26,919

73.75

Tas								
_(Cresson Project	Per	Permit Action: 2023 Permit/Job#:				#: <u>M1980244</u>	
PR(OJECT IDENTIFIC	<u>CATION</u>						
	Task #: B5004	State:	Colorado		Ab	breviation:	None	
	Date: 11/21/2023	County:	Teller			Filename:	M244-B5004	
	1:36:18 PM User: ZTT					=		
		zation nama: DI	OMC					
	Agency or organi	zation name. Dr	RMS					
	RTILIZING							
Mat	terials		Units /					
Ι	Description		Acre	Unit	Cos	st / Unit	Cost /Acre	
					\$		\$	
						401 Fau 4 11:au		
					10	tal Fertilizer Materials		
						Cost/Acre	\$0.00	
	olication Description					00000000	Cost /Acre	
							Cost /Acre	
							Cost /Acre	
			Total	Fertilizer	Applicatio	on Cost/Acre	Cost /Acre	
Ι			Total	Fertilizer	Applicatio		Cost /Acre	
	Description		Total	Fertilizer	Applicatio		Cost /Acre	
	Description LLING		Total	Fertilizer	Application		Cost /Acre \$ \$0.00	
	Description LLING		Total			on Cost/Acre	Cost /Acre \$ \$0.00 Cost /Acre	
	Description LLING		Total				Cost /Acre \$ \$0.00 Cost /Acre	
FIL	Description LLING		Total			on Cost/Acre	Cost /Acre \$ \$0.00 Cost /Acre	
TIL	Description LLING Description EDING		Total		Γotal Tillin Rate –	on Cost/Acre	Cost /Acre \$ \$0.00 Cost /Acre \$ \$0.00	
TIL I	Description LLING Description		Total		Fotal Tillin	on Cost/Acre ng Cost/Acre Seeds per SQ.	Cost /Acre \$ \$0.00 Cost /Acre	
TIL I	Description LLING Description EDING		Total		Γotal Tillin Rate –	on Cost/Acre	Cost /Acre \$ \$0.00 Cost /Acre \$ \$0.00	
TIL I	Description LLING Description EDING		Total		Fotal Tillin Rate – PLS LBS /	on Cost/Acre ng Cost/Acre Seeds per SQ.	Cost /Acre \$ \$0.00 Cost /Acre \$ \$0.00	
TIL	Description LLING Description EDING		Total Totals S		Fotal Tillin Rate – PLS LBS /	on Cost/Acre ng Cost/Acre Seeds per SQ.	Cost /Acre \$ \$0.00 Cost /Acre \$ \$0.00	

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/A	ero do oo
Total Mulch Application Cost/A	cre \$0.00

NURSERY STOCK PLANTING

Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
	m	NT 61		\$365.00
	50 25 25	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 26 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	Solution

JOB TIME AND COST

 No. of Acres:
 42
 Cost /Acre:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$15,330.00

Reseeding Job Cost: \$3,832.50

Total Job Cost: Job Hours: \$2.50

Cresson Project		Planting					
	Permit Action: _2023 Permit/Job#:				t: <u>M1980244</u>		
PROJECT IDENTIF	<u>ICATION</u>						
Task #: B5005	State:	Colorad	О		Ab	breviation:	None
Date: 11/21/202	2	Teller				Filename:	M244-B5005
1:37:14 P User: ZTT	<u>'M</u>				<u></u>	-	
·	anization name: DF	RMS					
FERTILIZING Materials							
Description	_		Units / Acre	Unit	Cos	st / Unit	Cost /Acre
Description			Acre	Cint	\$		\$
							Ψ
					Tot	tal Fertilizer Materials	
						Cost/Acre	\$0.00
							Ψ
							\$
			Total	Fertilizer	Application	on Cost/Acre	\$0.00
PH I INC							φυ.υυ
<u> TILLING</u>							φυ.υυ
Description							Cost /Acre
				7	Гotal Tillir	ng Cost/Acre	Cost /Acre
				<u> </u>	Fotal Tillir	ng Cost/Acre	Cost /Acre
Description				· .	Rate – PLS LBS /	Seeds per SQ. FT	Cost /Acre
Description SEEDING				· ·	Rate – PLS	Seeds per SQ.	Cost /Acre \$ \$0.00 Cost /Acre
Description SEEDING			Totals S	Seed Mix	Rate – PLS LBS /	Seeds per SQ.	Cost /Acre \$ \$0.00
Description SEEDING			Totals S		Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre \$ \$0.00 Cost /Acre

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/A	ero do oo
Total Mulch Application Cost/A	cre \$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Currant, Golden or	50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
Yellow		(MEANS)			
Pine, Bristlecone	25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
		(MEANS)			
Spruce, Englemann	25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
		(MEANS)			
Rose, Wood's	50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
		(MEANS)			
		Totals	Nursery Stoc	ck Cost / Acre	\$365.00

JOB TIME AND COST

 No. of Acres:
 115
 Cost /Acre:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$41,975.00

Reseeding Job Cost: \$10,493.75

Total Job Cost: \$52,469

143.75

Task description: S	Squaw - Tree Pl	anting				
Cresson Project	Per	rmit Action: 2023			Permit/Job	#: <u>M1980244</u>
PROJECT IDENTIFICA	<u>TION</u>					
Task #: B5006	State:	Colorado		Ab	breviation:	None
Date: 11/21/2023	County:	Teller			Filename:	M244-B5006
1:38:53 PM					_	
User: ZTT	<u> </u>					
Agency or organizat	ion name: DF	RMS				
ERTILIZING						
Materials		TT24/				
Description		Units / Acre	Unit	Cos	st / Unit	Cost /Acre
				\$		\$
				Tot	tal Fertilizer	
					Materials	
					Cost/Acre	\$0.00
						\$
		Total F	ertilizer	Application	on Cost/Acre	\$0.00
<u>TILLING</u>						
Description						Cost /Acre
						\$
			[Fotal Tillir	ng Cost/Acre	\$0.00
SEEDING						
Seed Mix				Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
						\$
		Totals Sec	ed Mix	0.00	0.00	\$0.00
Application						
Description						Cost /Acre

	\$
Total Seed Application Cost/A	cre \$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Currant, Golden or Yellow	50	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.40	\$0.00	\$120.00
Pine, Bristlecone	25	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.50	\$0.00	\$62.50
Spruce, Englemann	25	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.50	\$0.00	\$62.50
Rose, Wood's	50	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.40	\$0.00	\$120.00
		Totals	Nursery Stor	ek Cost / Acre	\$365.00

JOB TIME AND COST

 No. of Acres:
 85
 Cost /Acre:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$31,025.00

Reseeding Job Cost: \$7,756.25

Total Job Cost: \$38,781

106.25

Tas	sk description:	Mill Platform - 7	Tree Planting				
_(Cresson Project	Per	rmit Action: 202	3		Permit/Job	#: <u>M1980244</u>
PR(OJECT IDENTIFI	<u>CATION</u>					
	Task #: B5007	State:	Colorado		Ab	breviation:	None
	Date: 11/21/2023	-	Teller			Filename:	M244-B5007
	User: 1:39:47 PM ZTT	<u>/1</u>				=	
		.:_ation_nometDE	OMC				
	Agency of organ	ization name: DR	TIMIS				
	RTILIZING						
Mat	erials		Units /				
Ι	Description		Acre	Unit	Cos	st / Unit	Cost /Acre
					\$		\$
					То	tal Fertilizer	
					10	Materials	
						Cost/Acre	\$0.00
							\$
						~	
			101a	ı Ferunzer	Аррисацо	on Cost/Acre	\$0.00
ΓIL	LING						
Ι	Description						Cost /Acre
							\$
					Total Tillir	ng Cost/Acre	\$0.00
SEF	EDING						
	Seed Mix				Rate –	Seeds	Cost /Acre
2	seed Mix				PLS LBS /	per SQ.	Cost/Acre
					Acre	FT	
							¢.
							\$
			Totals	Seed Mix	0.00	0.00	Φ0.00
1			Totals	Decu IVIIA	0.00		\$0.00
<u> </u>							
لط pp	lication						

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/A	ero do oo
Total Mulch Application Cost/A	cre \$0.00

NURSERY STOCK PLANTING

Type and Size	on Name No /
Bare root seedling, 11-16 inch ht. \$2.40 \$0.00 \$120.00 (MEANS)	, Golden or 50
Bare root seedling, 11-16 inch ht. \$2.50 \$0.00 \$62.50 (MEANS)	ristlecone 25
Bare root seedling, 11-16 inch ht. \$2.50 \$0.00 \$62.50 (MEANS)	Englemann 25
Bare root seedling, 11-16 inch ht. \$2.40 \$0.00 \$120.00 (MEANS)	Vood's 50
<i>U</i> ,	Vood's 50

JOB TIME AND COST

No. of Acres: 35 Cost /Acre: \$365.00
Estimated Failure Rate: 25% Cost /Acre*: \$365.00
*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$12,775.00

Reseeding Job Cost: \$3,193.75

Total Job Cost: \$15,969

Job Hours: 43.75

Task description:	Victor & Ironcla	ad - Tree Planting				
Cresson Project	Cresson Project Permit Action: 2023 Permit/Job#		#: <u>M1980244</u>			
PROJECT IDENTIFIC	CATION					
Task #: B5008	State:	e: Colorado Abbreviation:				None
Date: 11/21/2023	County:	Teller			Filename:	M244-B5008
1:40:45 PM					_	
User: ZTT						
Agency or organiz	zation name: DR	RMS				
<u>ERTILIZING</u>						
Materials		Units /				
Description		Acre	Unit	Cos	st / Unit	Cost /Acre
				\$		\$
				Tot	tal Fertilizer	
					Materials	
					Cost/Acre	\$0.00
						\$
		Total F	ertilizer	Application	on Cost/Acre	\$0.00
<u> </u>						
Description						Cost /Acre
						\$
			7	Fotal Tillir	ng Cost/Acre	\$0.00
SEEDING						
Seed Mix				Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
						\$
		Totals Se	ed Mix	0.00	0.00	\$0.00
Application						
Description						Cost /Acre

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/A	ero do oo
Total Mulch Application Cost/A	cre \$0.00

NURSERY STOCK PLANTING

Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
25	Bare root seedling, 11-16 inch ht.	\$2.50	\$0.00	\$62.50
	(MEANS)			
50	Bare root seedling, 11-16 inch ht.	\$2.40	\$0.00	\$120.00
	(MEANS)			
	m	NT 61		\$365.00
	50 25 25	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	50 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 25 Bare root seedling, 11-16 inch ht. (MEANS) 26 Bare root seedling, 11-16 inch ht. (MEANS) 50 Bare root seedling, 11-16 inch ht. (MEANS)	Solution

JOB TIME AND COST

 No. of Acres:
 42
 Cost /Acre:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$15,330.00

Reseeding Job Cost: \$3,832.50

Total Job Cost: \$19,162

Job Hours: 52.50

Task description:	Building Footpr	int - Tree Planting				
Cresson Project	Permit Action: 2023 Permit/Job#		#: <u>M1980244</u>			
PROJECT IDENTIF	<u>TICATION</u>					
Task #: B5009	State:	State: Colorado Abbreviation:				None
Date: 11/21/202					Filename:	M244-B5009
1:44:06 P	PM				=	
User: ZTT						
Agency or orga	anization name: DF	RMS				
FERTILIZING						
Materials		Units /				
Description			Unit	Cos	st / Unit	Cost /Acre
				\$		\$
				To	tal Fertilizer	
					Materials	
					Cost/Acre	\$0.00
						\$
		Total Fe	ertilizer	Application	on Cost/Acre	\$0.00
<u> FILLING</u>						
Description						Cost /Acre
						\$
			7	Fotal Tillir	ng Cost/Acre	\$0.00
<u>SEEDING</u>						
Seed Mix				Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
						\$
		Totals See	d Mix	0.00	0.00	\$0.00
Application						
Description						Cost /Acre

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Currant, Golden or Yellow	50	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.40	\$0.00	\$120.00
Pine, Bristlecone	25	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.50	\$0.00	\$62.50
Spruce, Englemann	25	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.50	\$0.00	\$62.50
Rose, Wood's	50	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.40	\$0.00	\$120.00
		Totals	Nursery Stoo	ek Cost / Acre	\$365,00

JOB TIME AND COST

 No. of Acres:
 87
 Cost /Acres:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$31,755.00

Reseeding Job Cost: \$7,938.75

Total Job Cost: \$39,694

Job Hours: 108.75

Cresson Project	Permit Action: 2023 Permit/Job#:				: <u>M1980244</u>	
ROJECT IDENTIF	ICATION					
Task #: B5010	State: C	State: Colorado Abbreviation: 1				None
Date: 11/21/202	County: T	County: Teller Filename: N				M244-B5010
User: $\frac{1:46:18 \text{ P}}{\text{ZTT}}$	<u> </u>				_	
		_				
Agency or orga	inization name: DRMS	S				
ERTILIZING						
Iaterials			T			T
Description		Units / Acre	Unit	Co	st / Unit	Cost /Acre
2 description		Acic	01111			
				\$		\$
				To	tal Fertilizer	
					Materials Cost/Acre	\$0.00
					Cost/Acre	\$0.00
						\$
		Total	Fertilizer	Application	on Cost/Acre	\$0.00
<u>TLLING</u>						
						Gart IA arra
Description						Cost /Acre
						\$
			,	Total Tilli	ng Cost/Acre	\$0.00
L						ψυ•υυ
<u>EEDING</u>						
				Rate –		
Seed Mix				PLS	Seeds per SO	Cost /Acre
				LBS /	per SQ. FT	
				Acre		
						\$
				0.00	0.00	
		Totals S	Seed Mix	0.00	0.00	\$0.00
pplication						
Description						Cost /Acre
• • • • • • • • • • • • • • • • • • •						LOST /ACTA

	\$
Total Seed Application Cost/Acre	\$0.00

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
Currant, Golden or Yellow	50	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.40	\$0.00	\$120.00
Pine, Bristlecone	25	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.50	\$0.00	\$62.50
Spruce, Englemann	25	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.50	\$0.00	\$62.50
Rose, Wood's	50	Bare root seedling, 11-16 inch ht. (MEANS)	\$2.40	\$0.00	\$120.00
		Totals	Nursary Stag	ek Cost / Acre	\$365.00

JOB TIME AND COST

 No. of Acres:
 850
 Cost /Acre:
 \$365.00

 Estimated Failure Rate:
 25%
 Cost /Acre*:
 \$365.00

*Selected Replanting Work Items: NURSERY

Initial Job Cost: \$310,250.00

Reseeding Job Cost: \$77,562.50

Total Job Cost: \$387,812

Job Hours: 1,062.50

Rinsing VLF 1	_										
	AM13	2023	2024	2025	2026	2027	2028			Revision #/	
% inflation	-	19.73%	22.24%	24.75%	27.26%	29.77%	32.28% Task #	Task #	Form Used	Source	PDF Page
Rinse 1	\$20,843,995.00	\$24,956,515.21						C0001	User Provided AM13	AM13	107
Rinse 2	\$20,843,995.00			\$26,002,883.76				C0002	User Provided AM13	AM13	107
Rinse 3	\$19,603,000.00					\$25,438,813.10		C0003	User Provided AM13	AM13	107

Rinse 1	\$20,843,995.00	\$20,843,995.00 \$24,956,515.21						C0001	User Provided AM13	AM13	107	_	
Rinse 2	\$20,843,995.00	C		\$26,002,883.76				C0002	User Provided AM13	AM13	107	2	
Rinse 3	\$19,603,000.00	C				\$25,438,813.10		C0003	User Provided AM13	AM13	107	2	
Rinsing VLF 2	2												
	AM13	2023 (Q1 Q2) 2023 (Q3 Q4)	2023 (Q3 Q4)	2024 (Q1 Q2)	2024 (Q3 Q4)	2024 (Q1 Q2) 2024 (Q3 Q4) 2025 (Q1 Q2) 2025 (Q3 Q4) 2026 (Q1 Q2) 2026 (Q3 Q4) 2027 (Q1 Q2)	2025 (Q3 Q4)	2026 (Q1 Q2)	2026 (Q3 Q4)	2027 (Q1 Q2)			Revision
% inflation	-	19.73%	20.99%	22.24%	23.50%	24.75%	26.01%	%97.72	28.52%	29.77% Task #	Task #	Form Used	Source
Rinse 1	\$9,724,783.00	\$9,724,783.00 \$11,643,482.69									C1001	User Provide AM13	AM13
Rinse 2	\$9,724,783.00	С			\$12,009,620.77						C1002	User Provide AM13	AM13
Rinse 3	\$9,527,931.00	С						\$12,125,244.99			C1003	User Provide AM13	AM13
Breakdown o	of costs are found a	Breakdown of costs are found at the end of 2022 update (pdf page 109-110) named "User 10" and "User 11". Same for AM13 (pdf pages 107-108)	pdate (pdf page 10	99-110) named "Us	ser 10" and "User 1	idf page 109-110) named "User 10" and "User 11". Same for AM13 (pdf pages 107-108	3 (pdf pages 107-10	08)					
VLF 1. Eacil I.	IIISE CVCIE CILIE IS 7	2.5 1110111115 11501110 15	7 Vedis lor rabiel,	dssess Illiancin II c	אוון דם אבמו מאצ ממני	ש מבומת של רווע אושו י	כל כן המכון יייואם כאכי	υ					

PDF Page 108 108

AM13 + Inflation \$76,398,212 \$35,778,348 \$112,176,561

> VLF1 VLF2 Total

Apply inflation from AM13 to 2023 https://www.bls.g Apply Avg inflation 2013-2023: 2.51% per year https://data.bls.gov/pdq/SurveyOutputServlet Rinse 2 & 3 Rinse 1

Series Title: All items less food and energy in U.S. city average, all urban consumers, not seasonally adjusted Area: U.S. city average
Item: All items less food and energy
Base Period: 1982-84=100 12-Month Percent Change
Series Id: CUUR0000SA0L1E
Not Seasonally Adjusted 2.51% 100.00 **CPI Inflation Calculator** has the same buying power as 19.73% ₹ 2019 \$119.73 Calculate in December in October

U.S. city average

01/13 01/14 01/15 01/16 01/17 01/18 01/19 01/21 01/22 01/23 Month 12-Month Percent Change

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Year	Jan	Feb	Mar	Apr	May	Jun	7	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2
2013	1.9	2.0	1.9	1.7	1.7	1.6	1.7	1.8	1.7	1.7	1.7	1.7	1.8	1.8	1.7
2014	1.6	1.6	1.7	1.8	2.0	1.9	1.9	1.7	1.7	1.8	1.7	1.6	1.7	1.8	1.7
2015	1.6	1.7	1.8	1.8	1.7	1.8	1.8	1.8	1.9	1.9	2.0	2.1	1.8	1.7	1.9
2016	2.2	2.3	2.2	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.2	2.2	2.2	2.2
2017	2.3	2.2	2.0	1.9	1.7	1.7	1.7	1.7	1.7	1.8	1.7	1.8	1.8	2.0	1.7
2018	1.8	1.8	2.1	2.1	2.2	2.3	2.4	2.2	2.2	2.1	2.2	2.2	2.1	2.1	2.2
2019	2.2	2.1	2.0	2.1	2.0	2.1	2.2	2.4	2.4	2.3	2.3	2.3	2.2	2.1	2.3
2020	2.3	2.4	2.1	1.4	1.2	1.2	1.6	1.7	1.7	1.6	1.6	1.6	1.7	1.8	1.6
2021	1.4	1.3	1.6	3.0	3.8	4.5	4.3	4.0	4.0	4.6	4.9	5.5	3.6	2.6	4.5
2022	6.0	6.4	6.5	6.2	0.9	5.9	5.9	6.3	9.9	6.3	6.0	5.7	6.2	6.2	6.1
2023	5.6	5.5	5.6	5.5	5.3										
				1	1	1						1			

DEMOLITION WORK

-	Γask description:	Foundation	s and Building Area		
Site:	Cresson Project		Permit Action: 2023	Permit/.	Job#: M1980244
PROJE	CT IDENTIFICAT	<u>ION</u>			
Task #:	D0001	State:	Colorado	Abbreviation:	None
Date:	11/20/2023	County:	Teller	Filename:	M244-D0001
	8:55:21 PM				
User:	ERR	<u> </u>			
	Agency or organ	nization name:	DRMS		

<u>UNIT COSTS</u> <u>Location adjustment: 87.90 %</u>

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Primary Crusher - bldg	78x48x112	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	419,328.00	CF	\$0.42	\$175,866.16
Primary Crusher - Foundation	78x48	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	3,744.00	SF	\$2.43	\$9,111.40
Crane above Pocket - Bldg	85x33x50	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	140,250.00	CF	\$0.42	\$58,820.85
Crane above Pocket - Foundation	85x33	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,805.00	SF	\$2.43	\$6,826.25
Secondary Crusher MCC- Bldg	53x21x15	Plant (1S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	16,695.00	CF	\$0.38	\$6,292.35
Secondary Crusher MCC - Foundation	53x21	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,113.00	SF	\$2.43	\$2,708.60
Secondary Crushers - Bldg	120x67x107	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	860,280.00	CF	\$0.42	\$360,801.43
Secondary Crushers - Foundation	120x67	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	8,040.00	SF	\$2.43	\$19,566.14
Screen Bldg - Bldg	72x32x86	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	198,144.00	CF	\$0.42	\$83,101.59
Screen Bldg - Foundation	72x32	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,304.00	SF	\$2.43	\$5,607.01
Screen MCCs - Bldg	40x18x15	Plant (1S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	10,800.00	CF	\$0.38	\$4,070.52
Screen MCCs - Foundation	40x18	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	720.00	SF	\$2.43	\$1,752.19
Crusher Maint - Bldg	40x40x17	Bldg. (MN) demo./on-	27,200.00	CF	\$0.32	\$8,714.88

		site disposal in existing pit or cut - Max. 10,000 ft. haul				
Crusher Maint - Foundation	40x40	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,600.00	SF	\$2.43	\$3,893.76
Security - Bldg	65x40x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	26,000.00	CF	\$0.24	\$6,175.00
Security - Foundation	65x40	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,600.00	SF	\$2.43	\$6,327.36
MCC for Phase II Pumps - Bldg	21x11x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,772.00	CF	\$0.24	\$658.35
MCC for Phase II Pumps - Foundation	21x11	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	231.00	SF	\$2.43	\$562.16
Laboratory - Bldg	150x69x52	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	538,200.00	CF	\$0.32	\$172,439.28
Laboratory - Foundation	150x69	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	10,350.00	SF	\$2.43	\$25,187.76
Project Mgr Trailer - Bldg	57x12x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	6,840.00	CF	\$0.24	\$1,624.50
Project Mgr Trailer - Foundation	57x12	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	684.00	SF	\$1.22	\$832.29
Project Trailer - Bldg	40x53x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	21,200.00	CF	\$0.24	\$5,035.00
Project Trailer - Foundation	40x53	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	2,120.00	SF	\$1.22	\$2,579.62
Fire Trailer - Bldg	20x10x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,000.00	CF	\$0.24	\$475.00
Fire Trailer - Foundation	20x10	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	200.00	SF	\$1.22	\$243.36
Process Maint Trailer - Bldg	60x25x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	15,000.00	CF	\$0.24	\$3,562.50
Process Maint Trailer - Foundation	60x25	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	1,500.00	SF	\$1.22	\$1,825.20
Crusher Maint Addition - Bldg	25x40x17	Bldg. (MN) demo./on-site disposal in existing	17,000.00	CF	\$0.32	\$5,446.80

		pit or cut - Max. 10,000 ft. haul				
Crusher Maint Addition - Foundation	25x40	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft.	1,000.00	SF	\$2.43	\$2,433.60
Crusher Maint Lean To - Bldg	10x40x13	push Bldg. (SN) demo./on-site disposal in existing pit or	5,200.00	CF	\$0.24	\$1,235.00
Crusher Maint Lean Го - Foundation	10x40	cut - Max. 10,000 ft. haul Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	400.00	SF	\$2.43	\$973.44
AGADR 1995 - Bldg	165x100x52	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	858,000.00	CF	\$0.42	\$359,845.20
AGADR 1995 - Foundation	165x100	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	16,500.00	SF	\$2.43	\$40,154.40
Pipe Access Gallery - Bldg	60x10x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	6,000.00	CF	\$0.24	\$1,425.00
Pipe Accress Gallery - Foundation	60x10	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	600.00	SF	\$2.43	\$1,460.16
Carbon Strip & Regen Bldg	107x25x45	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	120,375.00	CF	\$0.42	\$50,485.28
Carbon Strip & Regen - Foundation	107x25	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,675.00	SF	\$2.43	\$6,509.88
Process Maint Trailer - Bldg	60x25x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	18,000.00	CF	\$0.24	\$4,275.00
Process Maint Trailer Foundation	60x25	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	1,500.00	SF	\$1.22	\$1,825.20
AGADR North - Bldg	165x43x44	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	312,180.00	CF	\$0.42	\$130,928.29
AGADR North - Foundation	165x43	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	7,095.00	SF	\$2.43	\$17,266.39
AGADR South - Bldg	108x70x57	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	430,920.00	CF	\$0.42	\$180,727.85
AGADR South - Foundation	108x70	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	7,560.00	SF	\$2.43	\$18,398.02
Etrain - Bldg	142x42x53	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	316,092.00	CF	\$0.42	\$132,568.98
Etrain - Foundation	142x42	Demo. and on-site	5,964.00	SF	\$2.43	\$14,513.99

		disposal in existing pit, 12 in. thick - Max. 50 ft. push				
MCC Fume Scrubber - Bldg	37x16x16	Plant (1S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	9,472.00	CF	\$0.38	\$3,570.00
MCC Fume Scrubber - Foundation	37x16	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	592.00	SF	\$2.43	\$1,440.69
Enrichment Pump Station - Bldg	60x30x38	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	68,400.00	CF	\$0.42	\$28,686.96
Enrichment Pump Station - Foundation	60x30	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,800.00	SF	\$2.43	\$4,380.48
Ph V Preg Pump MCC - Bldg	22x22x17	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	8,228.00	CF	\$0.32	\$2,636.25
Ph V Preg Pump MCC - Foundation	22x22	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	484.00	SF	\$2.43	\$1,177.86
Ph V Preg Enrich MCC - Bldg	42x22x17	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	15,708.00	CF	\$0.32	\$5,032.84
Ph V Preg Enrich MCC - Foundation	42x22	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	924.00	SF	\$2.43	\$2,248.65
Ph V Preg Enrich LVSC - Bldg	20x10x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,400.00	CF	\$0.24	\$570.00
Ph V Preg Enrich LVSC - Foundation	20x10	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	200.00	SF	\$2.43	\$486.72
Victor Maint Light Vehicle Shop - Bldg	80x56x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	53,760.00	CF	\$0.24	\$12,768.00
Victor Maint Light Vehicle Shop - Foundation	80x56	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	4,480.00	SF	\$2.43	\$10,902.53
Truck Wash - Bldg	75x45x41	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	138,375.00	CF	\$0.32	\$44,335.35
Truck Wash - Foundation	75x45	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	3,375.00	SF	\$2.43	\$8,213.40
Truck Shop - Bldg	305x95x65	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	1,883,375.00	CF	\$0.32	\$603,433.35

Truck Shop - Foundation	305x95	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	28,975.00	SF	\$2.43	\$70,513.56
Mill Maint Warehouse - Bldg	57x200x47	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	535,800.00	CF	\$0.32	\$171,670.32
Mill Maint Warehouse - Foundation	57x200	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	11,400.00	SF	\$2.43	\$27,743.04
Agglomerator - Bldg	20x76x34	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	51,680.00	CF	\$0.42	\$21,674.59
Agglomerator - Foundation	20x76	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,520.00	SF	\$2.43	\$3,699.07
Sump Pump - Bldg	16x15x13	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	3,120.00	CF	\$0.24	\$741.00
Sump Pump - Foundation	16x15	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	240.00	SF	\$2.43	\$584.06
Conveyor Shed - Bldg	85x13x21	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	23,205.00	CF	\$0.32	\$7,434.88
Conveyor Shed - Foundation	85x13	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,105.00	SF	\$2.43	\$2,689.13
Process Corridor - Bldg	15x175x24	Plant (1S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	63,000.00	CF	\$0.38	\$23,744.70
Process Corridor - Foundation	15x175	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,625.00	SF	\$2.43	\$6,388.20
Buckley Main Bldg - Bldg	60x40x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	28,800.00	CF	\$0.24	\$6,840.00
Buckley Main Bldg - Foundation	60x40	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,400.00	SF	\$2.43	\$5,840.64
Squaw MCC - Bldg	60x27x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	19,440.00	CF	\$0.24	\$4,617.00
Squaw MCC - Foundation	60x27	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,620.00	SF	\$2.43	\$3,942.43
Warehouse - Bldg	104x80x32	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	266,240.00	CF	\$0.32	\$85,303.30

Warehouse - Foundation	104x80	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	8,320.00	SF	\$2.43	\$20,247.55
LVSC Pump - Bldg	151x10x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	18,120.00	CF	\$0.24	\$4,303.50
LVSC Pump - Foundation	151x10	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,510.00	SF	\$2.43	\$3,674.74
SGADR - Bldg	165x200x62	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,046,000.00	CF	\$0.42	\$858,092.40
SGADR - Foundation	165x200	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	33,000.00	SF	\$2.43	\$80,308.80
SGADR Utility - Bldg	60x30x17	Plant (1S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	30,600.00	CF	\$0.38	\$11,533.14
SGADR Utility - Foundation	60x30	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,800.00	SF	\$2.43	\$4,380.48
Security - Bldg	143x20x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	28,600.00	CF	\$0.24	\$6,792.50
Security - Foundation	143x20	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,860.00	SF	\$2.43	\$6,960.10
Modular Office 1 - Bldg	60x66x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	39,600.00	CF	\$0.24	\$9,405.00
Modular Office 1 - Foundation	60x66	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	3,960.00	SF	\$1.22	\$4,818.53
Modular Office 2 - Bldg	60x66x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	39,600.00	CF	\$0.24	\$9,405.00
Modular Office 2 - Foundation	60x66	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	3,960.00	SF	\$1.22	\$4,818.53
Modular Office 3 - Bldg	12x66x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	7,920.00	CF	\$0.24	\$1,881.00
Modular Office 3 - Foundation	12x66	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	792.00	SF	\$1.22	\$963.71
Substation - Bldg	107x100x15	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	160,500.00	CF	\$0.24	\$38,118.75
Substation - Foundation	107x100	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft.	10,700.00	SF	\$2.43	\$26,039.52

		push			1	
Auxiliary A - Bldg	66x20x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	13,200.00	CF	\$0.24	\$3,135.00
Auxiliary A - Foundation	66x20	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,320.00	SF	\$2.43	\$3,212.35
Auxiliary B - Bldg	20x20x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	4,000.00	CF	\$0.24	\$950.00
Auxiliary B - Foundation	20x20	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	400.00	SF	\$2.43	\$973.44
Auxiliary C - Bldg	46x20x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	9,200.00	CF	\$0.24	\$2,185.00
Auxiliary C - Foundation	46x20	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	920.00	SF	\$2.43	\$2,238.91
High Grade Mill - Bldg	335x200x86	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	7,482,000.00	CF	\$0.42	\$3,137,950.80
High Grade Mill - Foundation	335x200	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	87,000.00	SF	\$2.43	\$211,723.20
Offices - Bldg	96x80x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	76,800.00	CF	\$0.24	\$18,240.00
Offices - Foundation	96x80	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	7,680.00	SF	\$2.43	\$18,690.05
Buckley Garage - Bldg	100x76x18	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	136,800.00	CF	\$0.32	\$43,830.72
Buckley Garage - Foundation	100x76	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	7,600.00	SF	\$2.43	\$18,495.36
Ironclad Office - Bldg	100x48x13	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	62,400.00	CF	\$0.24	\$14,820.00
Ironclad Office - Foundation	100x48	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	4,800.00	SF	\$2.43	\$11,681.28
Maint Annex - Bldg	75x25x65	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	121,875.00	CF	\$0.32	\$39,048.75
Maint Annex - Foundation	75x25	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	1,875.00	SF	\$2.43	\$4,563.00

Lab Addition - Bldg	30x15x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	4,500.00	CF	\$0.24	\$1,068.75
Lab Addition - Foundation	30x15	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	450.00	SF	\$2.43	\$1,095.12
ROM Silo - Bldg	66x20x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	972.00	CF	\$0.24	\$230.85
ROM Silo - Foundation	9x9x12	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	81.00	SF	\$2.43	\$197.12
Conveyor Support - Foundation	4x6 (9 lifts)	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	216.00	SF	\$2.43	\$525.66
Newmont Double Wide - Bldg	24x60x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	17,280.00	CF	\$0.24	\$4,104.00
Newmont Double Wide - Foundation	24x60	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft.	1,440.00	SF	\$1.22	\$1,752.19
Mobile Maint Shop - Bldg	50x100x18	push Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	90,000.00	CF	\$0.32	\$28,836.00
Mobile Maint Shop - Foundation	50x100	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	5,000.00	SF	\$2.43	\$12,168.00
Lube Bay and Wash Bay - Bldg	50x80x18	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	72,000.00	CF	\$0.32	\$23,068.80
Lube Bay and Wash Bay - Foundation	50x80	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	4,000.00	SF	\$2.43	\$9,734.40
Lube Bay and Wash Bay Apron - Bldg	124x40x1	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	4,960.00	CF	\$0.24	\$1,178.00
Lube Bay and Wash Bay Apron - Foundation	124x40	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	4,960.00	SF	\$2.43	\$12,070.66
Compressor Housing - Bldg	45x45x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	24,300.00	CF	\$0.24	\$5,771.25
Compressor Housing - Foundation	45x45	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,025.00	SF	\$2.43	\$4,928.04
Substation - Bldg	135x80x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	129,600.00	CF	\$0.24	\$30,780.00
Substation -	135x80	Demo. and on-site	10,800.00	SF	\$2.43	\$26,282.88

Foundation		disposal in existing pit,				
1 ounceron		12 in. thick - Max. 50 ft.				
Core Shed TR115 SA2 - Bldg	40x100x16	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	64,000.00	CF	\$0.32	\$20,505.60
Core Shed TR115 SA2 - Foundation	40x100	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	4,000.00	SF	\$1.22	\$4,867.20
Autonomous Haulage Tower TR115 SA4 - Bldg	8x10x7	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	560.00	CF	\$0.24	\$133.00
Autonomous Haulage Tower TR115 SA4 - Foundation	8x10	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	80.00	SF	\$1.22	\$97.34
Autonomous Haulage Tower TR115 SA6 - Bldg	8x10x7	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	560.00	CF	\$0.24	\$133.00
Autonomous Haulage Tower TR115 SA6 - Foundation	8x10	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	80.00	SF	\$1.22	\$97.34
Underground Contractor Double Wide - Bldg	24x60x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	17,280.00	CF	\$0.24	\$4,104.00
Underground Contractor Double Wide - Foundation	24x60	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	1,440.00	SF	\$1.22	\$1,752.19
Underground Fixed Maintenance Shop - Bldg	40x60x18	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	43,200.00	CF	\$0.32	\$13,841.28
Underground Fixed Maintenance Shop - Foundation	40x60	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	2,400.00	SF	\$2.43	\$5,840.64
Shotcrete plant - Bldg	55x150x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	99,000.00	CF	\$0.24	\$23,512.50
Shotcrete plant - Foundation	55x150	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	8,250.00	SF	\$1.22	\$10,038.60
VLF2 enrichment pump station - Bldg	60x54x20	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	64,800.00	CF	\$0.32	\$20,761.92
VLF2 enrichment pump station - Foundation	60x54	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	3,240.00	SF	\$2.43	\$7,884.86
VLF2 enrichment pump station - Bldg	15x59x8	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	7,080.00	CF	\$0.24	\$1,681.50
VLF2 enrichment	15x59	Demo. and on-site	885.00	SF	\$2.43	\$2,153.74

pump station - Foundation		disposal in existing pit, 12 in. thick - Max. 50 ft.				
Warehouse #1 on Dump 4 - Bldg	42x80x22	push Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	73,920.00	CF	\$0.32	\$23,683.97
Warehouse #1 on Dump 4 - Foundation	42x80	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	3,360.00	SF	\$2.43	\$8,176.90
Warehouse #2 on Dump 4 - Bldg	72x90x22	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	142,560.00	CF	\$0.32	\$45,676.22
Warehouse #2 on Dump 4 - Foundation	72x90	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	6,480.00	SF	\$2.43	\$15,769.73
Warehouse at Mill Platform - Bldg	72x166x22	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	262,944.00	CF	\$0.32	\$84,247.26
Warehouse at Mill Platform - Foundation	72x166	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	11,952.00	SF	\$2.43	\$29,086.39
Main PSES Building - Bldg	180x108x55	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,069,200.00	CF	\$0.42	\$448,422.48
Main PSES Building - Foundation	180x108	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	19,440.00	SF	\$2.43	\$47,309.18
Chicago Tunnel Maintenance Shop - Bldg	80x40x20	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	64,000.00	CF	\$0.32	\$20,505.60
Chicago Tunnel Maintenance Shop - Foundation	80x40	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	3,200.00	SF	\$2.43	\$7,787.52
Chicago Tunnel Site Office - Bldg	40x15x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	7,200.00	CF	\$0.24	\$1,710.00
Chicago Tunnel Site Office - Foundation	40x15	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	600.00	SF	\$1.22	\$730.08
Chicago Tunnel Dry Change - Bldg	40x15x12	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	7,200.00	CF	\$0.24	\$1,710.00
Chicago Tunnel Dry Change - Foundation	40x15	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	600.00	SF	\$1.22	\$730.08
High Grade Mill West Tank Farm - Foundation	14,721 SF	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft.	14,721.00	SF	\$2.43	\$35,825.03

Demo Worksheet Cont'd Task # TTT Page 11 of 11

		push				
High Grade Mill East Tank Farm - Foundation	13,855 SF	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	13,855.00	SF	\$2.43	\$33,717.53
New Engineering Building 2007 - Bldg	9,324 SF x 13	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	121,212.00	CF	\$0.24	\$28,787.85
New Engineering Building 2007 - Foundation	9,324 SF	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 50 ft. push	9,324.00	SF	\$2.43	\$22,690.89
Water Truck Storage Building TR115 SA7 - Bldg	72x90x(avg. 38)	Bldg. (MN) demo./on- site disposal in existing pit or cut - Max. 10,000 ft. haul	9,120.00	CF	\$0.32	\$2,922.05
Water Truck Storage Building TR115 SA7 - Footers	(52) 2x2x6	Demo. and on-site disposal in existing pit, 1.5 ft. x 2 ft Max. 50 ft. push	312.00	LF	\$7.30	\$2,277.85
Sidewalks TR115 SA8	638x4	Demo. and on-site disposal in existing pit, 4 in. thick - Max. 50 ft. push	2,552.00	SF	\$0.81	\$2,070.18
Concrete Pad TR115 SA8	10x24	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 50 ft. push	240.00	SF	\$1.22	\$292.03
Vision Zero 2 Offices and 2 Conex Containers TR115 SA9	12x50x12 & 8x40/20x8.5	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	686.00	CF	\$0.24	\$162.93
Carlton Tunnel Solar Panel Piers TR115 SA11	(8) 5x1	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 50 ft. push	40.00	LF	\$4.87	\$194.69

			Total Cost				
		Subtotal		(adjusted for			
Job Hours:	7.726.00	(unadjusted):	\$8,887,605.97	location):	\$7.812,205.65		

,	Task description:	Conveyors a	and LOB, Septi	c System, Tire Demo		
Site:	Cresson Project		Permit Action:	2023	Permit/.	Job#: M1980244
PROJE	CT IDENTIFICATION	<u>N</u>				
Task #:	D1000	State:	Colorado		Abbreviation:	None
Date:	11/20/2023	County:	Teller		Filename:	M244-D1000
	9:00:41 PM					
User:	ZTT					

<u>UNIT COSTS</u> <u>Location adjustment: 87.90 %</u>

Agency or organization name: DRMS

Structure or Item		Demolition Menu				
Description	Dimensions	Selection	Quantity	Unit	Unit Cost	Total Cost
Mill Conveyor Demo	1250 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	20.30	EA	\$3,350.00	\$68,005.00
ROM Conveyor Demo	136 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	2.20	EA	\$3,350.00	\$7,370.00
Septic Systems	12 total	Comprehensive storage tank removal, non- leaking - 6,000 to 8,000 gal. tank	12.00	EA	\$5,536.95	\$66,443.40
Tire Disposal	Qt: 50 + 12% Loc. Adj.	USER PROVIDED ITEM	50.00	EA	\$1,126.39	\$56,319.50
Loadout Bin	21.85x36	Plant (1S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	13,492.00	CF	\$0.38	\$5,085.13
Lime Silo	84x21.5	Plant (3S) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	119,088.00	CF	\$0.42	\$49,945.51
Screen Feed	587 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	9.50	EA	\$3,350.00	\$31,825.00
Crushed Ore	1243 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	20.20	EA	\$3,350.00	\$67,670.00
Secondary Crusher Feeder	843 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	13.70	EA	\$3,350.00	\$45,895.00
Shuttle (2)	111 ft. each	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	3.60	EA	\$3,350.00	\$12,060.00
Screen Undersize	620 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	10.10	EA	\$3,350.00	\$33,835.00
Screen Oversize	555 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	9.00	EA	\$3,350.00	\$30,150.00
Prodict to LOB	586 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	9.50	EA	\$3,350.00	\$31,825.00
LOB Relocation Phase IV	2050 ft.	Conveyor, Horizontal Belt 24" Belt, 61.5'	33.30	EA	\$3,350.00	\$111,555.00

Demo Worksheet Cont'd Task # TTT Page 2 of 2

		Length				
Process Pond Liner Removal - Cutting & Folding + 12% location adjustment	NA	USER PROVIDED ITEM	1.12	EA	\$84,416.00	\$94,545.92
TR79 8' Dia, CMP Manhole	8 ft x 4-6Ft	Pipe, corrugated metal (CMP) - 96 in. diameter pipe	6.00	LF	\$46.79	\$280.75
TR113 Leach Cell Liner Disposal (80mm)	67,049sqft w/20x swell	Load/haul/dump demolished materials/debris into pit - Max. 10,000 ft. haul	12,460.00	CY	\$1.97	\$24,496.36
TR90 Mercury Sampling prior to Demolition	10 Samples	Hazardous waste sampling and analysis, per sample	10.00	EA	\$216.69	\$2,166.89
TR90 Demolish Concentrate Storage Building	4 CY	USER PROVIDED ITEM	4.00	CY	\$32.13	\$128.52
TR90 Demolish, Decommission, Microencalsulate, and Dispose of Retort	1 Retort System	USER PROVIDED ITEM	1.00	EA	\$20,836.00	\$20,836.00
TR90 Demolish Supports for Retort	.5 ton	USER PROVIDED ITEM	0.50	Ton	\$200.00	\$100.00
TR90 Transport One- ton Flask to Refining Facility, Refine, and Ship to Long	1 Flask	USER PROVIDED ITEM	1.00	EA	\$8,560.00	\$8,560.00
TR90 Ten Years of Long Term Storage	10 years	USER PROVIDED ITEM	10.00	YR	\$1,200.00	\$12,000.00
TR90 Disposal with DOE	2200 lbs	USER PROVIDED ITEM	2,200.00	Lbs	\$10.00	\$22,000.00
TR115 SA11 12 Solar Panels 8 Batteries 1 Inverter 250' cable	(12) 6.5'x3.5'x1.3" & (8)	Hauling only, per mile, 12-18 CY truck - 30 mph average speed	25.00	MI	\$9.01	\$225.31
TR115 SA11 12 Solar Panels 8 Batteries 1 Inverter 250' cable	(12) 6.5'x3.5'x1.3" & (8)	Dumpsite disposal charge - Maximum	2.00	TON	\$415.00	\$830.00

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	200.00	(unadiusted):	\$804,153,29	location):	\$706.850.74

	Task description:	Waste and '	Fank Disposal			
Site:	Cresson Project		Permit Action:	2023	Permit/.	Job#: <u>M1980244</u>
PROJE	CCT IDENTIFICAT	<u>ION</u>				
Task #	: D2000	State:	Colorado		Abbreviation:	None
Date	: 11/20/2023	County:	Teller		Filename:	M244-D2000
	9:01:48 PM					
User	: ERR					
	Agency or organ	nization name:	DRMS			

<u>UNIT COSTS</u> <u>Location adjustment: 87.90 %</u>

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Carbon Columns - Remove Remnant Waste	10	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	10.00	EA	\$432.00	\$4,320.00
Carbon Columns - Dispose Tank	10	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	10.00	EA	\$1,050.00	\$10,500.00
Intermediate - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Intermediate - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
1999 Solution Tanks - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
1999 Solution Tanks - Dispose Tank	2	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
1999 Carbon Tanks - Remove Remnant Waste	5	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	5.00	EA	\$432.00	\$2,160.00
1999 Carbon Tanks - Dispose Tank	5	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	5.00	EA	\$1,050.00	\$5,250.00
Kiln - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Kiln - Remove/Haul Bulk Waste	290 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	2,169.00	GAL	\$1.88	\$4,077.72
Kiln - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Carbon Feed - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00

Carbon Feed - Remove/Haul Bulk	1256 CF	Hazardous waste removal - Bulk liquids,	9,369.00	GAL	\$1.88	\$17,613.72
Waste		large quantities (over 2,500 gal.)				
Carbon Feed - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Carbon Quench - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Carbon Quench - Remove/Haul Bulk Waste	706 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	5,281.00	GAL	\$1.88	\$9,928.28
Carbon Quench - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Carbon Strip - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Carbon Strip - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Cyanide Mix - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
Cyanide Mix - Dispose Tank	2	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
Tran D Carbon Columns - Remove Remnant Waste	5	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	5.00	EA	\$432.00	\$2,160.00
Tran D Carbon Columns - Dispose Tank	5	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	5.00	EA	\$1,050.00	\$5,250.00
Pregnant Solution Tanks - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Pregnant Solution Tanks - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
D Head - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 6,000 to 8,000 gal.	1.00	EA	\$324.00	\$324.00
D Head - Dispose Tank	1	Haul tank to certified salvage dump - 6,000 to 8,000 gal. tank	1.00	EA	\$880.00	\$880.00
D Transfer - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
D Transfer - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to	1.00	EA	\$1,050.00	\$1,050.00

		12,000 gal. tank				
Pre-Dryer - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000	1.00	EA	\$432.00	\$432.00
Pre-Dryer - Remove/Haul Bulk Waste	8,738 CF	gal. Hazardous waste removal - Bulk liquids, large quantities (over	65,365.00	GAL	\$1.88	\$122,886.20
Pre-Dryer - Dispose Tank	1	2,500 gal.) Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Victor Fresh Water - Dispose Tank	6,842 CF	Load/haul/dump demolished materials/debris into pit - Max. 10,000 ft. haul	254.00	CY	\$1.97	\$499.36
Detox - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Detox - Remove/Haul Bulk Waste	1,413 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	10,570.00	GAL	\$1.88	\$19,871.60
Detox - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Pregnant Solution Tanks - Remove Remnant Waste	4	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	4.00	EA	\$432.00	\$1,728.00
Pregnant Solution Tanks - Dispose Tank	4	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	4.00	EA	\$1,050.00	\$4,200.00
Fire Water - Dispose Tank	11,083 CF	Load/haul/dump demolished materials/debris into pit - Max. 10,000 ft. haul	411.00	CY	\$1.97	\$808.03
Bulk Storage - Remove Remnant Waste	4	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	4.00	EA	\$432.00	\$1,728.00
Bulk Storage - Remove/Haul Bulk Waste	9,236 CF Ea	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	69,090.00	GAL	\$1.88	\$129,889.20
Bulk Storage - Dispose Tank	4	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	4.00	EA	\$1,050.00	\$4,200.00
SST Solution - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
SST Solution - Remove/Haul Bulk Waste	3,392 CF Ea	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	50,748.00	GAL	\$1.88	\$95,406.24
SST Solution - Dispose Tank	2	Haul tank to certified salvage dump - 9,000 to	2.00	EA	\$1,050.00	\$2,100.00

Eval Damassa	2	12,000 gal. tank	2.00	TC A	\$250.50	\$770 FA
Fuel - Remove Remnant Waste	3	Remove sludge, water, and rem. product from tank - 3,000 to 5,000	3.00	EA	\$259.50	\$778.50
Fuel - Dispose Tank	3	gal. Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	3.00	EA	\$760.00	\$2,280.00
Prill - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Prill - Remove/Haul Bulk Waste	25,132 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	188,000.00	GAL	\$1.88	\$353,440.00
Prill - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Carbon Columns - Remove Remnant Waste	20	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	20.00	EA	\$432.00	\$8,640.00
Carbon Columns - Dispose Tank	20	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	20.00	EA	\$1,050.00	\$21,000.00
ntermediate - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
ntermediate - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Barren - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
Barren - Dispose Γank	2	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
Acid Mix - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 6,000 to 8,000 gal.	1.00	EA	\$324.00	\$324.00
Acid Mix - Remove/Haul Bulk Waste	1070 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	8,004.00	GAL	\$1.88	\$15,047.52
Acid Mix - Dispose Γank	1	Haul tank to certified salvage dump - 6,000 to 8,000 gal. tank	1.00	EA	\$880.00	\$880.00
Acid Neutralization - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 6,000 to 8,000 gal.	1.00	EA	\$324.00	\$324.00
Acid Neutralization - Remove/Haul Bulk Waste	1070 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	8,004.00	GAL	\$1.88	\$15,047.52

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Acid Neutralization - Dispose Tank	1	Haul tank to certified salvage dump - 6,000 to 8,000 gal. tank	1.00	EA	\$880.00	\$880.00
Acid Neut Scrubber - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 6,000 to 8,000 gal.	1.00	EA	\$324.00	\$324.00
Acid Neut Scrubber - Remove/Haul Bulk Waste	1070 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	8,004.00	GAL	\$1.88	\$15,047.52
Acid Neut Scrubber - Dispose Tank	1	Haul tank to certified salvage dump - 6,000 to 8,000 gal. tank	1.00	EA	\$880.00	\$880.00
Concentrated Acid - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 6,000 to 8,000 gal.	1.00	EA	\$324.00	\$324.00
Concentrated Acid - Remove/Haul Bulk Waste	936 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	7,002.00	GAL	\$1.88	\$13,163.76
Concentrated Acid - Dispose Tank	1	Haul tank to certified salvage dump - 6,000 to 8,000 gal. tank	1.00	EA	\$880.00	\$880.00
Sodium hydroxide - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Sodium hydroxide - Remove/Haul Bulk Waste	2,674 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	20,003.00	GAL	\$1.88	\$37,605.64
Sodium hydroxide - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Kiln - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Kiln - Remove/Haul Bulk Waste	290 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	2,169.00	GAL	\$1.88	\$4,077.72
Kiln - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Feed - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Feed - Remove/Haul Bulk Waste	1,256 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	9,396.00	GAL	\$1.88	\$17,664.48
Feed - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Quench - Remove	1	Remove sludge, water,	1.00	EA	\$259.50	\$259.50

Remnant Waste		and rem. product from tank - 3,000 to 5,000				
Quench - Remove/Haul Bulk Waste	706 CF	gal. Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	5,281.00	GAL	\$1.88	\$9,928.28
Quench - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Strip - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Strip - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Preg - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
Preg - Dispose Tank	2	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
Transfer Water - Dispose Tank	668 CF	Load/haul/dump demolished materials/debris into pit - Max. 5,000 ft. haul	25.00	CY	\$1.44	\$35.98
Pretreatment - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Pretreatment - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
NaCN - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
NaCN - Dispose Tank	2	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
Carbon Attrition - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Carbon Attrition - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
E Cell Tanks - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
E Cell Tanks - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Thickener - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000	1.00	EA	\$432.00	\$432.00

		gal.				
Thickener - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to	1.00	EA	\$1,050.00	\$1,050.00
Process Water -	1	12,000 gal. tank Remove sludge, water,	1.00	EA	\$432.00	\$432.00
Remove Remnant Waste		and rem. product from tank - 9,000 to 12,000 gal.				
Process Water - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Thickener - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Thickener - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
NaCN - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
NaCN - Dispose Tank	2	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
Leach - Remove Remnant Waste	6	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	6.00	EA	\$432.00	\$2,592.00
Leach - Dispose Tank	6	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	6.00	EA	\$1,050.00	\$6,300.00
PS Stablization - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
PS Stabilzation - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
CoMag Clarifiers - Remove Remnant Waste	8	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	8.00	EA	\$432.00	\$3,456.00
CoMag Clarifiers - Dispose Tank	8	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	8.00	EA	\$1,050.00	\$8,400.00
Coagulant - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Coagulant - Remove/Haul Bulk Waste	45,160 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	337,820.00	GAL	\$1.88	\$635,101.60
Coagulant - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Precoat - Remove Remnant Waste	1	Remove sludge, water, and rem. product from	1.00	EA	\$432.00	\$432.00

		tank - 9,000 to 12,000				
		gal.				
Precoat - Remove/Haul Bulk Waste	45,160 CF	Hazardous waste removal - Bulk liquids, large quantities (over	337,820.00	GAL	\$1.88	\$635,101.60
Precoat - Dispose Tank	1	2,500 gal.) Haul tank to certified salvage dump - 9,000 to	1.00	EA	\$1,050.00	\$1,050.00
CoMag Process	1	12,000 gal. tank Remove sludge, water,	1.00	EA	\$432.00	\$432.00
Tanks - Remove Remnant Waste		and rem. product from tank - 9,000 to 12,000 gal.				
CoMag Process Tanks - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Wet Wells - Remove Remnant Waste	2	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	2.00	EA	\$432.00	\$864.00
Wet Wells - Dispose Tank	2	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
Gravity Thickener - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00
Gravity Thickener - Dispose Tank	1	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Mag Chloride - Remove Remnant Waste	3	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	3.00	EA	\$432.00	\$1,296.00
Mag Chloride - Remove/Haul Bulk Waste	2,002 CF Ea	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	36,000.00	GAL	\$1.88	\$67,680.00
Mag Chloride - Dispose Tank	3	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	3.00	EA	\$1,050.00	\$3,150.00
Train E Facilities - Carbon Columns - Remove Remnant Waste	5	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	5.00	EA	\$432.00	\$2,160.00
Train E Facilities - Carbon Columns - Dispose Tank	5	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	5.00	EA	\$1,050.00	\$5,250.00
Train E Facilities - Barren Tank - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Train E Facilities - Barren Tank - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Soda Ash Mix Tank - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50

Soda Ash Mix Tank -	402 CF	Hazardous waste	3,007.00	GAL	\$1.88	\$5,653.16
Remove/Haul Bulk Waste	102 61	removal - Bulk liquids, large quantities (over	3,007.00	GIL	ψ1.00	φ5,055.10
		2,500 gal.)				
Soda Ash Mix Tank - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Precoat Mix Tank -	1	Remove sludge, water,	1.00	EA	\$259.50	\$259.50
Remove Remnant Waste		and rem. product from tank - 3,000 to 5,000 gal.	1.00		Ψ207.00	<i>\$257.53</i>
Precoat Mix Tank -	170 CF	Hazardous waste	1,272.00	GAL	\$1.88	\$2,391.36
Remove/Haul Bulk Waste		removal - Bulk liquids, large quantities (over 2,500 gal.)	,		,	, ,
Precoat Mix Tank - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
PSE Thickener	1	Remove sludge, water,	1.00	EA	\$259.50	\$259.50
Polymer Mix Tank - Remove Remnant Waste		and rem. product from tank - 3,000 to 5,000 gal.			4209.00	*25 7.63
PSE Thickener Polymer Mix Tank - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
PSE Conditioning Tank - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000	1.00	EA	\$259.50	\$259.50
		gal.				
PSE Conditioning Tank - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Polymer Storage Tank - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Polymer Storage Tank - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Magnetite Silo - Remove Remnant Waste	1	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$259.50	\$259.50
Magnetite Silo - Remove/Haul Bulk Waste	402 CF	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	3,007.00	GAL	\$1.88	\$5,653.16
Magnetite Silo - Dispose Tank	1	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
Off road diesel tanks - Remove Remnant Waste	6	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	6.00	EA	\$432.00	\$2,592.00
Off road diesel tanks - Dispose Tank	6	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	6.00	EA	\$1,050.00	\$6,300.00
kerosene tank - Remove Remnant	1	Remove sludge, water, and rem. product from	1.00	EA	\$259.50	\$259.50

Waste		tank - 3,000 to 5,000				
kerosene tank -	1	gal. Haul tank to certified	1.00	EA	\$760.00	\$760.00
Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
on-road diesel tank -	1	Remove sludge, water,	1.00	EA	\$259.50	\$259.50
Remove Remnant Waste		and rem. product from tank - 3,000 to 5,000				
on-road diesel tank -	1	gal. Haul tank to certified	1.00	EA	\$760.00	\$760.00
Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
fuel additive (Anti- Gel) tank - Remove	1	Remove sludge, water, and rem. product from	1.00	EA	\$259.50	\$259.50
Remnant Waste		tank - 3,000 to 5,000 gal.				
fuel additive (Anti-	1	Haul tank to certified	1.00	EA	\$760.00	\$760.00
Gel) tank - Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
gasoline tank - Remove Remnant	1	Remove sludge, water, and rem. product from	1.00	EA	\$259.50	\$259.50
Waste		tank - 3,000 to 5,000 gal.				
gasoline tank -	1	Haul tank to certified	1.00	EA	\$760.00	\$760.00
Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
antifreeze tanks -	2	Remove sludge, water,	2.00	EA	\$259.50	\$519.00
Remove Remnant Waste		and rem. product from tank - 3,000 to 5,000 gal.				
antifreeze tanks -	2	Haul tank to certified	2.00	EA	\$760.00	\$1,520.00
Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
hydraulic oil (10 wt)	2	Remove sludge, water,	2.00	EA	\$259.50	\$519.00
tanks - Remove Remnant Waste		and rem. product from tank - 3,000 to 5,000 gal.				
hydraulic oil (10 wt)	2	Haul tank to certified	2.00	EA	\$760.00	\$1,520.00
tanks - Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
30 wt motor oil - Remove Remnant	2	Remove sludge, water,	2.00	EA	\$259.50	\$519.00
Waste		and rem. product from tank - 3,000 to 5,000 gal.				
30 wt motor oil -	2	Haul tank to certified	2.00	EA	\$760.00	\$1,520.00
Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
15/40 wt motor oil - Remove Remnant	2	Remove sludge, water, and rem. product from	2.00	EA	\$259.50	\$519.00
Waste		tank - 3,000 to 5,000 gal.				
15/40 wt motor oil -	2	Haul tank to certified	2.00	EA	\$760.00	\$1,520.00
Dispose Tank		salvage dump - 3,000 to 5,000 gal. tank				
oil water separator tank - Remove	1	Remove sludge, water, and rem. product from	1.00	EA	\$259.50	\$259.50
Remnant Waste		tank - 3,000 to 5,000 gal.				
oil water separator	535 CF	Hazardous waste	4,000.00	GAL	\$1.88	\$7,520.00

Demo Worksheet Cont'd Task # TTT Page 11 of 11

tank - Remove/Haul		removal - Bulk liquids,				
Bulk Waste		large quantities (over				
		2,500 gal.)				
oil water separator	1	Haul tank to certified	1.00	EA	\$760.00	\$760.00
tank - Dispose Tank		salvage dump - 3,000 to				
		5,000 gal. tank				
Dispose Hazardous	440,000 Gal	Hazardous waste	440,000.00	GAL	\$1.88	\$827,200.00
Materials		removal - Bulk liquids,				
		large quantities (over				
		2,500 gal.)				
Lump Sum 11-Demo	NA	USER PROVIDED	1.12	EA	\$113,506.00	\$127,126.72
PCS @ Fuel Island		ITEM				
Plus 12% location						
adjustment						
Carbon in ADR	45 columns	Remove sludge, water,	45.00	EA	\$432.00	\$19,440.00
Columns - Remove		and rem. product from				
Remnant Waste		tank - 9,000 to 12,000				
		gal.				
Carbon in ADR	45 x 5 Tons	Hazardous waste	225.00	TON	\$1,014.61	\$228,287.25
Columns -	Carbon	removal - Bulk solids,				
Remove/Haul Bulk		large quantities (over				
Waste		1.5 tons)				

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	160.00	(unadjusted):	\$3,644,857.62	location):	\$3,203,829.85

	Task description:	Fence and	Culvert Demo				
Site:	Cresson Project		Permit Action:	2023	Permit/.	Job#: <u>M1980244</u>	
PROJE	ECT IDENTIFICATIO	<u>N</u>					
Task #	t: D3000	State:	Colorado		Abbreviation:	None	
Date	e: 11/20/2023	County:	Teller		Filename:	M244-D3000	
	9:12:08 PM						
User	: ZTT						
	Agency or organiza	ntion name:	DRMS				

UNIT COSTS

Location adjustment: 87.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Arequa Fence Removal	3450 ft	Fencing, chain link, including posts and fabric - 8 ft. to 10 ft. high	3,450.00	LF	\$3.39	\$11,695.50
Squaw Fence Removal	8835 ft	Fencing, chain link, including posts and fabric - 8 ft. to 10 ft. high	encing, chain link, cluding posts and 8,835.00 L		\$3.39	\$29,950.65
Ironclad Culvert 1	80 ft	Pipe, corrugated metal (CMP) - 24 in. diameter pipe		LF	\$7.73	\$618.30
Ironclad Culvert 2	80 ft	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	80.00	LF	\$7.73	\$618.30
Ironclad Culvert 3	80 ft	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	80.00	LF	\$7.73	\$618.30
Ironclad Culvert 4	80 ft	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	80.00	LF	\$7.73	\$618.30

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	60.00	(unadjusted):	\$44,119.35	location):	\$38,780.91

	Task description:	Fence Insta	llation (RS Mea	ns 32 31 13.20 0920	U)		
Site:	Cresson Project		Permit Action:	2023	Permit/.	Job#: _	M1980244
PROJE	CT IDENTIFICATION	<u>ON</u>					
Task #	: D4000	State:	Colorado		Abbreviation:	None	,
Date	: 11/20/2023	County:	Teller		Filename:	M24	4-D4000
	9:13:03 PM						
User	: ZTT						
	Agency or organi	zation name:	DRMS				

UNIT COSTS

Location adjustment: 100.00 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Cresson Fencing	22542 ft	USER PROVIDED	22,542.00	LF	\$48.95	\$1,103,430.90
		ITEM				
Globe Hill Fencing	16764 ft	USER PROVIDED	16,764.00	LF	\$48.95	\$820,597.80
		ITEM				
Safety Signs	NA	USER PROVIDED	111.00	EA	\$244.18	\$27,103.98
		ITEM				

Total Cost (adjusted for

 Subtotal
 (adjusted for location):

 Job Hours:
 320.00
 (unadjusted):
 \$1,951,132.68
 location):
 \$1,951,132.68

'	Task description:	Pipe Demo				
Site:	Cresson Project		Permit Action:	2023	Permit/.	Job#: M1980244
PROJE	CT IDENTIFICAT	<u>ION</u>				
Task #:	D5000	State:	Colorado		Abbreviation:	None
Date:	11/20/2023	County:	Teller		Filename:	M244-D5000
	9:14:09 PM					
User:	ZTT					
	Agency or organ	ization name:	DRMS			

UNIT COSTS

Location adjustment: 87.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Arequa Large Pipes	6900 ft	Pipe, steel, welded connections - 10 in. diameter pipe	6,900.00	LF	\$11.77	\$81,213.00
Arequa Small Pipes	21200 ft	Pipe, steel, welded connections - 10 in. diameter pipe	21,200.00	LF	\$11.77	\$249,524.00
Squaw Large Pipes	4082 ft	Pipe, steel, welded connections - 10 in. diameter pipe	4,082.00	LF	\$11.77	\$48,045.14
Arequa Small Pipes	12422 ft	Pipe, steel, welded connections - 10 in. diameter pipe	12,422.00	LF	\$11.77	\$146,206.94
Barren Pipe (TR76)	300 ft	Pipe, steel, welded connections - 10 in. diameter pipe	300.00	LF	\$11.77	\$3,531.00
TR130 18" HDPE Stormwater Pipe	2331 ft	Pipe, sewer/water - 15 to 18 in. diameter pipe	2,331.00	LF	\$5.03	\$11,724.93
TR130 24" HDPE Stormwater Pipe	890 ft	Pipe, sewer/water - 21 to 24 in. diameter pipe	890.00	LF	\$7.54	\$6,710.60
ADR - PSES Piping North (6)	715 ft	Pipe, steel, welded connections - 10 in. diameter pipe	4,290.00	LF	\$11.77	\$50,493.30
CoMag - PSES South (3)	100 ft	Pipe, steel, welded connections - 10 in. diameter pipe	300.00	LF	\$11.77	\$3,531.00
TR92 4" HDPE Solution Pipe	1950 ft	Pipe, sewer/water - 12 in. diameter pipe	1,950.00	LF	\$5.03	\$9,808.50
TR92 30" HDPE Solution Pipe	100 ft	Pipe, sewer/water - 27 to 36 in. diameter pipe	100.00	LF	\$7.54	\$754.00
TR79 4" HDPE Solution Pipe	1700 ft	Pipe, sewer/water - 12 in. diameter pipe	1,700.00	LF	\$5.03	\$8,551.00

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	80.00	(unadjusted):	\$620,093.41	location):	\$545,062.11

Site:	Cresson Project		Permit Action:	2023	Permit/J	ob#: M198024
ROJEC	CT IDENTIFICAT	<u>'ION</u>				
Task #:	D6000	State:	Colorado		Abbreviation:	None
Date:	11/20/2023	County:	Teller		Filename:	M244-D6000
	9:16:05 PM					
User:	ERR	<u> </u>				

UNIT COSTS

Loca	tion adjustmen	t: 100.00 %
	II	T-4-1 C4

Structure or Item		Demolition Menu			T T 1. G	T . 1 G .
Description	Dimensions	Selection	Quantity	Unit	Unit Cost	Total Cost
Power Lines (Single	7.2 mi	USER PROVIDED	1.00	Ea	\$347,098.00	\$347,098.00
Pole)		ITEM				
Crusher and ADR1	1.9 mi	USER PROVIDED	1.00	Ea	\$106,333.00	\$106,333.00
Lines (Double Pole)		ITEM				

| Total Cost | Subtotal | Galjusted for | Subtotal | Su

BULLDOZER WORK

PROJECT IDENTIFICATION Task #: E0001 State: Colorado Abbreviation: Not	ne 44-E0001
Task #: E0001	
Date 11/20/2023 County: Teller Filename: M2 10:44:44 PM User: ERR	
Date 11/20/2023 County: Teller Filename: M2 10:44:44 PM ERR	
10:44:44 PM	
Agency or organization name: DRMS	
Basic Machine:	
Basic Machine:	
Horsepower: 240	
Blade Type: Straight Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 69,838 Swell factor: 1.429 Loose volume: 99,771 LCY Source of estimated volume: AM13 CC&V Provided Estimate	
Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization %	
Shift Basis: 1 per day	
Data Source: (CRG)	
Cost Breakdown: Utilization %	
Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 69,838 Swell factor: 1.429 Loose volume: 99,771 LCY Source of estimated volume: AM13 CC&V Provided Estimate	
Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 69,838 Swell factor: 1.429 Loose volume: 99,771 LCY Source of estimated volume: AM13 CC&V Provided Estimate	
Ownership Cost/Hour: \$114.76 NA Operating Cost/Hour: \$91.98 100 Ripper own. Cost/Hour: \$0.00 NA Ripper op. Cost/Hour: \$0.00 0 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: Swell factor: 1.429 Loose volume: 99,771 LCY Source of estimated volume: AM13 CC&V Provided Estimate	
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: So.00 Operator Cost/Hour: Solot Solot NA Total unit Cost/Hour: Total Fleet Cost/Hour: Solot Solot MATERIAL QUANTITIES Initial Volume: Solot Solot Solot AM13 CC&V Provided Estimate	
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Summary Su	
Ripper op. Cost/Hour: Operator Cost/Hour: Substitute	
Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 69,838 Swell factor: 1.429 Loose volume: 99,771 LCY Source of estimated volume: AM13 CC&V Provided Estimate	
Total unit Cost/Hour: \$248.04 Total Fleet Cost/Hour: \$248.04 MATERIAL QUANTITIES Initial Volume: 69,838 Swell factor: 1.429 Loose volume: 99,771 LCY Source of estimated volume: AM13 CC&V Provided Estimate	
Loose volume: 99,771 LCY Source of estimated volume: AM13 CC&V Provided Estimate	
Source of estimated volume: AM13 CC&V Provided Estimate	
Source of estillated swell factor. Cat Handbook	
HOURLY PRODUCTION	
Average push distance: 50 feet	
Unadjusted hourly production: 800.0 LCY/hr	
Materials consistency description: Compacted fill or embankment 0.9	
Average push gradient: 30 %	
Average site altitude: 9,500 feet	
Material weight: 1,600 lbs/LCY	
Weight description: Top Soil	
Job Condition Correction Factor Operator Skill: 0.750	
Operator Skill: 0.750 (AVG.) Material consistency: 0.900 (CAT HB))	
Dozing method: 1.000 (GEN.)	

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.298	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.1921

Adjusted unit production: 153.68 LCY/hr
Adjusted fleet production: 153.68 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$1.614/LCY

Total job time: 649.21 Hours
Total job cost: \$161,031

SITE MAINTENANCE

	Task description:	Vegetation Survey			
Site:	Cresson Project	Permit Action	on: 2023	Permit/J	ob#: <u>M1980244</u>
<u>PROJE</u>	CT IDENTIFICAT	<u>ION</u>			
Task #	: E0002	State: Colorado		Abbreviation:	None
Date	: 11/21/2023	County: Teller		Filename:	M244-E0002
	2:20:56 PM				
User	: ERR				
	Agency or organ	nization name: DRMS			

UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Vegetation Survey -	50.00	USER PROVIDED	500.00	HR	\$132.56	\$66,280.00
Field Work		ITEM				
Vegetation Survey -	16.00	USER PROVIDED	160.00	HR	\$132.56	\$21,209.60
Reporting		ITEM				
Vegetation Survey -	10.00	USER PROVIDED	100.00	HR	\$132.56	\$13,256.00
Travel		ITEM				
Vegetation Survey -	1.00	USER PROVIDED	1.00	EA	\$13,485.00	\$13,485.00
Equipment		ITEM				

Job Hours: 760.00 Total Cost: \$114,230.60

REVEGETATION WORK

Task description:	Site-wide Weed	Control				
Cresson Project	Per	mit Action: 2023			Permit/Job#	: <u>M1980244</u>
PROJECT IDENTIFICA	ATION					
Task #: E0003	State:	Colorado		Ab	breviation:	None
Date: 11/21/2023	County:	Teller				M244-E0003
1:47:09 PM					_	
User: ERR						
Agency or organization	ation name: DR	MS				
FERTILIZING						
Materials		Units /				
Description		Acre	Unit	Cos	t / Unit	Cost /Acre
				\$		\$
				Tot	tal Fertilizer	
					Materials Cost/Acre	\$0.00
		l l				<u> </u>
Application Description						Cost /Acre
Description						\$
		Total 1	Fertilizer	Application	n Cost/Acre	\$0.00
<u> </u>						
Description						Cost /Acre
Weed control spraying (N	MEANS 31 31 16.	13 3100)				\$338.80
			r	Fatal Tillin	g Cost/Acre	****
				I Otal I IIIII	ig Cost/Acre	\$338.80
SEEDING						
				Rate –	G 1	G 4/1
Seed Mix				PLS	Seeds per SQ.	Cost /Acre
				LBS / Acre	FT	
				11010		\$
					0.00	Ψ
		Totals So	eed Mix	0.00	0.00	\$0.00
Application						
Description						Cost /Acre
Describuon						COSCILICIO

	\$
Total Seed Application Cost/Acre	\$0.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres: 1790.04 Cost /Acre: \$338.80 Estimated Failure Rate: 0% Cost /Acre*: \$0.00

*Selected Replanting Work Items: NONE

Initial Job Cost: \$606,465.55

Reseeding Job Cost: \$0.00

Total Job Cost: Job Hours: 160.00

DRILLING EQUIPMENT

1	Task descrip	ption:	Per	forate VLF Liner (6	5,000 LF)			
Site:	Cresson I	Project		Permit Action:	2023	Permit/Job#:	M	1980244
·	PROJECT	IDENTII	FICA	TION				
	Task #:	E2000		State: Colorad	0	Abbreviation:	No	ne
		11/20/202 10:46:09 I		County: Teller		Filename:	M2	244-E2000
		ERR						
	Agency o	or organiza	ation	name: DRMS				
	HOURLY 1	<u>EQUIPM</u>	<u>ENT</u>	COST				
	Make and	_		s Capco DM45/LP -		Horsepow		519.00
		hment 1:		r water pump station	·	Shift Bas	_	1 per day
		hment 2:		service pump station	n, 225 psi	Weig	ht:	45.25
		or Unit 1:		er - Caisson Drill				(US Tons)
	Labo	or Unit 2:	Labo	orer - Caisson Drill				
	Cost Breake	lown:						
					Utilization %			
	Ownersh	ip Cost/Ho	our:	\$410.31	NA			
	Operatir	ng Cost/Ho	our:	\$386.12	100			
	Operate	or Cost/Ho	our:	\$74.97	NA			
	Total Un	nit Cost/H	our:	\$871.40				
	Total Fle	eet Cost/H	our:	\$871.40				
;	JOB TIME	AND CO	<u>OST</u>					
	Fleet size:	1		_ Equipment Set(s)	Total job time	690.00)	Hours
	Unit cost:	\$871	.40	/Hour	Total job cost	\$601,26	6	

Site:	Cresson Project	Permit Action:	2023	Permit/Job#:	M1980244

PROJECT IDENTIFICATION

Task description:

Task #: F0001 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0001

User: 10:49:58 PM ACY

Initial Mobilization

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
1	(TONS)		t		fleet		
Cat D7R DS	38.49	\$123.82	\$158.17	2	\$563.98	\$316.34	\$500.00
Series II LGP							
Cat D8T - 8SU	47.71	\$241.38	\$158.17	2	\$799.10	\$316.34	\$500.00
Cat D10T - 10SU	84.53	\$178.69	\$175.95	4	\$1,418.56	\$703.80	\$1,000.00
CAT 16M	28.73	\$212.21	\$158.17	2	\$740.76	\$316.34	\$500.00
CAT 966H	25.80	\$65.69	\$82.29	2	\$295.96	\$164.58	\$500.00
CAT 988H	54.46	\$109.98	\$175.95	2	\$571.86	\$351.90	\$500.00
CAT 992K	107.88	\$229.24	\$175.95	2	\$810.38	\$351.90	\$500.00
LETOURNEAU	293.90	\$859.02	\$175.95	2	\$2,069.94	\$351.90	\$500.00
L2350							
CAT 953D	17.10	\$101.76	\$82.29	2	\$368.10	\$164.58	\$500.00
CAT 973D	29.07	\$146.11	\$158.17	2	\$608.56	\$316.34	\$500.00
CAT 450E	9.80	\$92.02	\$82.29	8	\$1,394.48	\$658.32	\$500.00
Grove GMK3055,	39.30	\$156.30	\$158.17	2	\$628.94	\$316.34	\$500.00
141', 54.4 MT							
Grove RT650E,	28.74	\$270.71	\$158.17	4	\$1,715.52	\$632.68	\$1,000.00
105', 45.4 MT							
Broderson IC-200-	13.75	\$82.29	\$82.29	8	\$1,316.64	\$658.32	\$500.00
3F, 59', 13.6MT							
Cat 725	24.54	\$130.23	\$82.29	20	\$4,250.40	\$1,645.80	\$5,000.00
Cat 740	36.49	\$113.82	\$158.17	6	\$1,631.94	\$949.02	\$1,500.00
Cat 777F	80.18	\$206.48	\$175.95	16	\$6,118.88	\$2,815.20	\$4,000.00
KOM45.00U 830E	244.00	\$207.26	\$175.95	14	\$5,364.94	\$2,463.30	\$2,500.00

Water Tanker, 7,000 Gal.	29.65	\$86.29	\$158.17	2	\$488.92	\$316.34	\$500.00
Drill/Broadcast Seeder with	25.00	\$6.73	\$82.29	2	\$178.04	\$164.58	\$500.00
Tractor							
Hydroseeder with	28.00	\$12.80	\$158.17	2	\$341.94	\$316.34	\$500.00
Tractor							
Cat 312D L 9'-2"	14.83	\$61.84	\$82.29	3	\$432.39	\$246.87	\$500.00
Stick							
Atlas Capco	1.25	\$410.31	\$82.29	2	\$985.20	\$164.58	\$500.00
DM45/LP - 7-7/8"							
Cat 307D 7'-3"	7.95	\$37.88	\$82.29	2	\$240.34	\$164.58	\$500.00
Stick							
CAT 246C	3.58	\$30.84	\$82.29	1	\$113.13	\$82.29	\$250.00

Subtotals: \$33,448.9 \$14,948.58 \$24,250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/	Fleet Size	Haul Trip	Return Trip
	unit		Cost/hr/ fleet	Cost/hr/ fleet
Flatbed Truck, 6x4, 45K GVW	\$89.44	8	\$715.52	\$715.52
Generic 10-12 cy, 6x4	\$116.31	4	\$465.24	\$465.24
Light Duty Pickup, 4x4, 1 T.	\$82.80	30	\$2,484.00	\$2,484.00
Crew				
Water Tanker, 3,500 Gal.	\$75.37	2	\$150.74	\$150.74

Subtotals: \$3,815.50 \$3,815.50

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job cost: \$236,068 Hours

rask description:	Site Maintenance YF 1

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0002 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0002

User: 10:52:58 PM ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Subtotals: \$1,234.57 \$1,234.57

Nearest Major City or Town within project area region:
Total one-way travel distance:
Average Travel Speed:

COLORADO SPRINGS
miles
ph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job cost: 2.31 Hours

Total job cost: \$2,853

Τ	Task description:	Site Maintenance Yr 2			
Site:	Cresson Project	Permit Action:	2023	Permit/Job#:	M1980244

PROJECT IDENTIFICATION

Task #: F0003 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0003

User: 10:53:41 PM ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)		t		fleet		
Drill/Broadcast	25.00	\$6.73	\$82.29	2	\$178.04	\$164.58	\$500.00
Seeder with							
Tractor							
Hydroseeder with	28.00	\$12.80	\$158.17	2	\$341.94	\$316.34	\$500.00
Tractor							

Subtotals: \$519.98 \$480.92 \$1,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$82.80	16	\$1,324.80	\$1,324.80
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Subtotals: \$1,400.17 \$1,400.17

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles
mph

Total Non-Roadable Mob/Demob Cost *
 '* two round trips with haul rig:
 Total Roadable Mob/Demob Cost **
 ** one round trip, no haul rig:

\$5,353.15

\$3,235.95

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job cost: \$8,589 Hours

Task description: Sit	e Maintenance Y	'r 3		
te: Cresson Project	Permi	t Action:2023	Permit/Jol	b#: <u>M1980244</u>
PROJECT IDENTIFICAT	<u>ION</u>			
Task #: F0004 Date: 3/15/2023 User: ACY		colorado celler	Abbreviation: Filename:	None M244-F0004
Agency or organizatio	n name: DRMS	S		
EQUIPMENT TRANSPOR	T RIG COST			
				1 per day CRG Data
Truck Tractor Desc	cription: GENI		AY TRUCK TRACTOR, 6X4, 400 HP (2ND HALF, 2006)	DIESEL POWERED
Truck Trailer Desc	cription: C		G GOOSENECK, DROP DEC AILER (25T, 50T, AND 100T)	~
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05	
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85	
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52	

NON ROADABLE EQUIPMENT:

Total Unit Cost/Hour:

Helper Cost/Hour:

\$0.00

\$82.29

Machine Description	Weight/ Unit	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
1	(TONS)		t		fleet		
				G 1 1	40.00	φο οο	40.00

\$23.53

\$175.95

\$23.53

\$158.17

Subtotals: **\$0.00 \$0.00 \$0.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Subtotals: \$1,234.57 \$1,234.57

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles
mph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$2,853.23

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job time:	2.31	Hours
Total job cost:	\$2,853	

Task description:	Site Maintenance Yr 4

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0005 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0005

10:55:29 PM

User: ACY
Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Description Uni	eight/ Owner ship nit Cost/hr/ unit ONS)	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
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Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Subtotals: \$1,234.57 \$1,234.57

Nearest Major City or Town within project area region:
Total one-way travel distance:
Average Travel Speed:

COLORADO SPRINGS
miles
ph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$0.00

\$2,853.23

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job cost: 2.31 Hours

Total job cost: \$2,853

Task description:	Site Maintenance Yr 5

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0006 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0006

User: 10:56:22 PM ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Atlas Capco DM45/LP - 7-7/8"	1.25	\$410.31	\$82.29	2	\$985.20	\$164.58	\$500.00

Subtotals: \$985.20 \$164.58 \$500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	16	\$1,324.80	\$1,324.80
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Subtotals: \$1,400.17 \$1,400.17

Nearest Major City or Town within project area region: COLORADO SPRINGS
Total one-way travel distance: 52.00 miles
Average Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost *
 '* two round trips with haul rig:
 Total Roadable Mob/Demob Cost **
 ** one round trip, no haul rig:

\$5,627.67

\$3,235.95

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job time:	6.62	Hours
Total job cost:	\$8,864	

rask description:	Site Maintenance 11 o

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0007 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0007

User: 10:57:31 PM ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Machine Weight/ Description Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
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Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job cost: 2.31 Hours

Total job cost: \$2,853

Task description:	Site Maintenance Yr /

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0008 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0008

User: 10:58:27 PM ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles
mph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$2,853.23

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job cost: 2.31 Hours

Total job cost: \$2,853

rask description.	Site Maintenance 11 8

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0009 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0009

User: 10:59:43 PM ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37
water Tanker, 3,500 Gal.	\$15.31	1	\$15.31	\$15.31

Nearest Major City or Town within project area region: COLORADO SPRINGS
Total one-way travel distance: 52.00 miles
Average Travel Speed: 45.00 mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

Total job time:	2.31	Hours
Total job cost:	\$2,853	

Task description: Site Maintenance Yr 9		Site Maintenance Yr 9	
Site:	Cresson Project	Permit Action: 2023	Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0010 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0010

11:00:48 PM

User: ACY
Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
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Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles

52.00
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

Total job time:	2.31	Hours
Total job cost:	\$2,853	

Task description: Site Maintenance Yr 10

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0011 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0011

11:01:30 PM

User: ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	14	\$1,159.20	\$1,159.20
Crew				
Water Tanker, 3,500 Gal.	\$75.37	1	\$75.37	\$75.37

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles
project area region:

52.00
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

Total job time:	2.31	Hours
Total job cost:	\$2,853	

Task description:	Site Maintenance Yr 11

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0012 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0012

11:02:54 PM

User: ACY

EQUIPMENT TRANSPORT RIG COST

Agency or organization name: DRMS

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Description Unit Cost/hr/ unit Cost/hr/uni Size Cost/hr/ fleet Cost/ flee	Machine Description		Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni	Fleet Size		Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
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Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$82.80	12	\$993.60	\$993.60

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles

Major City or Town within project area region:

52.00
mph

Total Non-Roadable Mob/Demob Cost *
 '* two round trips with haul rig:
 Total Roadable Mob/Demob Cost **
 ** one round trip, no haul rig:

\$0.00

\$2,296.32

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

Total job time:	2.31	Hours
Total job cost:	\$2,296	_

Task description:	Site Maintenance Yr 12

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0013 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0013

11:05:49 PM

User: ACY

EQUIPMENT TRANSPORT RIG COST

Agency or organization name: DRMS

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Description Uni	eight/ Owner ship nit Cost/hr/ unit ONS)	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
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Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$82.80	12	\$993.60	\$993.60

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles

Major City or Town within project area region:

52.00
mph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$2,296.32

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

Total job time:	2.31	Hours
Total job cost:	\$2.296	

	*		-
Site:	Cresson Project	Permit Action: 2023	Permit/Job# M1980244

PROJECT IDENTIFICATION

Task description:

Task #: F0014 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0014

11:06:31 PM

Site Maintenance Yr 13

User: ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
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Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$82.80	12	\$993.60	\$993.60

Nearest Major City or Town within project area region: COLORADO SPRINGS
Total one-way travel distance: 52.00 miles
Average Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$2,296.32

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

Total job time:	2.31	Hours
Total job cost:	\$2,296	

	*		-
Site:	Cresson Project	Permit Action: 2023	Permit/Job# M1980244

PROJECT IDENTIFICATION

Task description:

Task #: F0015 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0015

11:07:20 PM

Site Maintenance Yr 14

User: ACY

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Subtotals: \$0.00 \$0.00 \$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$82.80	12	\$993.60	\$993.60

Nearest Major City or Town within project area region:
Total one-way travel distance:
Average Travel Speed:

COLORADO SPRINGS
miles
ph

Total Non-Roadable Mob/Demob Cost *

'* two round trips with haul rig:

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$2,296.32

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.16	1.16
Return Time (Hours):	1.16	1.16
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.31	2.31

JOB TIME AND COST

Total job cost: 2.31 Hours

Total job cost: \$2,296

Task description: TR124 Carlton Tunnel Pond Cleanout - Mob

Site: Cresson Project Permit Action: 2023 Permit/Job#: M1980244

PROJECT IDENTIFICATION

Task #: F0016 State: Colorado Abbreviation: None

Date: 11/20/2023 County: Teller Filename: M244-F0016

11:08:15 PM

User: ERR

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat 320D L 9'-6" Stick	23.70	\$70.85	\$82.29	4	\$612.56	\$329.16	\$250.00

Subtotals: \$612.56 \$329.16 \$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$82.80	4	\$331.20	\$331.20
Crew				
Generic 15-18 cy, 6x4	\$137.31	4	\$549.24	\$549.24

Subtotals: \$880.44 \$880.44

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

COLORADO SPRINGS
miles
mph

Total Non-Roadable Mob/Demob Cost *
 '* two round trips with haul rig:
Total Roadable Mob/Demob Cost **
 ** one round trip, no haul rig:

\$5,554.78

\$3,580.46

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	2.03	2.03
Return Time (Hours):	2.03	2.03
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	5.07	4.07

JOB TIME AND COST

Total job cost: 10.13 Hours

Total job cost: \$9,135