COST SUMMARY WORK

Task descri	-	PR12 RCE	rmit Action:	PR12	Permit/Jol	o#: <u>C1981010</u>
PROJECT	IDENTIFIC	CATION				
Task #:	000	State:	Colorado		Abbreviation:	None
Data	4/17/2025	County:	Moffat		Filename:	C010-000
Date:						

TASK LIST (DIRECT COSTS)

		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
001	Ash Disposal Pit Regrade (NW section)	DOZER	2	9.40	\$16,171
001B	Load/Haul Section E1,423,800	TRUCK1	1	40.89	\$295,196
002	Ash Disposal Pit Regrade (Section 1)	DOZER	2	20.21	\$34,776
002B	Ash Disposal Pit Regrade (Section 2)	DOZER	2	25.76	\$44,325
003	Ash Disposal Pit Regrade (Section 3-1)	DOZER	2	1.82	\$3,125
003B	Ash Disposal Pit Regrade (Section 3-2)	DOZER	2	51.54	\$88,682
004	Regrade Johnson Coal Stockpile	DOZER	1	13.37	\$11,503
004A	D/E Pit Regrade (Spoil Side East)	DOZER	8	73.31	\$504,589
005A	D/E Pit Regrade (West)	DOZER	6	93.81	\$484,239
030	Regrade BC Road	DOZER	4	46.08	\$90,852
031	Regrade D-Main Road	DOZER	4	33.70	\$66,453
032	Regrade East and West Ash Roads	DOZER	4	55.65	\$109,716
033	Regrade LOM Roads	DOZER	4	100.51	\$198,169
034	Regrade A Roads (Middle A and North A N pit)	DOZER	4	37.01	\$72,970
035	Regrade N Pit Roads (old LOM, cross-over, ash pit)	DOZER	4	15.36	\$52,856
036	Regrade C Pit Haul Road	DOZER	4	37.81	\$74,545
038	Regrade East A Haul Roads (East A and East	DOZER	4	35.90	\$70,773
039	ASplit, BridgeRd)	DOZEK	4	35.90	\$70,775
040	Regrade I/J Roads (I/J Spoil, I Mid, I West)	DOZER	4	23.57	\$46,485
041	Regrade K Pit Haul Roads (K1 EPRL K3)	DOZER	4	41.10	\$81,040
042	Regrade Mine Access Road	DOZER	4	14.97	\$29,524
043	Regrade Explosive Storage Access Road	DOZER	4	3.99	\$7,874
044	Regrade No Name Access Roads #2, #4, 5R	DOZER	4	6.15	\$12,117
045	Regrade Potable Water Well Access Road	DOZER	4	1.13	\$2,237
046	Regrade West Pyeatt Access Road (1 and 2)	DOZER	4	5.77	\$11,383
047	Regrade Middle Pyeatt Access Road (1, 2 and 3)	DOZER	4	6.61	\$13,028
048	Regrade East Pyeatt Access Road (1, 2 and 3)	DOZER	4	5.87	\$11,564
049	Regrade Grouse Access Road	DOZER	4	2.90	\$5,726
050	Regrade West Flume Access Road	DOZER	4	1.70	\$3,355
051	Regrade East Flume Access Road	DOZER	4	1.70	\$3,355
052	Regrade Deal Access Road	DOZER	4	1.70	\$3,355
053	Regrade Horse Access Roads (Horse and Horse1)	DOZER	4	3.86	\$7,605
054	Regrade West Horse Access Road	DOZER	4	1.70	\$3,355
055	Regrade Middle Flume Access Roads (1 and 3)	DOZER	4	2.92	\$5,760
056	Regrade Oak Access Roads	DOZER	4	2.39	\$4,706
057	Regrade Sage Access Roads	DOZER	4	3.14	\$6,192
058	Regrade Johnson Access Road	DOZER	4	7.03	\$13,867
063	Rip BC Walk Road	RIPPER	4	2.24	\$4,755

4 F	Rip D-main Pit Haul Roads	RIPPER	4	8.40	\$17,814
	Rip West Ash Haulroads (West Ash, West Ash1	RIPPER	4	5.98	\$12,679
	and West Ash 2)	KIITEK	-	5.90	\$12,079
	Rip LOM Haul Roads (F2 and F2-G5)	RIPPER	4	8.76	\$18,575
	Rip A Pit Haul Roads (Middle A and North A)	RIPPER	4	6.43	\$13,630
	Rip N Pit Haul Roads	RIPPER	4	5.38	\$11,411
	Rip East A Haul Roads (East A and East A Split)	RIPPER	4	2.96	\$6,276
	Rip Access Road (Tasks 042-059)	RIPPER	4	3.11	\$6,593
	Rip K Pit Haul Roads (KMain, K1, K2, K3)	RIPPER	4	2.12	\$4,501
	Rip I/J Roads (I/J Spoil, I Mid, I West)	RIPPER	4	4.55	\$9,655
	Regrade Coyote Impoundment	DOZER	2	224.13	\$220,954
	Regrade Middle Pyeatt Impoundments	DOZER	1	51.09	\$220,934
I	mpoundment (1,2, 3)	DOLLK	1	51.07	φ25,105
	Regrade Far East Buzzard Impoundment	DOZER	1	0.44	\$216
	Regrade Sage Impoundments (1 and 2)	DOZER	1	16.26	\$8,015
	Regrade West Horse Impoundment	DOZER	1	2.73	\$1,346
	Regrade Impoundment H	DOZER	1	5.66	\$2,788
	Regrade Industrial Waste Pond	DOZER		5.80	\$2,788
	Regrade Deal 1 and 2		1	7.64	\$2,839
	<u><u>u</u></u>	DOZER	1		\$38,587
	Regrade Deacon 1,2 and Jeffway 1,2 mpoundments	DOZER	1	73.67	\$38,387
	Regrade W. Buzzard #4 Impoundment	DOZER	1	5.34	\$2,796
	Regrade E. Buzzard #4 Impoundment	DOZER	1	6.26	\$3,277
	• •		1	-	
	Regrade Diversions	DOZER	1	40.85	\$13,893
r	Regrade Diversions	DOZER	1	0.84	\$284
F	Replace Topsoil on Ash Pits (ASH1)	SCRAPER1	1	5.20	\$32,014
	Replace Topsoil on Ash Pits (ASH2)	SCRAPER1	1	12.78	\$78,627
	Replace Topsoil on Ash Pits (A92-4 to Pit)	TRUCK1	1	107.16	\$307,455
	Replace Topsoil on D/E Pits (Truck/Excavator)	TRUCK1	1	416.57	\$1,038,052
	Replace Topsoil on D/E Pits (D97-1)	SCRAPER1	1	14.75	\$85,470
	Replace Topsoil at L Pit K Knob L23-1 to K Knob	SCRAPER1	1	1.69	\$10,421
F	Replace Topsoil on D/E Pits (D1-07)	SCRAPER1	1	1.99	\$11,545
	Replace Topsoil JPE 1 to J East	SCRAPER1	1	24.80	\$152,663
_		5010112101			<i></i>
F	Replace Topsoil at C Pit Future TS Pile TR134	SCRAPER1	1	36.50	\$224,660
F	Replace Topsoil at West Panel, BC rd, Shop	SCRAPER1	1	13.22	\$81,383
	Scraper)				
	Replace Topsoil at West Panel, BC rd, Shop Truck/Excavator)	TRUCK1	1	147.14	\$366,648
F	Replace Topsoil at East Panel Ponds, A road	SCRAPER1	1	20.64	\$127,032
	Scraper)				
	Replace Topsoil at East Panel Ponds, A Rd Truck/Excavator)	TRUCK1	1	209.29	\$521,528
	Re-topsoil Johnson Coal Stockpile	SCRAPER1	1	4.14	\$25,488
	Re-topsoil aJ23-1 to J Pit	SCRAPER1	1	8.24	\$50,713
			_		
	Replace Topsoil at Dragline Walk Road (ASH4)	TRUCK1	1	8.17	\$17,280
	Replace Topsoil at Dragline Walk Road (ASH1)	TRUCK1	1	33.14	\$70,092
	Facilities Area	REVEGE	1	75.00	\$31,802
	Seed D Pit Range A-B	REVEGE	1	319.30	\$362,777
	Roads (including BC road) below 6700'	REVEGE	1	196.00	\$83,236
Г	Ponds below 6700' (Coyote, Sage, E Buzzard)	REVEGE	1	26.00	\$11,025

104	Johnson Cool Stoolmile	DEVECE	1	12.00	\$5,343
104 105	Johnson Coal Stockpile topsoil piles below 6700'	REVEGE REVEGE	1	27.00	\$5,545 \$11,491
103	Roads: >6700 ftRangeland with Shrubs	REVEGE	-	54.00	\$58,694
107	Ash pitRangeland with Shrubs	REVEGE	1	115.00	\$125,185
108	Ponds above 6700'(Deal, Deacon, Jeffways, West	REVEGE	1	113.00	\$20,261
111	Horse)	KEVEOE	1	19.00	\$20,201
112	topsoil piles above 6700'	REVEGE	1	5.00	\$5,523
113	Shrub Transplants as per Operator	NA	1	40.00	\$155,204
120	Seal Land Slide Monitoring Stations	BOREHOLE	1	4.00	\$8,143
121	Plug and Seal Exploration Drill Holes	BOREHOLE	1	80.00	\$38,730
122	Plug and Seal Monitoring Wells	BOREHOLE	1	185.00	\$168,156
128	Reveg for 20 x .3 acres drillholes	REVEGE	1	6.00	\$6,497
129	Regrade .3acres x 20 drill pads	DOZER	1	47.12	\$16,025
130	Demolish structures, remove materials and debris	DEMOLISH	1	100.00	\$1,009,908
131	Culvert Removal and Disposal	DEMOLISH	1	60.00	\$176,564
132	Mobilize and Demobilize from Hayden, CO	MOBILIZE	1	5.34	\$88,152
133	Drill and Blast L Pit 1,776,482 BCY	NA	3	407.00	\$640,555
134	Drill and Blast Ash Pit 106,474 BCY	NA	3	37.75	\$43,232
135	Drill and Blast J Pit 513,911 BCY	NA	3	142.00	\$193,985
91AT	Replace Topsoil at L Pit K Knob L23-1 to K Knob	SCRAPER1	1	1.69	\$10,421
R					
L01	Regrade L Pit X-sec:407,200	DOZER	4	23.78	\$81,844
L02	Regrade L Pit X-sec:406,700	DOZER	4	63.46	\$218,378
L03	Regrade L Pit X-sec:406,200	DOZER	4	28.02	\$96,438
L04	Regrade L Pit X-sec:405700	DOZER	4	33.86	\$116,522
L05	Regrade L Pit X-sec:405,200	DOZER	4	198.18	\$682,027
L06	Regrade L Pit X-sec:404,700	DOZER	4	276.11	\$950,223
L07	Regrade L Pit X-sec:404,200	DOZER	4	76.15	\$262,076
L08	Regrade L Pit X-sec:403,700	DOZER	4	12.88	\$44,332
L09	Regrade L Pit X-sec:403,200	DOZER	4	10.08	\$34,677
L10	Regrade L Pit X-sec:402,700	DOZER	4	108.18	\$372,309
L11	Regrade L Pit X-sec:402,200	DOZER	4	220.52	\$758,896
L12	Regrade L Pit X-sec:401,700	DOZER	4	51.98	\$178,885
L13	Regrade L Pit X-sec:401,200	DOZER	4	35.26	\$121,358
L14	Regrade L Pit X-secs:400,700 and 400,200	DOZER	4	37.69	\$129,721
L15	Regrade L PIt (Truck/Excavator)	TRUCK1	1	459.83	\$1,607,039
L15A TR	Regrade Jennings Pit (Truck/Excavator)	TRUCK1	4	96.99	\$1,026,908
L15T R135	Regrade L PIt K Knob (Truck/Excavator)	TRUCK1	4	474.59	\$5,024,826
L16	Seed L Pit: Rangeland with Shrubs	REVEGE	1	804.00	\$870,556
L16M R228	Seed L Pit diversion: Rangeland with Shrubs	REVEGE	1	2.30	\$2,491
L17	Regrade L Pit North Haul road.6.5 ac X 9 ft th.	DOZER	2	26.56	\$45,684
L18	Replace Topsoil on L Pit (Scrapper)	SCRAPER1	1	166.47	\$1,024,555
L19	Replace Topsoil on L Pit (Truck/Excavator)	TRUCK1	1	708.38	\$2,032,367
LN20	Site Maintenance; Rill and Gully Repair and Pond Cleaning	SITEMAINT ENANCE	1	600.00	\$226,300
LN20 ATR	Site Maintenance; Drainage Stabilization	SITEMAINT ENANCE	1	600.00	\$15,868
N01	Regrade N Pit	DOZER	2	1,011.00	\$1,739,638
N02	Backfill and Grading N Pit	TRUCK1	1	604.84	\$2,421,638
		TRUCK1	·	156.39	\$546,565
N02A	Backfill and Grading I Pit	IKUUKI	1	1.00.19	

N13	Replace Topsoil on C Pit	SCRAPER1	1	90.64	\$557,880
N14	Replace Topsoil on N Pit (Scraper)	SCRAPER1	1	169.86	\$1,045,426
N14A	Replace Topsoil on N Pit (Truck/Excavator)	TRUCK1	1	147.82	\$365,087
N15	Replace Topsoil in I Pit	SCRAPER1	1	13.46	\$82,869
N16	Replace Topsoil on J Pit (Truck/Excavator)	TRUCK1	1	103.22	\$254,944
N16A	Replace Topsoil in J Pit (Scraper)	SCRAPER1	1	3.87	\$23,813
N16A ATR	Replace Topsoil on J Pit ASH-1 to J Pit	TRUCK1	1	38.09	\$94,066
N16A TR	Replace Topsoil on J Pit A91-8 to J Pit	TRUCK1	1	22.95	\$56,683
N16T R135	Seed L Pit, K Nob: >6700 ftRangeland with Shrubs	REVEGE	1	3.50	\$5,306
N17	Replace Topsoil on I/J Pit	TRUCK1	1	54.31	\$113,660
n18	Seed N PitRangeland w/o shrubs (<6700 ft.)	REVEGE	1	44.00	\$18,699
N18A	Seed N Pit: >6700 ftRangeland with Shrubs	REVEGE	1	244.00	\$264,664
N19	Seed J Pit without shrubs (Range C)	REVEGE	1	66.00	\$27,901
N19T R134	Seed J Pit without shrubs (Range C)	REVEGE	1	66.00	\$14,714
N20	Seed I Pit without Shrubs	REVEGE	1	35.00	\$14,904
N21	Seed I/J Pits no shrubs (Range C)	REVEGE	1	31.00	\$13,047
N21A MR	Seed J Pits no shrubs (Range C) MR229	REVEGE	1	31.00	\$5,193
N22	Seed C Pit No Shrubs	REVEGE	1	189.00	\$79,673
RCN BR	Reclamation Not Bond Released	NA	1	1.00	\$213,391
		SUBTO	TALS:	12808.65	\$33,648,975

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$679,709
Performance bond:	1.05	Total =	\$353,314
Job superintendent:	6,404.63	Total =	\$507,695
Profit:	10.00	Total =	\$3,364,898
		TOTAL O & P =	\$4,905,616
		CONTRACT AMOUNT (direct + O & P) = $($	\$38,554,591

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$1,638,570
Reclamation management and/or administration:	2.50	_	\$963,865
CONTINGENCY:	0.00	Total =	\$0
	TOTAL I	NDIRECT COST =	\$7,508,551
TOTAL BO	\$41,157,526		

							39500000	
PR12 Estimate	2						\$540,610	bond increase
Phase Bond Rele	ase Area Cost Accou	nting	Liability	Acres	Cost /Acre	%	Phase Bond R	Acreage
	Worst Case Bond		\$41,157,526.00	2953.10	\$13,937.06	100%	Phase 1	4585.9
	Phase I Total Applica	able Bon	\$4,411,078.86	316.50				
	Worst Case (-) TAB		\$36,746,447.14	2636.60				
	Phase I (Liability to he	old)	\$ 1,790,633.21	321.20	\$5,574.82	40%	Phase 2	4264.7
	Phase II (Liability to h	nold)	\$ 1,503,529.82	719.20	\$2,090.56	15%	Phase 3	3545.5
<u>Total</u>		TOTAL	\$40,040,610	3677.0				

Current Required Surety\$ 38,550,205.38Required Surety Increase\$1,490,404.79

4%

			W section)		
e: Trapper Mine	Pe	ermit Action:	PR12	Permit/Jol	o#: <u>C1981010</u>
PROJECT IDENTI	FICATION				
Task #: 001 Date: 4/20/202 User: RAR	25 State: County:	Colorado Mineral		Abbreviation: Filename:	None C010-001
Agency or or	ganization name: D	RMS			<u> </u>
HOURLY EQUIPM	IENT COST				
Horsepower: Blade Type: Attachment: Shift Basis:	Cat D11T - 11U 850 Universal NA 3 per day (CRG)		- - - -		
Cost Breakdown:	(61(6))		– Utilization %		
Ownership Cost/Hou Operating Cost/Hou	r:	\$496.62 \$324.90	<u>NA</u> 100		
Ripper own Cost/Hou		\$0.00	NA		
Ripper op. Cost/Hou		\$0.00	0		
Operator Cost/Hou	r:	\$38.84	NA		
Swell factor: 1.	TITIES 3,722 .000 3,722 LCY				
Source of estimated ve Source of estimated sy factor:			able A.4.1 and A-2.8		
HOURLY PRODUC	CTION				
Average push distance Unadjusted hourly production:	e: <u>150 feet</u> 2,036.8 LC	CY/hr			
Materials consistency	description: Loose	stockpile 1.2			
Average push gradient:	-30 %				
Average site altitude:					
Material weight:	2,475 lbs/LCY				
Weight description:	User Provided				

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.200	(S-BY-S)
Visibility:	0.800	(POOR)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.9137

Adjusted unit production:	1,861.02 LCY/hr
Adjusted fleet production:	3722.04 LCY/hr

Fleet size:	2 Dozer(s)
Unit cost:	\$0.462/LCY

Total job time:	11.75 Hours
Total job cost:	\$20,213

TRUCK/LOADER TEAM WORK

Task description	on: Load	/Haul Sect	ion E1	,423,800			
Site: Trapper Mi	ne	_ Permit A	ction:	PR12		Permit/Job	#: <u>C1981010</u>
PROJECT IDE	ENTIFICATI	<u>ON</u>					
Task #: 001 Date: 5/1 User: RA	/2025 C		Colorad Moffat	lo	Abbr Filen	eviation: ame:	None 001B
Agency or org	anization nam	e: DRM	1S				
HOURLY EQU	UIPMENT CO	<u>OST</u> Shit	ft basis	: <u>1 per day</u>			
Equipme	ent Description	1					
Truck Loader	Team -Truck:		KOM	ATSU 830E	Ξ		
-Loader:			CAT	6090			
Support Equip	ment -Load A	rea:	NA				
-Dump Area:			Cat D	10T - 10SU	-		
Road Mainten	ance – Motor C	Grader:	CAT	16M			
-Water Truck:			Water	Tanker, 14	,000 Gal.		
Cost Breakdow	n: Truck/I	.oader Tear	n Su	pport Equip	ment Main	tenance Eq	uipment
	Truck	Shovel		Load Area	Dump	Motor	Water
					Area	Grader	Truck
%Utilization-	100	100	Ν	NA	25	25	50

%Utilization- machine:	100	100	NA	25	25	50
Ownership cost/hour:	\$209.47	\$302.35	NA	\$257.39	\$179.39	\$130.32
Operating cost/hour:	\$274.17	\$501.45	NA	\$49.23	\$29.91	\$70.88
%Utilization- riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$33.87	NA	\$38.59	\$27.76	\$0.00
Unit Subtotals:	\$508.88	\$837.67	NA	\$345.21	\$237.06	\$201.20
Number of Units:	11	1	0	1	1	1
Group Subtotals:	Work:	\$6,435.35	Support:	\$345.21	Maint:	\$438.26

Total work team cost/hour: \$7,218.82

MATERIAL QUANTITIES

Initial volume: 128,454 CCY Swell factor: 1.000

Loose volume:	128,454	LCY	

Source of estimated volume:	Table A-4.1A
Source of estimated swell factor:	Cat Handbook
Material Purchase Cost:	\$0.00
Total Cost:	\$0.00

HOURLY PRODUCTION

Truck Capacity: Truck Payload (weight) Basi

Iruck Payload (weight) Basis:				
Material weight:	3,300	Pounds/LCY		
Description:	Decomposed rock - 75%	b Rock, 25% Earth		
Rated Payload:	492,200	Pounds		
Payload Capacity:	149.15	LCY		

Truck Bed (volume) Basis:

153.00	LCY
192.00	LCY
172.50	LCY
149.15	LCY
	192.00 172.50

Final Truck Volume Based on Number of Loader Passes:

Loading Tool Capacity

		Bucket Size Class:	NA
Rated Capacity:	58.900	LCY (heaped)	
Bucket Fill Factor:	0.825	Blasted rock - avg. blasted (7	75 - 90%) 0.825
Adjusted Capacity:	48.593	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 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:

Number of Loading Tool Passes Required to Fill Truck:

passes

Excavators and Front Shovels:

145.78 LCY

3

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Machine Cycle Time vs. Job Condition
Rating:
Selected Value within this Basic Rating:

ABOVE AVERAGE

Track Loaders – Material Description:

AVERAGE

Cycle Time Elements (min.):

Load:	NA	Maneuver:	NA	Dump:	0.100	_
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Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, NA minutes maneuver):

	Factor (min.)	Source
NA	NA	(Cat HB)
Net Cycle Time Adjustment:	NA	minutes
Adjusted Loader Cycle Time:	0.498	minutes
Net Load Time per Truck:	1.494	minutes
	NA NA NA NA Net Cycle Time Adjustment: Adjusted Loader Cycle Time:	NANANANANANANANANANANet Cycle Time Adjustment:NAAdjusted Loader Cycle Time:0.498

Truck Cycle Time:

Truck Exchange Time:	0.80	Minutes	Adjusted for site altitude:	0.800	Minutes
Truck Load Time:	1.494	Minutes	Adjusted for site altitude:	1.494	Minutes
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted for site altitude:	1.200	Minutes

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

Haul Rou		Distance	\mathbf{C} and \mathbf{I} \mathbf{C}	D - 11 D	T - 4 - 1 D	VI-1	T 1	
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	1142	8.00	10.00	3.00	13.00	620	18.513	
				Haul Tin	ne:	18.513	minute	S
Return Ro			1	1	I		1	
Seg #		Distance	Grade (%)	Roll. Res	Total	Velocity	Travel	
	(Ft)			(%)	Res (%)	(fpm)	Time	
1	1140	0.00	10.00	2.00	7.00	2450	(min)	
1	1142	8.00	-10.00	3.00	-7.00	3450	3.415	
		ŀ	Return Time:			3.415	minu	ites
			Total Truck Cy	cle Time:		25.422	minı	
ading Tool ur	nit	0.010.01					21515	
oduction		3,812.84	LCY/Hou	ir Adjust	ted for job ef	ficiency:	3,164.6	6 LCY/Hour
uck Unit oduction		344.06	LCY/Hou	r Adjust	ted for job ef	ficionau	285.57	LCY/Hour
Juction		344.00		n Aujusi		nciency.	205.57	
otimal No. of		11	Truck(s)	Selecte	ed Number o	f Trucks:	11	Truck(s)
ucks:								
Adjust	ed hou	rlv truck tea	m production:			3,141.2	25 L	CY/Hour
5		•	der team produ			3,141.2		CY/Hour
5			oader team pro			3,141.2		CY/Hour
JOB TIM	IE AN	D COST						
JOB TIM		D COST 1	Team(s)	Total jo	b time:	40.89		Hours

Task description: Ash	Disposal Pit Regrade (Section	ion 1)		
Site: Trapper Mine	Permit Action: Pl	R12	Permit/Job#: C	1981010
PROJECT IDENTIFICATIO	<u>ON</u>			
Task #: 002	State: Colorado		Abbreviation:	None
Date: 4/20/2025	County: Mineral		Filename:	PR12
User: RAR	_			
Agency or organizat	ion name: DRMS			
HOURLY EQUIPMENT CO	<u>)ST</u>			
Basic Machine: Cat D11'	Г - 11U			
Horsepower: 850				
Blade Type: Universa	1			
Attachment: NA				
Shift Basis: 3 per day	7			
Data Source: (CRG)				
Cost Breakdown:				
<u>Cost Dicardown</u> .		Utilization %		
Ownership Cost/Hour:	\$496.62	NA		
Operating Cost/Hour:	\$324.90	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.84	NA		
-				
	50.36			
Total Fleet Cost/Hour: \$1,	720.71			
MATERIAL QUANTITIES				
Initial Volume: 24,907				
Swell factor: 1.000				
Loose volume: 24,907 L0	TY			
Source of estimated volume:	Permit Appendix A, Ta	able A.4.1 and A-2.8		
Source of estimated swell factor	:: Cat Handbook			
HOURLY PRODUCTION				
Average push distance:	420 feet			
Unadjusted hourly production:	774.7 LCY/hr			
Materials consistency description	n: Loose stockpile 1.2			
Average push gradient:	%			
Average site altitude: 6,8	00 feet			
Material weight:2,4	75 lbs/LCY			
Weight description: Us	er Provided			

_

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.200	(S-BY-S)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.7954	
Adjusted unit production: 61	6 20 I CV/hr	

Adjusted unit production:	616.20 LCY/hr
Adjusted fleet production:	1232.4 LCY/hr

Fleet size:	2 Dozer(s)
Unit cost:	\$1.396/LCY

Total job time:	20.21 Hours
Total job cost:	\$34,776

Trapper Mine	e Permi	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	TIFICATION				
ask #:0021		Color		Abbreviation:	None
Date: $\frac{4}{20}$ User: RAF	$\frac{2025}{8}$ County:	Mine	ral	Filename:	PR12
gency or organ		DRMS			
rgency of organ		DRMS			
DURLY EQUI	PMENT COST				
asic Machine:	Cat D11T - 11U				
lorsepower:	850				
lade Type:	Universal				
ttachment:	NA				
hift Basis:	3 per day				
Data Source:	(CRG)				
st Breakdown:					
·1-5			<u>Utilization %</u>		
)wnership Cost/Hour:	\$496.62		NA		
)perating					
Cost/Hour:	\$324.90		100		
Lipper own.					
Cost/Hour:	\$0.00		NA		
lipper op.					
Cost/Hour:	\$0.00		0		
)perator	#2 0.04				
Cost/Hour:	\$38.84		NA		
			1		
otal unit	\$860.36				
Cost/Hour:					
otal Fleet	\$1,720.71				
Cost/Hour:	. ,				

Initial 35,685 Volume: 1.000

Loose volume:	35,685 LCY

Source of estimated volume:	Permit Appendix A, Table A.4.1 and A-2.8
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance	: 410 feet		
Unadjusted hourly production:	792.6 LCY/hr		
Materials consistency description:	Loose stock	xpile 1.2	
Average push gradient:	-10 %		
Average site altitude:	6,800 feet		
Material weight:	2,475 lbs/LCY		
Weight description:	User Provided		
Job Condition Correctio	n Factor Source		
Operator Skill:	0.750	(AVG.)	
Material consistency:	1.200	(CAT HB)	
Dozing method:	1.200	(S-BY-S)	
Visibility:	1.000	(AVG.)	
Job efficiency:	0.790	(3 SHIFTS/DAY)	
Spoil pile:	0.900	(SSD-FC)	
Push gradient:	1.225	(CAT HB)	
Altitude:	1.000	(CAT HB)	
Material Weight:	0.929	(CAT HB)	
Blade type:	1.000	(PAT)	
Net correction:	0.8739		
Adjusted unit production:	692.65 LCY/hr		
Adjusted fleet production:	1385.3 LCY/hr		

Fleet size:	2 Dozer(s)
Unit cost:	\$1.242/LCY
Total job time:	25.76 Hours
Total job cost:	\$44,325

Trapper Mine	e Permit	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	TIFICATION				
Task #: 003	State:	Colorad		Abbreviation:	None
	/2025 County:	Minera	1	Filename:	PR12
User: RAF					
Agency or organ	ization name:	DRMS			
	DMENT COST				
IUUKLY EQUI	<u>PMENT COST</u>				
Basic Machine:	Cat D11T - 11U				
Horsepower:	850				
Blade Type:	Universal				
Attachment:	NA				
Shift Basis:	3 per day				
Data Source:	(CRG)				
ost Breakdown:					
			Utilization %		
Ownership	\$496.62		NA		
Cost/Hour:	\$490.02		INA		
Operating	\$324.90		100		
Cost/Hour:	<i>432</i> 1.90		100		
Ripper own.	\$0.00		NA		
Cost/Hour:					
Ripper op.	\$0.00		0		
Cost/Hour:					
Operator Cost/Hour:	\$38.84		NA		
			INA		
Total unit	\$860.36				
Cost/Hour:	<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>				
Total Fleet	\$1,720.71				

Initial	7,833
Volume:	7,855
Swell factor:	1.000

Loose volume:	7,833 LCY

Source of estimated volume:	Permit Appendix A, Table A.4.1 and A-2.8
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance	: 120 feet		
Unadjusted hourly production:	2,467.4 LCY/hr		
Materials consistency description:	Loose stockpile	1.2	
Average push gradient:	-10 %		
Average site altitude:	6,800 feet		
Material weight:	2,475 lbs/LCY		
Weight description:	User Provided		
Job Condition Correctio	on Factor Source		
Operator Skill:	0.750	(AVG.)	
Material consistency:	1.200	(CAT HB)	
Dozing method:	1.200	(S-BY-S)	
Visibility:	1.000	(AVG.)	
Job efficiency:	0.790	(3 SHIFTS/DAY)	
Spoil pile:	0.900	(SSD-FC)	
Push gradient:	1.225	(CAT HB)	
Altitude:	1.000	(CAT HB)	
Material Weight:	0.929	(CAT HB)	
Blade type:	1.000	(PAT)	
Net correction:	0.8739		
Adjusted unit production:	2,156.26 LCY/hr		
Adjusted fleet production:	4312.52 LCY/hr		

Fleet size:	2 Dozer(s)
Unit cost:	\$0.399/LCY
Total job time:	1.82 Hours
Total job cost:	\$3,125

Task description:	Ash Disposal Pit Regrad	le (Section 3-2)		
Site:	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
PROJECT IDEN	TIFICATION			
	/2025 County: Minera		Abbreviation: Filename:	None PR12
User: <u>RAR</u> Agency or organ				
HOURLY EQUI	PMENT COST			
Basic Machine: <u>Horsepower:</u> Blade Type: <u>Attachment:</u> Shift Basis: Data Source:	<u>Cat D11T - 11U</u> <u>850</u> <u>Universal</u> <u>NA</u> <u>3 per day</u> <u>(CRG)</u>			
Cost Breakdown:		Utilization %		
<u>Ownership</u> <u>Cost/Hour:</u>	<u>\$496.62</u>	NA		
<u>Operating</u> <u>Cost/Hour:</u>	<u>\$324.90</u>	<u>100</u>		
<u>Ripper own.</u> <u>Cost/Hour:</u>	<u>\$0.00</u>	NA		
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>		
<u>Operator</u> <u>Cost/Hour:</u>	<u>\$38.84</u>	NA		
<u>Total unit</u> <u>Cost/Hour:</u> <u>Total Fleet</u> <u>Cost/Hour:</u>	<u>\$860.36</u> \$1,720.71			

MATERIAL QUANTITIES

InitialVolume:Swell factor:1.000				
Loose volume: 64,60				
Source of estimated vo Source of estimated sw factor:		Cable A.4.1 and A-2.8		
HOURLY PRODUCT	<u>ION</u>			
Average push distance Unadjusted hourly production:	616.7 LCY/hr			
Materials consistency description:	Loose stockpile 1.2			
Average push gradient: Average site altitude:	<u>-20 %</u> <u>6,800 feet</u>			
Material weight: 2,475 lbs/LCY				
Weight description:	User Provided			
Job Condition Correction	n Factor Source			
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>		
Material consistency:	1.200	(CAT HB)		
Dozing method:	1.200	<u>(S-BY-S)</u>		
<u>Visibility:</u>	<u>1.000</u>	<u>(AVG.)</u>		
Job efficiency:	<u>0.790</u>	(3 SHIFTS/DAY)		
Spoil pile:	0.900	(SSD-FC)		
Push gradient:	<u>1.426</u>	<u>(CAT HB)</u>		
<u>Altitude:</u>	<u>1.000</u>	<u>(CAT HB)</u>		
Material Weight:	<u>0.929</u>	(CAT HB)		
Blade type:	<u>1.000</u>	<u>(PAT)</u>		
Net correction:	<u>1.0173</u>			
Adjusted unit production:	<u>627.37 LCY/hr</u>			

Adjusted fleet production:

1254.74 LCY/hr

Fleet size:	<u>2 Dozer(s)</u>
Unit cost:	<u>\$1.371/LCY</u>

<u>Total job time:</u>	<u>51.54 Hours</u>
Total job cost:	<u>\$88,682</u>

Trapper Mine		on: <u>PR12</u>	Permit/Job#:	C1981010
ROJECT IDEN	IIFICATION			
Task #: 004		olorado	Abbreviation:	None
	v	loffat	Filename:	PR12
User: RAR				
Agency or organ	ization name:DRM	S		
OURLY EQUI	PMENT COST			
Basic Machine: Horsepower:	<u>Cat D11T - 11U</u> 850			
Blade Type:	Universal			
Attachment:	NA			
Shift Basis:	3 per day			
Data Source:	(CRG)			
ost Breakdown:		1		
.		<u>Utilization %</u>		
Ownership	\$496.62	NA		
Cost/Hour:				
Operating Cost/Hour:	\$324.90	100		
Ripper own.				
Cost/Hour:	\$0.00	NA		
Ripper op.				
Cost/Hour:	\$0.00	0		
Operator	¢20.04			
Cost/Hour:	\$38.84	NA		
Total unit	\$860.36			
i otai uiilt	φου υ. 30			
Cost/Hour				
Cost/Hour: Total Fleet	\$860.36			

Initial Volume:	26,112	
Swell factor:	1.000	

Loose volume:	26,112 LCY

Source of estimated volume:	Permit Appendix A, TableA-4.7
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly	: 75 feet 3,584.2 LCY/hr	
production:	5,584.2 LC 1/III	
Materials consistency description:	Partly consoli	dated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	7,000 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5449	
Adjusted unit production:	1,953.03 LCY/hr	
Adjusted fleet	1953.03 LCY/hr	

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost:	\$0.441/LCY	
Total job time:	13.37 Hours	
Total job cost:	\$11,503	

Trapper Mine	e Permit	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	TIFICATION				
Гask #: 004.	A State:	Color	ado	Abbreviation:	None
Date: 4/20	0/2025 County:	Moff	at	Filename:	PR12
User: RAI	R				
Agency or organ	nization name:	DRMS			
OURLY EQUI	PMENT COST				
Basic Machine:	Cat D11T - 11U				
Horsepower:	850				
Blade Type:	Universal				
Attachment:	NA				
Shift Basis:	3 per day				
Data Source:	(CRG)				
ost Breakdown:					
			Utilization %		
Ownership	\$496.62		NA		
Cost/Hour:	φ190 .02				
Operating	\$324.90		100		
Cost/Hour:	·				
Ripper own. Cost/Hour:	\$0.00		NA		
Ripper op. Cost/Hour:	\$0.00		0		
Operator					
Cost/Hour:	\$38.84		NA		
Fotal unit	\$860.36				
Cost/Hour:					
	\$6,882.84				
Fotal Fleet	\$U,002.0 4				

Initial Volume:	528,550	
Swell factor:	1.000	

Loose volume:	528,550 LCY

Source of estimated volume:	Permit Appendix A, Table 1.4-2
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance	: 335 feet	
Unadjusted hourly production:	956.8 LCY/hr	
Materials consistency description:	Consolidate	d stockpile 1.0
Average push gradient:	-20 %	
Average site altitude:	7,000 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correctio	n 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:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.9419	
Adjusted unit production:	901.21 LCY/hr	
Adjusted fleet production:	7209.68 LCY/hr	

Fleet size:	8 Dozer(s)
Unit cost:	\$0.955/LCY
Total job time:	73.31 Hours
Total job cost:	\$504,589

Task description	D/E Pit Regrade (W	(est)		
Trapper Mine	e Permit Action	n: PR12	Permit/Job#:	C1981010
PROJECT IDEN	NTIFICATION			
Task #: 005	A State: Co	lorado	Abbreviation:	None
Date: 4/20 User: RAI		offat	Filename:	PR12
Agency or organ	nization name: DRMS			
HOURLY EQUI	IPMENT COST			
Basic Machine:	Cat D11T - 11U			
Horsepower:	850			
Blade Type:	Universal			
Attachment:	NA			
Shift Basis:	3 per day			
Data Source:	(CRG)			
Cost Breakdown:				
<u>cost Dieakdowii</u> .		Utilization %		
Ownership				
Cost/Hour:	\$496.62	NA		
Operating	¢224.00	100		
Cost/Hour:	\$324.90	100		
Ripper own.	\$0.00	NA		
Cost/Hour:	φ υ. υυ			
Ripper op.	\$0.00	0		
Cost/Hour:	Ψυιυυ	V		
Operator	\$38.84			
Cost/Hour:		NA		
Total unit	\$860.36			
Cost/Hour:	ΨΟΟΟ.ΟΟ			
Total Fleet	\$5,162.13			
Cost/Hour:	Ψυ,102.10			
CODV 11041.				

MATERIAL QUANTITIES

volume:	507,233	
	1.000	
Loose volume:	507,233 LCY	
Source of estimate		lix A, Table 1.4-2
factor:		
HOURLY PRODU	UCTION	
Average push dist Unadjusted hourly production:		
Materials consiste description:	cncy Consolidated	l stockpile 1.0
Average push gradient:	-20 %	
Average site altitude:	7,000 feet	
Material weight:	2,475 lbs/LCY	
Weight description	n: User Provided	
Job Condition Corr	ection Factor Source	
Operator Skill:	0.750	(AVG.)
Material consister		(CAT HB)
Dozing method:	1.200	(S-BY-S)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.9419	
Adjusted unit production:	901.21 LCY/hr	

Adjusted fleet production:

5407.26 LCY/hr

Fleet size:	6 Dozer(s)	
Unit cost:	\$0.955/LCY	

Total job time:	93.81 Hours
Total job cost:	\$484,239

Task description:	Regrade BC Road			
Site: Trapper Mine	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
PROJECT IDEN	TIFICATION			
	<u>/2025</u> <u>State:</u> <u>Colorad</u> <u>/2025</u> <u>County:</u> <u>Moffat</u>	lo	Abbreviation: Filename:	None PR12
User: <u>RAR</u> Agency or organ				
HOURLY EQUI	PMENT COST			
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D10T - 10SU574Semi-UniversalNA1 per day(CRG)			
Cost Breakdown:		Utilization %		
<u>Ownership</u> <u>Cost/Hour:</u>	<u>\$257.39</u>	NA		
<u>Operating</u> <u>Cost/Hour:</u>	<u>\$196.93</u>	<u>100</u>		
<u>Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	<u>NA</u>		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>100</u>		
<u>Operator</u> <u>Cost/Hour:</u>	<u>\$38.59</u>	NA		
<u>Total unit</u> <u>Cost/Hour:</u>	<u>\$492.91</u>			
<u>Total Fleet</u> <u>Cost/Hour:</u>	<u>\$1,971.62</u>			

MATERIAL QUANTITIES

<u>Initial</u> Volume: <u>166</u> ,	237	
Swell factor: 1.25	0	
Loose volume: 207,	<u>796 LCY</u>	
Source of estimated vo Source of estimated sy		ble A-6.1
factor:		
HOURLY PRODUCT	ION	
A 1.1.	00.6	
Average push distance		
<u>Unadjusted hourly</u> production:	<u>2,028.0 LCY/hr</u>	
production.		
Materials consistency	Partly consolic	lated stockpile 1.1
description:		
A 1	0.0/	
<u>Average push</u> gradient:	<u>0 %</u>	
Average site	6,400 feet	
altitude:	<u>0,100 1001</u>	
Material weight:	<u>2,550 lbs/LCY</u>	
Weight description:	Earth - Dry packed	
weight description.	<u>Earth - Dry packed</u>	
Job Condition Correction	on Factor Source	
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.100</u>	(CAT HB)
Dozing method:	1.000	(GEN.)
<u>Visibility:</u>	1.000	$\frac{(AVG.)}{(1 \text{ SUPET}(DAV))}$
Job efficiency: Spoil pile:	<u>0.830</u> 0.900	(1 SHIFT/DAY) (SSD-FC)
<u>Push gradient:</u>	1.000	<u>(CAT HB)</u>
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	<u>1.000</u>	<u>(PAT)</u>
	0.5550	
Net correction:	0.5559	
Adjusted unit		
production:	<u>1,127.37 LCY/hr</u>	

Adjusted fleet production:

4509.48 LCY/hr

Fleet size:	4 Dozer(s)
<u>Unit cost:</u>	<u>\$0.437/LCY</u>

<u>Total job time:</u>	<u>46.08 Hours</u>
Total job cost:	<u>\$90,852</u>

Trapper Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	TIFICATION				
Task #: 031 Date: 4/20/2	2025 State:	Colora Moffat		_ Abbreviation: Filename:	None PR12
Jser: RAR	<u>2023</u> County:				11(12
Agency or organiz	zation name:	RMS			
OURLY EQUIP	MENT COST				
Basic Machine:	Cat D10T - 10SU				
Iorsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
ost Breakdown:					
<u>ost Dieakdown</u> .			Utilization %		
Ownership	#257.2 0				
Cost/Hour:	\$257.39		NA		
Operating	¢106.02		100		
Cost/Hour:	\$196.93		100		
Ripper own.	\$0.00		NA		
Cost/Hour:	φ 0.00		NA		
Ripper op.	\$0.00		100		
Cost/Hour:	φ υ. υυ		100		
Operator	\$38.59				
Cost/Hour:	\$30.37 		NA		
Fotal unit	\$492.91				
Cost/Hour:					
Total Fleet	\$1,971.62				
Cost/Hour:					

Initial 121,593 Volume: 1.250

Loose volume:	151,991 LCY

Source of estimated volume:	Appendix A, Table A-6.1
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:	: 80 feet 2,028.0 LCY/hr	
Materials consistency description:	Partly conso	blidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	33.70 Hours
Total job cost:	\$66,453

Trapper Mine	Permit A	Action:	PR12	Permit/Job#:	C1981010
<u>ROJECT IDEN'</u>	TIFICATION				
Task #: 032 Date: 4/20/ User: RAR		Color Moffa		Abbreviation: Filename:	None PR12
Agency or organi	zation name:	ORMS			
OURLY EQUIE	PMENT COST				
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D10T - 10SU 574 Semi-Universal NA 1 per day (CRG)				
ost Breakdown:					
Ownership Cost/Hour:	\$257.39		<u>Utilization %</u> NA		
Operating Cost/Hour:	\$196.93		100		
Ripper own. Cost/Hour:	\$0.00		NA		
Cipper op. Cost/Hour:	\$0.00		100		
Operator Cost/Hour:	\$38.59		NA		
Fotal unit Cost/Hour:	\$492.91				
Total Fleet Cost/Hour:	\$1,971.62				

Initial 200,753 Volume: 1.250

Loose volume:	250,941 LCY

Source of estimated volume:	Appendix A, Table A-6.1
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance	: 80 feet	
Unadjusted hourly production:	2,028.0 LCY/hr	
Materials consistency description:	Partly consol	idated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	55.65 Hours
Total job cost:	\$109,716

Task description:	Regrade LOM Roads			
Trapper Mine	Permit Action:	PR12	Permit/Job#:	C1981010
PROJECT IDEN	TIFICATION			
Task #: 033	State: Color		Abbreviation:	None
Date: $\frac{4/20}{}$ User: RAR	5	at	_ Filename:	PR12
Agency or organi	ization name: DRMS			
HOURLY EQUIE	PMENT COST			
Basic Machine:	Cat D10T - 10SU			
Horsepower:	574			
Blade Type:	Semi-Universal			
Attachment:	NA			
Shift Basis:	1 per day			
Data Source:	(CRG)			
Cost Breakdown:				
<u>20st Dicardowii</u> .		Utilization %		
Ownership				
Cost/Hour:	\$257.39	NA		
Operating Cost/Hour:	\$196.93	100		
Ripper own. Cost/Hour:	\$0.00	NA		
	\$0.00 \$0.00	NA 100		
Cost/Hour: Ripper op.				
Cost/Hour: Ripper op. Cost/Hour: Operator	\$0.00	100		

Initial Volume:	362,600	
	1.250	
	453,250 LCY	
Source of estimate Source of estimate		e A-6.1
factor:		
HOURLY PROD	UCTION	
Average push dist	tance: 80 feet	
Unadjusted hourly		
production:	, _,	
1		
Materials consiste description:	ency Partly consolida	ted stockpile 1.1
a comparent		
Average push	0 %	
gradient:		
Average site	6,400 feet	
altitude:		
Material weight:	2,550 lbs/LCY	
Waisht descriptio	n. Earth Dry nachad	
Weight descriptio	n: Earth - Dry packed	
Job Condition Corr	rection Factor Source	
Operator Skill:	0.750	(AVG.)
Material consister		(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
A 10 . 1 .		
Adjusted unit	1,127.37 LCY/hr	
production:	· · · · ·	

Adjusted fleet production:

4509.48 LCY/hr

JOB TIME AND COST

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY

 Total job time:
 100.51 Hours

 Total job cost:
 \$198,169

	Regrade A Roads (Mic	ddle A and North A I	N pit)	
Trapper Mine	Permit Action:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	TIFICATION			
Task #: 034 Date: 4/20/	Z025 State: Color County: Moff		_ Abbreviation: Filename:	None PR12
User: RAR		at		FR12
Agency or organi	ization name: DRMS			
IOURLY EQUI	PMENT COST			
Basic Machine:	Cat D10T - 10SU			
Horsepower:	574			
Blade Type:	Semi-Universal			
Attachment:	NA			
Shift Basis:	1 per day			
Data Source:	(CRG)			
last Dreakdown				
Cost Breakdown:		Utilization %		
Ownership				
Cost/Hour:	\$257.39	NA		
Operating				
Cost/Hour:	\$196.93	100		
Ripper own.				
Cost/Hour:	\$0.00	NA		
Ripper op.				
Cost/Hour:	\$0.00	100		
Operator	\$20.50			
Cost/Hour:	\$38.59	NA		
		I		
Total unit	\$492.91			
i otai unit				
Cost/Hour:				
	\$1,971.62			

volume:	133,517	
	1.250	
Loose volume:	166,896 LCY	
Source of estimate Source of estimate factor:	/	
HOURLY PRODU	JCTION	
Average push dist	ance: 80 feet	
Unadjusted hourly production:	2,028.0 LCY/hr	
Materials consiste description:	ncy Partly consol	lidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description	n: Earth - Dry packed	
Job Condition Corr	ection Factor Source	
Operator Skill:	0.750	(AVG.)
Material consisten	icy: 1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	

Adjusted fleet production:

4509.48 LCY/hr

JOB TIME AND COST

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY

 Total job time:
 37.01 Hours

 Total job cost:
 \$72,970

Trapper Mine		Permit A	Action:	PR12	Permit/Job#:	C1981010
ROJECT	IDENTIFIC	ATION				
Task #:	035	State:	Color	ado	Abbreviation:	None
Date:	4/20/2025	County:	Moffa	at	Filename:	PR12
User:	RAR					
Agency or	organization	name:	RMS			
IOURLY E	QUIPMEN	T COST				
Basic Mach	vino: Cot I	D11T - 11U				
Horsepowe		5111 - 110				
Blade Type		rersal				
Attachmen						
Shift Basis	1 per	day				
Data Sourc	e: (CR0	G)				
Cost Breakd	own:					
				Utilization %	-	
Ownership		\$496.62		NA		
Cost/Hour:	_	¢ 0.02				
Operating		\$324.90		100		
Cost/Hour:						
Ripper owr Cost/Hour:	1.	\$0.00		NA		
Ripper op.	—					
Cost/Hour:		\$0.00		100		
Operator		¢20.50				
Cost/Hour:	_	\$38.59		NA		
Total wait		\$860.11				
I OLAL UNIT						
Total unit Cost/Hour:						
Cost/Hour: Total Fleet		\$3,440.42				

Initial Volume:	105,283
Swell factor:	1.150

Loose volume:	121,075 LCY

Source of estimated volume:	Table A-6.1
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance	: 80 feet	
Unadjusted hourly production:	3,441.4 LCY/hr	
Materials consistency description:	Partly conso	lidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,600 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	on Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5725	
Adjusted unit production:	1,970.20 LCY/hr	
Adjusted fleet production:	7880.8 LCY/hr	

4 Dozer(s)		
\$0.437/LCY		
15.36 Hours		
\$52,856		

Trapper Min	e	Permit A	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDE	NTIFICAT	<u>ION</u>				
Task #: 036	j	State:	Color	ado	Abbreviation:	None
Date: 4/2 User: RA	0/2025 County: Moffat R		ıt	Filename:	PR12	
Agency or orga	nization nam	ne: D	RMS			
OURLY EQU	IPMENT C	<u>OST</u>				
Basic Machine:						
Horsepower:	574	1 1050				
Blade Type:	Semi-Un	iversal				
Attachment:	NA					
Shift Basis:	1 per day	,				
Data Source:	(CRG)					
ost Breakdown	:					
				Utilization %	<u>6</u>	
Ownership	\$25	7.39		NA		
Cost/Hour:	φ25	1.57		142 X		
Operating	\$19	6.93		100		
Cost/Hour:	ψ17	.,,,		100		
Ripper own.	\$0.0)()		NA		
Cost/Hour:	φ υ .υ	~~				
Ripper op.	\$0.0)0		0		
Cost/Hour:				-		
Operator	\$38	.59				
Cost/Hour:				NA		
F = 4 = 1 == = : 4	¢ 40/	2 01				
Fotal unit	\$492	2.91				
Cost/Hour:	<u>.</u>	71 (2)				
Fotal Fleet	\$1,9	71.62				
Cost/Hour:						

Initial Volume: 13	6,400	
	250	
	0,500 LCY	
	0,500 LC 1	
Source of estimated Source of estimated factor:		e a-6.1
HOURLY PRODUC	TION	
Average push distan	ce: 80 feet	
Unadjusted hourly	2,028.0 LCY/hr	
production:		
Materials consistenc description:	Partly consolidate	ed stockpile 1.1
Average push	0 %	
gradient:		
Average site	6,400 feet	
altitude:		
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correct	tion Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency		(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	

Adjusted fleet production:

4509.48 LCY/hr

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY

Total job time:	37.81 Hours
Total job cost:	\$74,545

Trapper Mine			Permit Action: PR12]	Permit/Job#:	C1981010	
OJECT	<u>IDEN</u>	TIFICAT	ION						
ask #: ate: ser:	039 4/20/ RAR	2025	State: County:	Colora Moffa			Abbreviation: Filename:	None PR12	
gency or	organi	zation nan	ne: D	RMS					
DURLY	EQUII	PMENT C	COST						
asic Mac orsepowe lade Typ ttachmen	er: e:	Cat D10' 574 Semi-Un NA							
hift Basis			ý						
st Breakd	lown:				TT(:1:	O/			
Ownership Cost/Hour:		\$25	57.39		<u>Utilizati</u> NA	<u>OII %</u>			
Operating Cost/Hour:		\$19	6.93		100				
Ripper own. Cost/Hour:		\$0.0	00		NA				
Ripper op. Cost/Hour:		\$0.0	00		100				
Operator Cost/Hour:		\$38	3.59		NA				
Total unit Cost/Hour:		\$49	2.91						
otal Fleet		\$1,971.62							

Initial Volume:	155,400
Swell factor:	1.250

Source of estimated volume:	Appendix A, Table A-6.1
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance	: 80 feet	
Unadjusted hourly production:	2,028.0 LCY/hr	·
Materials consistency description:	Partly conso	blidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.200	(S-BY-S)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.6671	
Adjusted unit production:	1,352.88 LCY/hr	
Adjusted fleet production:	5411.52 LCY/hr	

Total job cost:	\$70,773
Total job time:	35.90 Hours
Unit cost:	\$0.364/LCY
Fleet size:	4 Dozer(s)

Task description	Regrade I/J Roads (I/J S	poil, I Mid, I West	<u> </u>	
Site: Trapper Mine	e <u>Permit Action:</u>	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
PROJECT IDEN	NTIFICATION			
Task #: 040 Date: 4/21 User: RAI	1/2025County:Moffat	0	Abbreviation: Filename:	None PR12
Agency or organ	nization name: DRMS			
HOURLY EQUI	IPMENT COST			
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	<u>Cat D10T - 10SU</u> <u>574</u> <u>Semi-Universal</u> <u>NA</u> <u>3 per day</u> (CRG)			
Cost Breakdown:		Utilization %		
<u>Ownership</u> <u>Cost/Hour:</u>	<u>\$257.39</u>	<u>NA</u>		
Operating Cost/Hour:	\$196.93	<u>100</u>		
Ripper own. Cost/Hour:	<u>\$0.00</u>	NA		
Ripper op. Cost/Hour:	\$0.00	<u>25</u>		
Operator Cost/Hour:	<u>\$38.84</u>	NA		
<u>Total unit</u> <u>Cost/Hour:</u> <u>Total Fleet</u> <u>Cost/Hour:</u>	<u>\$493.16</u> \$1,972.62			

<u>Initial</u> Volume: <u>111,</u>	<u>117</u>	
Swell factor: 1.250	0	
	<u>s</u> 896 LCY	
<u> </u>		
Source of estimated vo	lume: <u>Permit Appendix A, 7</u>	Tables A-2.3, A.6.1
Source of estimated sw		
factor:	<u>A Table A-6.1</u>	
HOURLY PRODUCT	ION	
HOUKLI I KODUCI.	ION	
Average push distance	: 80 feet	
Unadjusted hourly	2,028.0 LCY/hr	
production:		
	.	
Materials consistency	Partly consolidated	stockpile 1.1
description:		
Average push	0 %	
gradient:	<u> </u>	
Average site	<u>6,725 feet</u>	
altitude:		
Material weight:	<u>2,475 lbs/LCY</u>	
Weight description:	User Provided	
weight description.	User riovided	
Job Condition Correctio	n Factor Source	
Operator Skill:	1.000	(EXCL.)
Material consistency:	<u>1.100</u>	(CAT HB)
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
<u>Altitude:</u> Matarial Waishta	<u>1.000</u>	(CAT HB)
Material Weight: Plade type:	<u>0.929</u> 1.000	(CAT HB)
<u>Blade type:</u>	1.000	<u>(PAT)</u>
Net correction:	0.7266	
Adjusted unit	<u>1,473.54 LCY/hr</u>	
production:	<u>1,77,3.37 LC 1/III</u>	

Adjusted fleet production:

5894.16 LCY/hr

Fleet size:	$4 \operatorname{Dozer}(s)$
Unit cost:	<u>\$0.335/LCY</u>

<u>Total job time:</u>	<u>23.57 Hours</u>
Total job cost:	<u>\$46,485</u>

Task description:	Regrade K Pit Haul Road	ds (K1 EPRL K3)		
e: <u>Trapper Mine</u>	Permit Action:	PR12	Permit/Job#:	C1981010
PROJECT IDEN	TIFICATION			
Task #: 041 Date: 4/20 User: RAF	X2025 State: Colorad County: Moffat	0	Abbreviation: Filename:	None PR12
Agency or organ	ization name: DRMS			
HOURLY EQUI	PMENT COST			
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D10T - 10SU 574 Semi-Universal NA 1 per day (CRG)			
Cost Breakdown:		Utilization %		
Ownership Cost/Hour:	\$257.39	NA		
Operating Cost/Hour:	\$196.93	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.59	NA		
Total unit Cost/Hour:	\$492.91			
Total Fleet Cost/Hour:	\$1,971.62			

Initial Volume:	148,283	
Swell factor:	1.250	
Loose volume:	185,354 LCY	
Loose volume.	103,334 LC 1	
Source of estima Source of estima factor:		le A-6.1
lactor.		
HOURLY PROD	DUCTION	
Average push dis	stance: 80 feet	
Unadjusted hour production:	ly 2,028.0 LCY/hr	
Materials consist description:	ency Partly consolida	ated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description	on: _Earth - Dry packed	
Job Condition Cor	rrection Factor Source	
Operator Skill:	0.750	(AVG.)
Material consiste		(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:		(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	

Adjusted fleet production:

4509.48 LCY/hr

JOB TIME AND COST

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY

Total job time:41.10 HoursTotal job cost:\$81,040

Task description	n: Regrade Mine Access	Road		
Trapper Min	Permit Action:	PR12	Permit/Job#:	C1981010
PROJECT IDE	NTIFICATION			
Task #: 042			Abbreviation:	None
Date: $\frac{4}{2}$ User: RA	0/2025 County: Mof	fat	Filename:	PR12
Agency or orga	nization name: DRMS			
HOURLY EQU	IPMENT COST			
Basic Machine:	Cat D10T - 10SU			
Horsepower:	574			
Blade Type:	Semi-Universal			
Attachment:	NA			
Shift Basis:	1 per day			
Data Source:	(CRG)			
Cost Breakdown				
0 1		<u>Utilization %</u>		
Ownership	\$257.39	NA		
Cost/Hour:				
Operating Cost/Hour:	\$196.93	100		
Ripper own.				
Cost/Hour:	\$0.00	NA		
Ripper op.				
Cost/Hour:	\$0.00	0		
Operator				
Cost/Hour:	\$38.59	NA		
C03/11001.				
Total unit	\$492.91			
Cost/Hour:	+ · / = · / 1			
Total Fleet	\$1,971.62			
Cost/Hour:	+-y- · -•V=			
2000110011				

Initial Volume: 54,	022	
Swell factor: 1.2	50	
	50 528 LCY	
1005e volume. 07,	526 LC 1	
Source of estimated v Source of estimated s		e a-6.1
factor:	wen Cat Handbook	
Tactor.		
HOURLY PRODUC	TION	
Average push distance		
Unadjusted hourly	2,028.0 LCY/hr	
production:		
Materials consistency description:	y Partly consolidat	ted stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correcti	ion Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:		(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	

Adjusted fleet production:

4509.48 LCY/hr

Fleet size:	4 Dozer(s)	
Unit cost:	\$0.437/LCY	_

Total job time:	14.97 Hours
Total job cost:	\$29,524

Task description:	Regrade	Explosive Storage	Access Road	
Site: Trapper Min	e Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
	<u>PROJECT I</u>	DENTIFICATION		
Task #: 043 Date: 3/26/20 User: RAR		<u>Colorado</u> <u>Moffat</u>	Abbreviation: <u>Filename:</u>	<u>None</u> <u>043</u>
Agency or organiza	tion name:	DF	<u>RMS</u>	
HOURLY EQUIPME	<u>ENT COST</u>			
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	<u>Cat D10T - 10SU</u> <u>574</u> <u>Semi-Universal</u> <u>NA</u> <u>1 per day</u> <u>(CRG)</u>			
	Cost	Breakdown:	0/	
<u>Ownership</u> Cost/Hour:	<u>\$257.39</u>	<u>Utilization</u> <u>NA</u>	<u>%</u>	
Operating Cost/Hour:	<u>\$196.93</u>	<u>100</u>		
Ripper own. Cost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>0</u>		
Operator Cost/Hour:	<u>\$38.59</u>	NA		
<u>Total unit</u> <u>Cost/Hour:</u>	<u>\$492.91</u>			
<u>Total Fleet</u> <u>Cost/Hour:</u>	<u>\$1,971.62</u>			

Initial Volume:13,09Swell factor:1.250Loose volume:16,37		
Source of estimated vol Source of estimated sw factor:		<u>, Table A-6.2</u>
HOURLY PRODUCTI	<u>ON</u>	
Average push distance: Unadjusted hourly production:	80 feet 2,028.0 LCY/h	<u>n</u>
Materials consistency description:	Consolidat	ted stockpile 1.0
<u>Average push</u> gradient: <u>Average site</u> altitude:	<u>0 %</u> <u>6,400 feet</u>	
Material weight:	2,550 lbs/LCY	
Weight description:		Earth - Dry packed
Job Condition Correction Operator Skill: Material consistency: Dozing method: Visibility: Job efficiency: Spoil pile:	$ \begin{array}{r} 0.750 \\ \hline 1.000 \\ 1.000 \\ 1.000 \\ 0.830 \\ 0.900 \\ \end{array} $	(AVG.) (CAT HB) (GEN.) (AVG.) (1 SHIFT/DAY) (SSD-FC)
<u>Push gradient:</u> <u>Altitude:</u> <u>Material Weight:</u> <u>Blade type:</u>	<u>1.000</u> <u>1.000</u> <u>0.902</u> <u>1.000</u>	(CAT HB) (CAT HB) (CAT HB) (PAT)
Net correction:	0.5053	
<u>Adjusted unit</u> production: Adjusted fleet	1,024.75 LCY/hr	
production:	4099 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	<u>\$0.481/LCY</u>
<u>Total job time:</u>	3.99 Hours
Total job cost:	\$7,874

Task description:	Regrade No Name Acces	ss Roads #2, #4, 5R		
te: Trapper Mine	Permit Action:	PR12	Permit/Job#:	C1981010
PROJECT IDEN	TIFICATION			
Task #: 044 Date: 4/20 User: RAF	/2025 State: Colorad /2025 County: Moffat		Abbreviation: Filename:	None PR12
Agency or organ	ization name: DRMS			
HOURLY EQUI	PMENT COST			
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D10T - 10SU 574 Semi-Universal NA 1 per day (CRG)			
Cost Breakdown:		Utilization %		
Ownership Cost/Hour:	\$257.39	NA		
Operating Cost/Hour:	\$196.93	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.59	NA		
Total unit Cost/Hour:	\$492.91			
Total Fleet Cost/Hour:	\$1,971.62			

Initial Volume:	24,719		
Swell factor:	1.250		
Loose volume:	30,899 LC	Y	
-	,		
Source of estima	ted volume:	Appendix A, Ta	ble A- 6.2
Source of estima	ted swell	Cat Handbook	
factor:			
HOURLY PROD	DUCTION		
Average push dis	stance:	80 feet	
Unadjusted hour		2,028.0 LCY/hr	
production:			
	_		
Materials consist	tency	Partly consoli	dated stockpile 1.1
description:			
Average push	-5 %		
gradient:	5 70		
Average site	6.40	0 feet	
altitude:			
Material weight:	2,55	0 lbs/LCY	
Weight descripti	on: Earth	n - Dry packed	
	· • •	G	
Job Condition Con	rection Fact		(AUC)
Operator Skill:	-	0.750	(AVG.)
Material consiste Dozing method:		1.000	(CAT HB) (GEN.)
Visibility:	-	1.000	(AVG.)
Job efficiency:	-	0.830	(1 SHIFT/DAY)
Spoil pile:	=	0.900	(SSD-FC)
Push gradient:	-	1.115	(CAT HB)
Altitude:	-	1.000	(CAT HB)
Material Weight	-	0.902	(CAT HB)
Blade type:	-	1.000	(PAT)
	-	0 (109	
Net correction:	-	0.6198	
Adjusted unit			
production:	1,2	256.95 LCY/hr	
1			

Adjusted fleet production:

5027.8 LCY/hr

Fleet size:	4 Dozer(s)
Unit cost:	\$0.392/LCY

Total job time:	6.15 Hours
Total job cost:	\$12,117

Trapper Min	e Permit	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDE	NTIFICATION				
Task #:045		Color		Abbreviation:	None
	<u>9/2025</u> County:	Moffa	at	Filename:	PR12
User: RA	K				
Agency or organ	nization name:	DRMS			
	IPMENT COST				
OUKLI EQU					
Basic Machine:					
Horsepower:	574				
Blade Type: Attachment:	Semi-Universal NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
Bulu Boulee.	(01(0))				
ost Breakdown:					
			Utilization %	<u>-</u>	
Ownership	\$257.39		NA		
Cost/Hour: Operating					
Cost/Hour:	\$196.93		100		
Ripper own.					
Cost/Hour:	\$0.00		NA		
Ripper op.	\$0.00		0		
Cost/Hour:	ψυ.υυ				
Operator	\$38.59		NT A		
Cost/Hour:			NA		
Total unit	\$492.91				
Cost/Hour:	ψ174.71				
Total Fleet	\$1,971.62				

Initial Volume:	4,093
Swell factor:	1.250

Loose volume:	5,116 LCY

Source of estimated volume:	Appendix A, Table 1.4-5
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:	: 80 feet 2,028.0 LCY/h	
Materials consistency description:	Partly conse	blidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

Fleet size:	4 Dozer(s)		
Unit cost:	\$0.437/LCY		
Total job time:	1.13 Hours		
Total job cost:	\$2,237		

Trapper Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
OJECT IDENTI	IFICATION				
ask #: 046	State:	Colora		Abbreviation:	None
Date: $\frac{4}{19}/20$	025 County:	Moffat	;	Filename:	PR12
ser: RAR					
gency or organiza	ation name: D	RMS			
DURLY EQUIPM	IENT COST				
	Cat D10T - 10SU 574				
	Semi-Universal				
ttachment:	NA				
nift Basis:	l per day				
ta Source: _((CRG)				
st Breakdown:					
			Utilization %		
wnership ost/Hour:	\$257.39		NA		
perating cost/Hour:	\$196.93		100		
ipper own. cost/Hour:	\$0.00		NA		
ipper op. cost/Hour:	\$0.00		0		
perator cost/Hour:	\$38.59		NA		
otal unit	\$492.91				
Cost/Hour: Cost/Hour:	\$1,971.62				

Initial 16,370 Volume: 1.250

Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:		feet 028.0 LCY/hr	
Materials consistency description:		Partly consoli	dated stockpile 1.1
Average push gradient:	10 %		
Average site altitude:	6,400 fe	et	
Material weight:	2,550 lb	s/LCY	
Weight description:	Earth - I	Dry packed	
Job Condition Correctio		Source	
Operator Skill:		750	(AVG.)
Material consistency:		100	(CAT HB)
Dozing method:	1.0	000	(GEN.)
Visibility:	1.(000	(AVG.)
Job efficiency:	0.8	330	(1 SHIFT/DAY)
Spoil pile:	0.9	900	(SSD-FC)
Push gradient:	0.7	786	(CAT HB)
Altitude:	1.0	000	(CAT HB)
Material Weight:	0.9	902	(CAT HB)
Blade type:	1.0	000	(PAT)
Net correction:	0.4	1369	
Adjusted unit production:	886.03	3 LCY/hr	
Adjusted fleet production:	3544.1	12 LCY/hr	

J

Unit cost:	\$0.556/LCY
Total job time:	5.77 Hours

Task description	n: Regrade Middl	e Pyeatt	Access Road (1, 2 a	and 3)	
Trapper Min	e Permit A	ction:	PR12	Permit/Job#:	C1981010
PROJECT IDE	NTIFICATION				
Task #: 047		Colora		Abbreviation:	None
Date: 4/19 User: RA	9/2025 County: R	Moffa	t	Filename:	PR12
Agency or orga	nization name: D	RMS			
	IPMENT COST				
Basic Machine:					
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
~ ~					
Cost Breakdown:					
Ownershire			<u>Utilization %</u>		
Ownership Cost/Hour:	\$257.39		NA		
Operating					
Cost/Hour:	\$196.93		100		
Ripper own.					
Cost/Hour:	\$0.00		NA		
Ripper op.					
Cost/Hour:	\$0.00		0		
Operator	¢20 50				
Cost/Hour:	\$38.59		NA		
T 1 1	¢ 40 2 01				
Total unit	\$492.91				
Cost/Hour:	¢1 071 /3				
Total Fleet	\$1,971.62				
Cost/Hour:					

MATERIAL QUANTITIES

Swell factor:	1.250	
Loose volume:	18,928 LCY	
_		
Source of estimat		le A-6.2
Source of estimat	ted swell Cat Handbook	
factor:		
HOURLY PROD	UCTION	
Average push dis	stance: 80 feet	
Unadjusted hourl		
production:		
Materials consist description:	ency Consolidated sto	ockpile 1.0
Average push gradient:	10 %	
Average site	6,400 feet	
altitude:	0,1001000	
Material weight:	2,550 lbs/LCY	
Weight description	on: Earth - Dry packed	
Job Condition Cor	rection Factor Source	
Operator Skill:	0.750	(AVG.)
Material consiste		(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3531	
Adjusted unit production:	716.09 LCY/hr	

Adjusted fleet production:

2864.36 LCY/hr

Fleet size:	4 Dozer(s)
Unit cost:	\$0.688/LCY

Total job time:	6.61 Hours
Total job cost:	\$13,028

Trapper Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
<u>ROJECT IDENTIFI</u>	<u>CATION</u>				
Task #: 048 Date: 4/19/2025 Jser: RAR	State: County:	Colora Moffa		Abbreviation: Filename:	None PR12
Agency or organizatio	n name:	RMS			
OURLY EQUIPME	NT COST				
Horsepower:574Blade Type:SerAttachment:NAShift Basis:1 peData Source:(CF	ni-Universal				
ost Breakdown:			Utilization %		
Dwnership Cost/Hour:	\$257.39		NA		
Operating Cost/Hour:	\$196.93		100		
Ripper own. Cost/Hour:	\$0.00		NA		
Ripper op. Cost/Hour:	\$0.00		0		
Dperator Cost/Hour:	\$38.59		NA		
Fotal unit Cost/Hour:	\$492.91				
Total Fleet	\$1,971.62				

Initial 21,159 Volume: 1.250

Loose volume:	26,449 LCY	
Loobe forame.		

Source of estimated volume:	Appendix A, Table 1.4-5
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:		eet 8.0 LCY/hr	
Materials consistency description:	F	Partly consolidated	stockpile 1.1
Average push gradient:	0 %		
Average site altitude:	6,400 feet		
Material weight:	2,550 lbs/I	LCY	
Weight description:	Earth - Dry	y packed	
Job Condition Correction	n Factor	Source	
Operator Skill:	0.750		(AVG.)
Material consistency:	1.100)	(CAT HB)
Dozing method:	1.000)	(GEN.)
Visibility:	1.000)	(AVG.)
Job efficiency:	0.830)	(1 SHIFT/DAY)
Spoil pile:	0.900)	(SSD-FC)
Push gradient:	1.000)	(CAT HB)
Altitude:	1.000)	(CAT HB)
Material Weight:	0.902	2	(CAT HB)
Blade type:	1.000)	(PAT)
Net correction:	0.555	59	
Adjusted unit production:	1,127.37	LCY/hr	
Adjusted fleet production:	4509.48	LCY/hr	
	т		

JOB TIME AND COST

Fleet size: 4 Dozer(s)

Unit cost:	\$0.437/LCY	
Total job time: Total job cost:	5.87 Hours \$11,564	

-	Regrade Grouse	e Access	Road		
Trapper Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	<u>FIFICATION</u>				
Task #: 049	State:	Colora		_ Abbreviation:	None
Date: <u>4/19/2</u> User: RAR	v	Moffat		_ Filename:	PR12
Agency or organiz	zation name: DI	RMS			
IOURLY EQUIP	MENT COST				
Basic Machine:	Cat D10T - 10SU				
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	NA				
Shift Basis: Data Source:	1 per day				
Data Source.	(CRG)				
ost Breakdown:			1		
			Utilization %		
Ownership					
Cost/Hour:	\$257.39		NA		
	\$257.39 \$196.93		NA 100		
Cost/Hour: Operating					
Cost/Hour: Operating Cost/Hour: Ripper own.	\$196.93		100		
Cost/Hour: Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op.	\$196.93 \$0.00		100 NA		
Cost/Hour: Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator	\$196.93 \$0.00 \$0.00		100 NA 0		

MATERIAL QUANTITIES

Initial	10,477
Volume:	10,477
Swell factor:	1.250

Loose volume:	13,096 LCY
Loose volume.	13,090 LC I

Source of estimated volume:	Appendix A, Table 1.4-5
Source of estimated swell	Cat Handbook
factor:	

Average push distance Unadjusted hourly production:	: 80 feet 2,028.0 LCY/hr	
Materials consistency description:	Partly conso	blidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	2.90 Hours
Total job cost:	\$5,726

Trapper Mine	Permit A	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDENTI	FICATION				
Task #: 050	State:	Colora		Abbreviation:	None
Date: 4/19/20 User: RAR	25 County:	Moffa	t	Filename:	PR12
Agency or organization	tion name:	RMS			
OURLY EQUIPM	IENT COST				
Basic Machine: C	Cat D10T - 10SU				
I	74				
V 1	emi-Universal				
	JA				
	per day				
Data Source: (CRG)				
ost Breakdown:					
ost Brownedo min.			Utilization %		
Ownership	¢257.20				
Cost/Hour:	\$257.39		NA		
Operating	\$196.93		100		
Cost/Hour:	φ170.75		100		
Ripper own.	\$0.00		NA		
Cost/Hour:	ψ0.00		1111		
Ripper op.	\$0.00		0		
Cost/Hour:	+ • • • •				
Operator	\$38.59				
Cost/Hour:			NA		
- - 1 - 1	\$492.91				
otol unit	Φ472.71				
Fotal unit Cost/Hour: Fotal Fleet	\$1,971.62				

Initial 6,139 Volume: 1.250

Loose volume:	7,674 LCY

Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:	80 feet 2,028.0 LCY/h	c
Materials consistency description:	Partly conse	blidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

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Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	1.70 Hours
Total job cost:	\$3,355

Frapper Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
OJECT IDENTI	FICATION				
ask #: 051 ate: 4/19/202	25 State: County:	Color Moffa		Abbreviation: Filename:	None PR12
ser: RAR	<u> </u>		u		11(12
gency or organizat	ion name:	RMS			
URLY EQUIPM	ENT COST				
sic Machine: C	at D10T - 10SU				
	74				
VI	emi-Universal				
	IA				
	per day				
ta Source: (C	CRG)				
t Breakdown:					
<u>e Dicukdo wii</u> .			Utilization %		
wnership ost/Hour:	\$257.39		NA		
perating ost/Hour:	\$196.93		100		
pper own. ost/Hour:	\$0.00		NA		
pper op. ost/Hour:	\$0.00		0		
perator ost/Hour:	\$38.59		NA		
otal unit	\$492.91				
ost/Hour:	\$1,971.62				

Initial 6,139 Swell factor: 1.250

Loose volume:	7,674 LCY

Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

Average push distance:	80 feet	
Unadjusted hourly production:	2,028.0 LCY/hr	
Materials consistency description:	Partly conso	lidated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correction	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	1.70 Hours
Total job cost:	\$3,355

Trapper Mine	e Perm	it Action:	PR12	Permit/Job#:	C1981010
OJECT IDEN	NTIFICATION				
ask #: 052	State:	Color	ado	Abbreviation:	None
	0/2025 County	: Moff	at	Filename:	PR12
ser: RA	<u>X</u>				
gency or organ	nization name:	DRMS			
DURLY EOU	PMENT COST				
asic Machine:	Cat D10T - 10SU	J			
lorsepower: lade Type:	574 Semi-Universal				
ttachment:	NA				
hift Basis:	1 per day				
ata Source:	(CRG)				
	(0110)				
st Breakdown:					
			<u>Utilization %</u>		
wnership	\$257.39		NA		
ost/Hour:	ψ231.37		1111		
perating	\$196.93		100		
ost/Hour:					
ipper own.	\$0.00		NA		
ost/Hour:					
ipper op. ost/Hour:	\$0.00		0		
perator					
ost/Hour:	\$38.59		NA		
			1.12 1		
otal unit	\$492.91				
ost/Hour:					
	¢1 0=1 (3				
otal Fleet	\$1,971.62				

MATERIAL QUANTITIES

Initial Volume: 6,13 Swell factor: 1.25 Loose volume: 7,67 Source of estimated vo Source of estimated so factor: HOURLY PRODUCT	50 74 LCY olume: <u>Appendix A, Tak</u> well Cat Handbook	ble A-6.2
Average push distance Unadjusted hourly production:	e: 80 feet 2,028.0 LCY/hr	
Materials consistency description:	Partly consolid	ated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correction	on Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	

Adjusted fleet production:

4509.48 LCY/hr

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY

Total job time:	1.70 Hours
Total job cost:	\$3,355

Frapper Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
OJECT IDENT	IFICATION				
ask #:053	State:	Colora		Abbreviation:	None
ate: $\frac{4}{19}$ /2 ser: RAR	025 County:	Moffa	t	Filename:	PR12
gency or organiz	ation name: D	RMS			
URLY EQUIP	MENT COST				
	Cat D10T - 10SU 574				
ade Type:	Semi-Universal				
ttachment:	NA				
nift Basis:	1 per day				
ata Source:	(CRG)				
t Breakdown:					
			Utilization %		
wnership	\$257.39		NA		
ost/Hour: perating					
ost/Hour:	\$196.93		100		
pper own.	\$0.00		NA		
ost/Hour: pper op.	·				
ost/Hour:	\$0.00		0		
perator	\$38.59				
ost/Hour:	φ50.57		NA		
otal unit	\$492.91				
ost/Hour:	T · / - // T				
otal Fleet	\$1,971.62				

Loose volume:	17,394 LCY
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Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

Average push distance Unadjusted hourly production:	: 80 feet 2,028.0 LCY/hr	
Materials consistency description:	Partly consoli	dated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	3.86 Hours
Total job cost:	\$7,605

Permit Action:	PR12	Permit/Job#:	C1981010
<u>ON</u>			
		Abbreviation:	None
County: Moffa	ıt	Filename:	PR12
e: <u>DRMS</u>			
<u>DST</u>			
- 10SU			
1			
versal			
	Utilization %		
.39	NA		
.93	100		
)	NA		
)	0		
59	NA		
.91			
/1.62			
	DN State: Color County: Moffa ST - 10SU /ersal 39 93 93 93 93 93 93 93 93	DN State: Colorado County: Moffat SET - 10SU - rersal 39 39 39 93 100 NA 91	DN State: Colorado Moffat Abbreviation: County: Moffat Filename: ST - 10SU 'ersal 'ersal Utilization % NA 93 100 NA 93 100 0 9 NA

Initial 6,139 Volume: 1.250

Loose volume:	7,674 LCY

Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

Average push distance	: 80 feet	
Unadjusted hourly production:	2,028.0 LCY/hr	
Materials consistency description:	Partly consol	idated stockpile 1.1
Average push gradient:	0 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit production:	1,127.37 LCY/hr	
Adjusted fleet production:	4509.48 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	1.70 Hours
Total job cost:	\$3,355

Trapper Mine	e Permit	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	NTIFICATION				
Task #:055		Color		Abbreviation:	None
	0/2025 County:	Moffa	ıt	Filename:	PR12
User: RAI	<u> </u>				
Agency or orgar	nization name:	DRMS			
OURLY EQUI	PMENT COST				
Basic Machine:	Cat D10T 10SU				
Horsepower:	<u>Cat D10T - 10SU</u> 574				
Blade Type:	Semi-Universal				
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
ost Breakdown:					
			Utilization %		
Ownership	\$257.39		NA		
Cost/Hour:	\$237.39				
Operating	\$196.93		100		
Cost/Hour:					
Ripper own. Cost/Hour:	\$0.00		NA		
Ripper op. Cost/Hour:	\$0.00		0		
Operator					
Cost/Hour:	\$38.59		NA		
Total unit	\$492.91				
Cost/Hour:	Ψ 1 <i>7 Φ</i> 1 <i>7</i> Ι				
	\$1,971.62				
Total Fleet					

VUANIIIII

Initial Volume:	10,539
Swell factor:	1.250

Loose volume: 13,174	LCY
----------------------	-----

Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

Average push distance Unadjusted hourly production:	: 80 feet 2,028.0 LCY/h		
Materials consistency description:	Partly consolidated stockpile 1.1		
Average push gradient:	0 %		
Average site altitude:	6,400 feet		
Material weight:	2,550 lbs/LCY		
Weight description:	Earth - Dry packed		
Job Condition Correctio	n Factor Source		
Operator Skill:	0.750	(AVG.)	
Material consistency:	1.100	(CAT HB)	
Dozing method:	1.000	(GEN.)	
Visibility:	1.000	(AVG.)	
Job efficiency:	0.830	(1 SHIFT/DAY)	
Spoil pile:	0.900	(SSD-FC)	
Push gradient:	1.000	(CAT HB)	
Altitude:	1.000	(CAT HB)	
Material Weight:	0.902	(CAT HB)	
Blade type:	1.000	(PAT)	
Net correction:	0.5559		
Adjusted unit production:	1,127.37 LCY/hr		
Adjusted fleet production:	4509.48 LCY/hr		

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY
Total job time:	2.92 Hours
Total job cost:	\$5,760

Trapper Mine	Permit Ac	tion:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	TIFICATION				
Task #: 056 Date: 4/19/	/2025 State:	Colora Moffat		Abbreviation: Filename:	None PR12
User: RAR				_	
Agency or organ	ization name: DR	MS			
OURLY EQUI	PMENT COST				
Basic Machine:	Cat D10T - 10SU				
Horsepower: Blade Type:	574 Semi-Universal				
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
ost Breakdown:			Utilization %		
Ownership Cost/Hour:	\$257.39		NA		
Operating Cost/Hour:	\$196.93		100		
Ripper own. Cost/Hour:	\$0.00		NA		
Ripper op. Cost/Hour:	\$0.00		0		
Operator Cost/Hour:	\$38.59		NA		
Total unit	\$492.91				
Cost/Hour:					

MATERIAL QUANTITIES

7,776
7,770
1.250

Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

Average push distance Unadjusted hourly	: 80 feet 2,028.0 LCY/hr	<u>.</u>	
production:			
Materials consistency description:	Partly consolidated stockpile 1.1		
Average push gradient:	5 %		
Average site altitude:	6,400 feet		
Material weight:	2,550 lbs/LCY		
Weight description:	Earth - Dry packed		
Job Condition Correctio	n Factor Source		
Operator Skill:	0.750	(AVG.)	
Material consistency:	1.100	(CAT HB)	
Dozing method:	1.000	(GEN.)	
Visibility:	1.000	(AVG.)	
Job efficiency:	0.830	(1 SHIFT/DAY)	
Spoil pile:	0.900	(SSD-FC)	
Push gradient:	0.903	(CAT HB)	
Altitude:	1.000	(CAT HB)	
Material Weight:	0.902	(CAT HB)	
Blade type:	1.000	(PAT)	
Net correction:	0.5020		
Adjusted unit production:	1,018.06 LCY/hr		
Adjusted fleet production:	4072.24 LCY/hr		

Fleet size:	4 Dozer(s)
Unit cost:	\$0.484/LCY
Total job time:	2.39 Hours
Total job cost:	\$4,706

Trapper Mine	Permit A	Action:	PR12	Permit/Job#:	C1981010
ROJECT IDEN	TIFICATION				
Task #: 057	State:	Color		Abbreviation:	None
	2025 County:	Moffa	at	Filename:	PR 12 F
User: RAR	·				
Agency or organ	zation name:	DRMS			
IOURLY EQUI	PMENT COST				
IOUKLI LQUI					
Basic Machine:	Cat D10T - 10SU				
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment: Shift Basis:	NA 1 pop dov				
Data Source:	1 per day (CRG)				
Data Source.	(CRO)				
ost Breakdown:					
			<u>Utilization %</u>		
Ownership	\$257.39		NA		
Cost/Hour:					
Operating	\$196.93		100		
Cost/Hour:	\$196.93		100		
Cost/Hour: Ripper own.	\$196.93 \$0.00		100 NA		
Cost/Hour: Ripper own. Cost/Hour:					
Cost/Hour: Ripper own. Cost/Hour: Ripper op.					
Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour:	\$0.00		NA		
Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator	\$0.00		0		
Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour:	\$0.00 \$0.00		NA		
Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour:	\$0.00 \$0.00 \$38.59		0		
Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit	\$0.00 \$0.00		0		
Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour:	\$0.00 \$0.00 \$38.59		0		

MATERIAL QUANTITIES

Initial	10,231
Volume:	10,231
Swell factor:	1.250

Source of estimated volume:	Appendix A, Table A-6.2
Source of estimated swell	Cat Handbook
factor:	

_

Average push distance: 80 feet		
Unadjusted hourly production:	2,028.0 LCY/hr	
Materials consistency description:	Partly consolidated stockpile 1.1	
Average push gradient:	5 %	
Average site altitude:	6,400 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correctio	n Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5020	
Adjusted unit production:	1,018.06 LCY/hr	
Adjusted fleet production:	4072.24 LCY/hr	

JOB TIME AND COST

Fleet size:	4 Dozer(s)
Unit cost:	\$0.484/LCY
Total job time:	3.14 Hours
Total job cost:	\$6,192

BULLDOZER WORK

Task description	n: Regrade John	ison Acce	ess Road		
Trapper Min	e Permit	Action:	PR12	Permit/Job#:	C1981010
PROJECT IDE	NTIFICATION				
Task #:058	State:	Color	ado	Abbreviation:	None
Date: 4/19 User: RA	<u>9/2025</u> County: R	Moffa	at	Filename:	PR12
Agency or orga		DRMS			
		DRMS			
IOURLY EQU	IPMENT COST				
Basic Machine:	Cat D10T - 10SU				
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
<u>eost Breakdown</u>			Utilization %		
Ownership	\$257.20				
Cost/Hour:	\$257.39		NA		
Operating	\$196.93		100		
Cost/Hour:	\$170.75		100		
Ripper own.	\$0.00		NA		
Cost/Hour:					
Ripper op. Cost/Hour:	\$0.00		0		
Operator Cost/Hour:	\$38.59		NA		
			INA		
Total unit	\$492.91				
Cost/Hour:	ψ τ72,71				
Total Fleet	\$1,971.62				
Cost/Hour:	Ψ1,771102				
C05011001.					

MATERIAL QUANTITIES

volume:	25,374	
	1.250	
Loose volume: 3	31,718 LCY	
Source of estimate Source of estimate	/	ble A-6.2
factor:	d swell Cat Handbook	
lactor.		
HOURLY PRODU	ICTION	
1001111020		
Average push dista	ance: 80 feet	
Unadjusted hourly		
production:		
-		
Materials consister description:	ncy Partly consolid	ated stockpile 1.1
Average push	0 %	
gradient:		
Average site	6,400 feet	
altitude:		
Material weight:	2,550 lbs/LCY	
Material Weight.	2,000 100/ 201	
Weight description	n: Earth - Dry packed	
0 1	¥ ¥	
Job Condition Corre	ection Factor Source	
Operator Skill:	0.750	(AVG.)
Material consisten	cy: <u>1.100</u>	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5559	
Adjusted unit	1,127.37 LCY/hr	
production:		

Adjusted fleet production:

4509.48 LCY/hr

JOB TIME AND COST

Fleet size:	4 Dozer(s)
Unit cost:	\$0.437/LCY

Total job time:	7.03 Hours
Total job cost:	\$13,867

ite:	Trapper	r Mine	Perm	it Action:	PR12		Permit/Job	#: <u>C</u>	21981010
<u>P</u>	PROJECT	IDENTIFIC	CATION						
	Task #:	063	State:	Colora	do		Abbreviatio	on:	None
	Date:	4/19/2025	County	v: Moffa	t		Filename:		063
	User:	RAR							
	Agency or	organization	n name:	DRMS					
Ē	IOURLY	EQUIPMEN	NT COST						
	Basic Mac	chine:	Cat D10T	- 10SU	Horse	power:	5	74	
	Ripper At	tachment:	3-Shank R	Ripper	Shift I	Basis:	1	per da	ay
					Data S	Source:	_((CRG)	
C	Cost Break	down:							
<u> </u>	20st Diedak	<u></u>				Utiliza	ation		
						%			
	-	p Cost/Hour:		\$257.39		NA			
		Cost/Hour:		\$196.93		100			
		vnership Cost		\$25.02		NA			
		erating Cost/	Hour:	\$11.73		100			
	-	Cost/Hour:		\$38.59		NA			
	Total Unit	Cost/Hour:		\$529.66					
	Total Flee	t Cost/Hour:		\$2,118.6	2				
N	MATERIA	L QUANTI	TIES	مام؟	cted estimati	ing method	l: Area		
	Alternate M			Bele	eteu estimati	ing method	<u>1110a</u>		
nic:	NA		Bank	Volume:	NA	BC	Y NA		
	7.50	acre	s Rip Dept	th (ft):	2.50	Volun e:	n 30,250)	BCY or CCY

Seismic:					
Seismic Vel	ocity:		NA	feet/second	
Area:					
Average Rip	ping Depth:		2.50	feet/pass	
Average Rip	ping Width:		8.67	feet/pass	
	ping Length:		500.00	feet/pass	
Average Doz	-		88.00	feet/minute	
-	neuver Time:		0.25	minutes/pass	
Production p	er unit area:		1.007	acres/hour	
	Correction Factor Hourly Unit Proc		1.007	Acres/hr	
Site Altitude	2:		6,400	feet	
Altitude Adj	:		1.00	(CAT HB)	
Job Efficien	cy:		0.83	(1 shift/day)	
Net Correcti	on:		0.83	multiplier	
•	ourly Unit Productourly Fleet Productourly Fleet Productor		0.84 3.34	_ Acres/hr _ Acres/hr	
JOB TIME A	ND COST				
Fleet size:	_4	Grader(s)	Total job time:	2.24	Hours
Unit cost:	\$633.949	Per acre	Total job cost:	\$4,755	

PROJEC	<u>T IDENTIFIC</u>	<u>CATION</u>					
Task #:	064	State:	Colora	ıdo		Abbreviation:	None
Date:	4/19/2025	County	: Moffa	t		Filename:	064
User:	RAR						
Agency	or organization	n name:	DRMS				
HOURLY	Y EQUIPMEN	<u>NT COST</u>					
Basic M	achine:	Cat D10T	- 10SU	Horse	power:	574	
Ripper A	Attachment:	3-Shank R		Shift	Basis:	1 per	day
				Data S	Source:	(CRG	()
Cost Brea	Irdown						
Cost brea	<u>kuowii:</u>				Utiliza	ation	
					%		
Ownersł	nip Cost/Hour:		\$257.39		NA		
	g Cost/Hour:		\$196.93		100		
-	Ownership Cost	t/Hour:	\$25.02		NA		
	Operating Cost/		\$11.73		100		
	Cost/Hour:		\$38.59		NA		
Total Ur	nit Cost/Hour:		\$529.66				
Total Flo	eet Cost/Hour:		\$2,118.6	52			
MATER	AL QUANTI	<u>TIES</u>	Sele	cted estimat	ing method	l: Area	
Alternate	Methods:						
		Bank	Volume:	NA	BC	Y NA	
ic: NA					Volum	n <u>113,337</u>	BCY or

Seismic:					
Seismic Vel	ocity:		NA	feet/second	
Area:					
Average Rip			2.50	feet/pass	
Average Rip			8.67	feet/pass	
	ping Length:		500.00	feet/pass	
Average Doz	-		88.00	feet/minute	
-	neuver Time:		0.25	minutes/pass	
Production p	er unit area:		1.007	acres/hour	
Job Condition	Correction Fact	ors			
** 1/ . 1 1			1.005		
Unadjusted I	Hourly Unit Proc	luction:	1.007	Acres/hr	
			C 100	C ,	
Site Altitude			6,400	feet	
Altitude Adj			1.00	(CAT HB)	
Job Efficien	•		0.83	(1 shift/day)	
Net Correcti	on:		0.83	multiplier	
A diveted He	unter Unit Duo due	tion	0.84	Acres/hr	
	urly Unit Produc		<u> </u>	Acres/hr	
Aujusteu no	urly Fleet Produ	ction.	5.54		
JOB TIME A	ND COST				
Fleet size:	4	Grader(s)	Total job time:	8.41	Hours
Unit cost:	\$633.949	Per acre	Total job cost:	\$17,814	
		-			

Site:	Тгаррен	r Mine	Permit	Action:	PR12		Permit/Job#:	C1981010
<u>P</u>	PROJECT	IDENTIFICA	TION					
	Task #:	065	State:	Colora	do		Abbreviation	: None
	Date:	4/19/2025	County:	Moffat	t		Filename:	065
	User:	RAR						
	Agency or	organization n	ame:	DRMS				
<u>H</u>	HOURLY	EQUIPMENT	COST					
	Basic Mac	chine:	Cat D10T -	10SU	Horser	oower:	574	Ļ
	Ripper Att		3-Shank Ri		Shift B			er day
		_			Data S	ource:		RG)
C	Cost Breake	down:						
		<u></u>				Utiliz	ation	
						%		
	-	p Cost/Hour:		\$257.39		NA		
		Cost/Hour:		\$196.93		100		
		vnership Cost/H		\$25.02		NA		
		erating Cost/He	our:	\$11.73		100		
	-	Cost/Hour:		\$38.59		NA		
	Total Unit	Cost/Hour:		\$529.66				
	Total Flee	t Cost/Hour:		\$2,118.6	2			
N	MATERIA	L QUANTITI	ES	Sele	cted estimati	ng metho	d: Area	
A	Alternate M	lethods:						
	NA Bank V		Bank V	olume:	NA	BC	Y NA	
smic:	NA		acres Rip Depth					

Seismic:				
Seismic Velocity:		NA	feet/second	
Area:				
Average Ripping Depth:		2.50	feet/pass	
Average Ripping Width:		8.67	feet/pass	
Average Ripping Length:		500.00	feet/pass	
Average Dozer Speed:		88.00	feet/minute	
Average Maneuver Time:		0.25	minutes/pass	
Production per unit area:		1.007	acres/hour	
_				
Job Condition Correction Factor	<u>ors</u>			
Unadjusted Hourly Unit Prod	uction:	1.007	Acres/hr	
Site Altitude:		6,400	feet	
Altitude Adj:		1.00	(CAT HB)	
Job Efficiency:		0.83	(1 shift/day)	
Net Correction:		0.83	multiplier	
Adjusted Hourly Unit Produc	tion:	0.84	Acres/hr	
Adjusted Hourly Fleet Produc	ction:	3.34	Acres/hr	
JOB TIME AND COST				
Fleet size: 4	Grader(s)	Total job time:	5.98	Hours
Unit cost:\$633.949	Per acre	Total job cost:	\$12,679	

ite: Traj	oper Mine	Permi	it Action:	PR12		Permit/Jo	o#: _(C1981010
PROJE	<u>CT IDENTIFI</u>	CATION						
Task ‡ Date: User:	: 066 4/19/2025 RAR	State: County	Colorad : Moffat	0		Abbreviat Filename:		None 066
Agenc	y or organizatio	n name:	DRMS					
<u>HOUR</u>	LY EQUIPME	NT COST						
	Machine: Attachment:	Cat D10T 3-Shank R		Horsep Shift E Data S	Basis:		574 1 per da (CRG)	ay
Cost Br	eakdown:							
					Utiliz %	ation		
	ship Cost/Hour		\$257.39		NA			
-	ting Cost/Hour:	~~	\$196.93		100			
	Ownership Cos		\$25.02		NA 100			
	Operating Cost tor Cost/Hour:	/Hour:	<u>\$11.73</u> \$38.59		100 NA			
-	Unit Cost/Hour:		\$529.66		INA			
Total	Fleet Cost/Hour:		\$2,118.62					
MATE	RIAL QUANT	TIES	Select	ed estimati	ng metho	d: <u>Area</u>		
Alterna	e Methods:							
nic: <u>NA</u>	0 acro		h (ft)·	NA 2.50	BC Volur		77	BCY or

Seismic:					
Seismic Velo	ocity:		NA	feet/second	
Area:					
Average Rip	ping Depth:		2.50	feet/pass	
Average Rip			8.67	feet/pass	
Average Rip	ping Length:		500.00	feet/pass	
Average Doz	ver Speed:		88.00	feet/minute	
Average Ma	neuver Time:		0.25	minutes/pass	
Production p	er unit area:		1.007	acres/hour	
	Correction Factor Hourly Unit Proc		1.007	Acres/hr	
Site Altitude	:		6,400	feet	
Altitude Adj	:		1.00	(CAT HB)	
Job Efficiend	ey:		0.83	(1 shift/day)	
Net Correction	on:		0.83	multiplier	
•	urly Unit Produc urly Fleet Produ		0.84 3.34	_ Acres/hr _ Acres/hr	
JOB TIME A	ND COST				
Fleet size:	_4	Grader(s)	Total job time:	8.77	Hours
Unit cost:	\$633.949	Per acre	Total job cost:	\$18,575	

Site:	Trapper	Mine	Permit	Action:	PR12		Permit/J	ob#:	C1981010
Ī	PROJECT	<u>IDENTIFIC</u>	ATION						
	Task #:	067	State:	Colorad	lo		Abbrevia	ation:	None
	Date:	4/19/2025	County:	Moffat			Filenam	e:	067
	User:	RAR							
	Agency or	organization	name:	DRMS					
Ī	HOURLY I	EQUIPMEN	<u>T COST</u>						
	Basic Mac	hine:	Cat D10T -	10SU	Horser	oower:		574	
	Ripper Atta		3-Shank Ri		Shift E		-	1 per d	lay
				• •	Data S	ource:	-	(CRG)	
(Cost Breakd	own:							
<u> </u>	<u>JUST DICAKU</u>	<u>OWII.</u>				Utiliz	ation		
						%			
	Ownership	Cost/Hour:		\$257.39		NA			
	Operating	Cost/Hour:		\$196.93		100			
	Ripper Ow	nership Cost	/Hour:	\$25.02		NA			
	Ripper Ope	erating Cost/	Hour:	\$11.73		100			
	Operator C			\$38.59		NA			
	Total Unit	Cost/Hour:		\$529.66					
	Total Fleet	Cost/Hour:		\$2,118.62	2				
<u>1</u>	VIA I ĽKIA	L QUANTI	<u>IIËS</u>	Selec	ted estimati	ng metho	d: Area	ì	
<u> </u>	Alternate M	ethods:							
smic:	NA		Bank V	olume:	NA	BC	Y NA		
sinic.		acres	Rip Depth			Volur	n 86,7	1 -	BCY of

Seismic:					
Seismic Vel	ocity:		NA	feet/second	
<u>Area:</u>					
Average Rip			2.50	feet/pass	
Average Rip			8.67	feet/pass	
	ping Length:		500.00	feet/pass	
Average Do	-		88.00	feet/minute	
-	neuver Time:		0.25	minutes/pass	
Production p	er unit area:		1.007	acres/hour	
Job Condition	Correction Fact	ors			
TT 1 1 1			1.005		
Unadjusted I	Hourly Unit Proc	luction:	1.007	Acres/hr	
			C 400	6	
Site Altitude			6,400	feet	
Altitude Adj			1.00	(CAT HB)	
Job Efficien	•		0.83	(1 shift/day)	
Net Correcti	on:		0.83	multiplier	
A diveted He	unter Unit Des dus	tion	0.84	Acres/hr	
5	urly Unit Produc		<u> </u>	Acres/hr	
Aujusteu no	ourly Fleet Produ	ction.	5.54		
JOB TIME A	AND COST				
Fleet size:	4	Grader(s)	Total job time:	6.43	Hours
Unit cost:	\$633.949	Per acre	Total job cost:	\$13,630	
		-	-		

ite:	Trapper	r Mine	Permit	t Action:	PR12		Pe	ermit/Jo	ob#:	C1981010
<u>P</u>	PROJECT	IDENTIFIC	CATION							
	Task #:	068	State:	Color	ado		A	bbrevia	tion:	None
	Date:	4/19/2025	County:	Moffa	ıt		Fi	lename	:	068
	User:	RAR								
	Agency or	rorganization	name:	DRMS						
E	HOURLY	EQUIPMEN	T COST							
	Basic Mac	chine:	Cat D10T -	10SU	Но	rsepowe	r:		574	
	Ripper At	tachment:	3-Shank Ri	pper		ft Basis:		_	1 per d	lay
					Da	ta Sourc	e:	_	(CRG))
<u>C</u>	Cost Break	down:								
							Utilizati	on		
							%			
	-	p Cost/Hour:		\$257.39			NA			
		Cost/Hour:		\$196.93			100			
		vnership Cost		\$25.02			NA			
		erating Cost/	Hour:	\$11.73			100			
	-	Cost/Hour:		\$38.59		ſ	NA			
	Total Unit	t Cost/Hour:		\$529.66	1					
	Total Flee	t Cost/Hour:		\$2,118.	62					
N	MATERIA	L QUANTI	<u>ries</u>	Sele	ected estir	nating m	ethod:	Area		
<u>A</u>	Alternate M	lethods:								
ic:	NA		Bank V	/olume:	NA		BCY	NA		
	18.00	acres	Rip Depth	n (ft):	2.50	N e	Volum ::	72,60	00	BCY o CCY

Seismic:					
Seismic Vel	ocity:		NA	feet/second	
<u>Area:</u>					
Average Rip			2.50	feet/pass	
Average Rip			8.67	feet/pass	
	ping Length:		500.00	feet/pass	
Average Do	zer Speed:		88.00	feet/minute	
Average Ma	neuver Time:		0.25	minutes/pass	
Production p	er unit area:		1.007	acres/hour	
Job Condition	Correction Factor	ors			
Unadjusted 1	Hourly Unit Prod	luction:	1.007	Acres/hr	
Site Altitude			6,400	feet	
Altitude Adj			1.00	(CAT HB)	
Job Efficien	•		0.83	(1 shift/day)	
Net Correcti	on:		0.83	multiplier	
•	ourly Unit Produc		0.84	Acres/hr	
Adjusted Ho	ourly Fleet Produ	ction:	3.34	Acres/hr	
JOB TIME A	<u>IND COST</u>				
Fleet size:	4	Grader(s)	Total job time:	5.39	Hours
Unit cost:	\$633.949	Per acre	Total job cost:	\$11,411	
		-	5	/	

Site:	Trapper	Mine	Permit .	Action:	PR12		Permit/Job#:	C1981010
<u>P</u>	PROJECT	IDENTIFICA	<u>TION</u>					
	Task #:	072	State:	Colora	ıdo		Abbreviation:	None
	Date:	4/19/2025	County:	Moffa	t		Filename:	072
	User:	RAR						
	Agency or	organization n	ame: I	ORMS				
H	HOURLY	EQUIPMENT	COST					
	Basic Mac	hine:	Cat D10T - 1	10SU	Horsep	ower:	574	
	Ripper Att	achment:	3-Shank Rip	per	Shift B	Basis:	1 per c	lay
					Data S	ource:	(CRG))
<u>C</u>	Cost Breake	<u>lown:</u>						
						Utiliz	ation	
	A			***		%		
	-	Cost/Hour:		\$257.39		NA		
		Cost/Hour:		\$196.93		100		
		vnership Cost/H		\$25.02		NA		
		erating Cost/Ho	our:	\$11.73		100		
	Operator C			\$38.59		NA		
	Total Unit	Cost/Hour:	-	\$529.66				
	Total Flee	t Cost/Hour:	-	\$2,118.6	52			
N	MATERIA	L QUANTITI	F2	Sele	cted estimati	ng methoo	l: Area	
A	Alternate M	ethods:						
mic:	NA		Bank Vo	olume:	NA	BC	Y NA	
		acres	Rip Depth	(ft):	2.50	Volun	n 39,930	BCY o
a:	9.90		1 1		/ 11/			CCY

Seismic:				
Seismic Velocity:		NA	feet/second	
<u>Area:</u>				
Average Ripping Depth:		2.50	feet/pass	
Average Ripping Width:		8.67	feet/pass	
Average Ripping Length:		500.00	feet/pass	
Average Dozer Speed:		88.00	feet/minute	
Average Maneuver Time:		0.25	minutes/pass	
Production per unit area:		1.007	acres/hour	
Job Condition Correction Factor	ors_			
Unadjusted Hourly Unit Prod	luction:	1.007	Acres/hr	
Site Altitude:		6,400	feet	
Altitude Adj:		1.00	(CAT HB)	
Job Efficiency:		0.83	(1 shift/day)	
Net Correction:		0.83	multiplier	
Adjusted Hourly Unit Produc		0.84	Acres/hr	
Adjusted Hourly Fleet Produce	ction:	3.34	Acres/hr	
JOB TIME AND COST				
Fleet size: 4	Grader(s)	Total job time:	2.96	Hours
Unit cost: \$633.949	Per acre	Total job cost:	\$6,276	

<u>P</u>	PROJECT	IDENTIFIC	CATION						
	Task #: Date: User:	074 4/19/2025 RAR	State: County	Colora Moffat			Abbrevi Filenam		None 074
	Agency or	organizatior	n name:	DRMS					
E	IOURLY	EQUIPMEN	NT COST						
	Basic Mac Ripper Att		Cat D10T 3-Shank R		Horser Shift E Data S	Basis:	-	574 1 per d (CRG)	
<u>C</u>	Cost Break	down:							
						Utiliz %	cation		
	-	cost/Hour:		\$257.39		NA			
	1 0	Cost/Hour:		\$196.93		100			
		vnership Cos		\$25.02		NA			
		erating Cost/ Cost/Hour:	Hour:	<u>\$11.73</u> \$38.59		100 NA			
	-	Cost/Hour:		\$529.66		INA			
	Total Flee	t Cost/Hour:		\$2,118.6	2				
N	<u>/IATERIA</u>	L QUANTI	<u>TIES</u>	Sele	cted estimati	ng metho	d: <u>Are</u> a	a	
<u>A</u>	Alternate M	lethods:							
nic:	NA		Bank	Volume:	NA	BC	Y NA		
	10.40	acre	s Rip Dept	th (ft):	2.50	Volur	n 41,9	47	BCY or

Seismic:					
Seismic Velo	ocity:		NA	feet/second	
Area:					
Average Rip	ping Depth:		2.50	feet/pass	
Average Rip	ping Width:		8.67	feet/pass	
	ping Length:		500.00	feet/pass	
Average Doz	-		88.00	feet/minute	
-	neuver Time:		0.25	minutes/pass	
Production p	er unit area:		1.007	acres/hour	
	Correction Factor Hourly Unit Proc		1.007	Acres/hr	
Site Altitude	:		6,400	feet	
Altitude Adj			1.00	(CAT HB)	
Job Efficiend	cy:		0.83	(1 shift/day)	
Net Correcti	on:		0.83	multiplier	
•	urly Unit Produc urly Fleet Produ		0.84 3.34	_ Acres/hr _ Acres/hr	
JOB TIME A	ND COST				
Fleet size:	4	Grader(s)	Total job time:	3.11	Hours
Unit cost:	\$633.949	Per acre	Total job cost:	\$6,593	

Site:	Trapper	· Mine	Permit	Action:	PR12		Permit/Job)#: <u>(</u>	C1981010
P	PROJECT	IDENTIFIC	ATION						
	Task #:	075	State:	Colora	do		Abbreviati	ion:	None
	Date:	4/19/2025	County:	Moffat			Filename:		075
	User:	RAR							
	Agency or	organization	name:	DRMS					
H	HOURLY	EQUIPMEN'	<u>Г COST</u>						
	Basic Mac	hine:	Cat D10T -	10SU	Horse	power:	5	574	
	Ripper Att	achment:	3-Shank Ri	pper	Shift H	Basis:	1	per d	lay
					Data S	Source:	(CRG)	
C	Cost Breake	lown							
<u>c</u>	JUST DIEAK	<u>10w11.</u>				Utiliz	zation		
						%	Jution		
	Ownershir	o Cost/Hour:		\$257.39		NA			
	-	Cost/Hour:		\$196.93		100			
		/nership Cost/	Hour:	\$25.02		NA			
		erating Cost/H		\$11.73		100			
	Operator C	-		\$38.59		NA			
	-	Cost/Hour:		\$529.66					
	Total Flee	t Cost/Hour:		\$2,118.62	2				
-									
<u>N</u>	MATERIA	L QUANTII	<u>TES</u>	Selec	ted estimati	ing metho	d: Area		
A	Alternate M	ethods:							
smic:	NA		Bank V	volume:	NA	BC	CY NA		
			Rip Depth	(ft)		Volu	m 28,63	7	BCY o
ea:	7.10	acres	кір Бери	I (III).	2.50	v Olul	1 20,05	,	CCY

Seismic:					
Seismic Vel	ocity:		NA	feet/second	
Area:					
Average Rip	ping Depth:		2.50	feet/pass	
Average Rip			8.67	feet/pass	
	ping Length:		500.00	feet/pass	
Average Doz	-		88.00	feet/minute	
-	neuver Time:		0.25	minutes/pass	
Production p	er unit area:		1.007	acres/hour	
	Correction Factor Hourly Unit Prod		1.007	Acres/hr	
Site Altitude	2:		6,400	feet	
Altitude Adj	:		1.00	(CAT HB)	
Job Efficien	cy:		0.83	(1 shift/day)	
Net Correcti	on:		0.83	multiplier	
•	ourly Unit Productourly Fleet Productourly		0.84 3.34	_ Acres/hr _ Acres/hr	
JOB TIME A	ND COST				
Fleet size:	4	Grader(s)	Total job time:	2.12	Hours
Unit cost:	\$633.949	Per acre	Total job cost:	\$4,501	

Tas	k description:	Rip I/J Road	s (I/J Spoil, I	Mid, I West)		
Site: <u>T</u>	rapper Mine	Permit	Action: P	R12	Permi	t/Job#:	C1981010
<u>PRO</u>	JECT IDENTIF	ICATION					
	sk #:077	State:	Colorado			eviation:	None
Dat	-	5 County:	Moffat		Filena	ame:	077
Use	er: <u>RAR</u>						
Age	ency or organizati	on name:	DRMS				
HOU	URLY EQUIPME	ENT COST					
Bas	sic Machine:	Cat D10T -	10 S U	Horsepow	ver:	574	
Rip	per Attachment:	3-Shank Ri	pper			1 per d	lay
-	-			Data Sour	rce:	(CRG)	
	Breakdown: vnership Cost/Hou	r.	\$257.39		Utilization % NA		
	erating Cost/Hours		\$196.93		100		
-	oper Ownership Co		\$25.02		NA		
-	per Operating Cos		\$11.73		100		
	erator Cost/Hour:		\$38.59		NA		
Tot	al Unit Cost/Hour	:	\$529.66				
Tot	al Fleet Cost/Hou	r:	\$2,118.62				
_	MATERIAL QUA		Selecte	ed estimating d:	Are	ea	
Seismic:	NA	Baı	nk Volume:	NA	BCY	NA	
Area:	15.23	acres Rip D	epth (ft):	2.50	Volum e:	61,428	BCY or CCY
	Source of estimat	ed quantity:	Apper	ndix A Table	6.2		

Seismic:		NA		
Seismic Velocity:	Seismic Velocity:		feet/second	
Area:				
Average Ripping Dep	th:	2.50	feet/pass	
Average Ripping Wid		8.67	feet/pass	
Average Ripping Len	gth:	500.00	feet/pass	
Average Dozer Speed	:	88.00	feet/minute	
Average Maneuver Ti	me:	0.25	minutes/pass	
Production per unit ar	ea:	1.007	acres/hour	
Job Condition Correction	on Factors			
Unadjusted Hourly Unit Production:		1.007	Acres/hr	
Site Altitude:		6,400	feet	
Altitude Adj:		1.00	(CAT HB)	
Job Efficiency:		0.83	(1 shift/day)	
Net Correction:		0.83	multiplier	
Adjusted Hourly Unit	Production:	0.84	Acres/hr	
Adjusted Hourly Flee		3.34	Acres/hr	
JOB TIME AND COS	<u>ST</u>			
Fleet size: 4	Grader(s)	Total job time:	4.56	Hours
Unit cost: \$633.94	9 Per acre	Total job cost:	\$9,655	

BULLDOZER WORK

Task description:]	Regrade Coyote Impoundment				
<u>e:</u> <u>Tr</u>	Trapper Mine Permit Ac		on:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>	
PROJECT	IDENTIFIC	CATION					
Task #:	<u>078</u>	State:	Cold	orado	Abbreviation:	None	
Date: User:	<u>4/19/2025</u> <u>RAR</u>	County:	Mo	offat	Filename:	<u>PR12 F</u>	
Agency of	r organization	n name:		DR	MS		
HOURLY	EQUIPMEN	T COST					
Basic Machine	e: (Cat D10T - 10SU					
Horsepow		<u>574</u>					
Blade Ty		Semi-Universal					
<u>Attachme</u>	ent:	<u>NA</u>					
Shift Bas	sis:	<u>1 per day</u>					
Data Sour	rce:	<u>(CRG)</u>					
Cost Breakd	<u>lown:</u>						
				Utilization 9	<u>%</u>		
Owner		\$257.39		NA			
<u>Cost/H</u>		<u> </u>		<u> </u>			
<u>Opera</u>	-	<u>\$196.93</u>		100			
<u>Cost/H</u>							
<u>Ripper</u>		\$0.00		NA			
<u>Cost/H</u>							
<u>Ripper</u>	-	<u>\$0.00</u>		<u>0</u>			
<u>Cost/H</u> Opera							
<u>Cost/H</u>		<u>\$38.59</u>		<u>NA</u>			
Total		<u>\$492.91</u>					
<u>Cost/H</u>		.		_			
<u>Total I</u>		<u>\$985.81</u>					
<u>Cost/H</u>	lour:			_			
	L QUANTI	<u> TIES</u>					
<u>Initial</u> Volume	<u>.</u>	<u>83,750</u>					
Swell fact	or:	<u>1.000</u>					
Loose	83.	750 LCY					

83,750 LCY

volume:

Source of estimated volume:	Appendix	A Table A-7.2				
Source of estimated swell factor:	Operator Estimate	_				
HOURLY PRODUCTION Average push distance: Unadjusted hourly production:	<u>N</u> <u>500 feet</u> <u>410.8 LCY/hr</u>					
Materials consistency description:	Compacted	fill or embankment 0.9				
Average push gradient: Average site altitude:	<u>0 %</u> 5,400 feet					
Material weight:	<u>2,550 lbs/LC</u>	<u>Y</u>				
Weight description:	User Provided					
Job Condition Correction F Operator Skill: Material consistency: Dozing method: Visibility: Job efficiency: Spoil pile: Push gradient: <u>Altitude:</u> Material Weight: <u>Blade type:</u>	$\begin{array}{r} 0.750 \\ \hline 0.900 \\ \hline 1.000 \\ \hline 1.000 \\ \hline 0.830 \\ \hline 0.900 \\ \hline 1.000 \\ \hline 1.000 \\ \hline 0.902 \\ \hline 1.000 \\ \hline 0.902 \\ \hline 1.000 \end{array}$	<u>(AVG.)</u> (<u>CAT HB))</u> (<u>GEN.)</u> (<u>AVG.)</u> (<u>1 SHIFT/DAY)</u> (<u>SSD-FC)</u> (<u>CAT HB)</u> (<u>CAT HB)</u> (<u>CAT HB)</u> (<u>PAT)</u>				
Net correction:	0.4548					
Adjusted unit production: Adjusted fleet production:	<u>186.83 LCY/hr</u> <u>373.66 LCY/hr</u>					

JOB TIME AND COST

$2 \operatorname{Dozer}(s)$
\$2.638/LCY
224.13 Hours
\$220,954

BULLDOZER WORK

<u> </u>	Mine	Permit Action	on:	<u>PR12</u>	Permit/Job#:	<u>C198101(</u>
PROJECT IDEN	TIFICA	TION				
	<u>79</u>	State:	Col	orado	Abbreviation:	None
	/2025	County:	M	<u>offat</u>	Filename:	<u>PR12 F</u>
<u>User:</u> <u>R</u>	<u>AR</u>	-				
Agency or organ	ization	name:		DRI	MS	
HOURLY EQUI	PMENT	COST				
<u>Basic</u> Machine:	<u>C</u>	at D10T - 10SU				
Horsepower:		<u>574</u>				
Blade Type:	<u>S</u>	emi-Universal				
Attachment:		NA				
Shift Basis:		<u>1 per day</u>				
Data Source:		<u>(CRG)</u>				
Cost Breakdown:						
				Utilization 9	<u>%</u>	
<u>Ownership</u>		<u>\$257.39</u>		NA		
<u>Cost/Hour:</u>		<u>+==</u>		<u></u>		
<u>Operating</u> Cost/Hour:		\$196.93		<u>100</u>		
<u>Ripper own.</u>						
<u>Cost/Hour:</u>		<u>\$0.00</u>		<u>NA</u>		
Ripper op.		+ a . a a				
Cost/Hour:		<u>\$0.00</u>		<u>0</u>		
Operator Cost/Hour:		<u>\$38.59</u>		<u>NA</u>		
<u>Total unit</u>		\$492.91				
<u>Cost/Hour:</u> Total Fleet		\$402.01		<u> </u>		
<u>Cost/Hour:</u>		<u>\$492.91</u>				
<u>Cost/110d1.</u>						
MATERIAL QU	ANTITI	ES				
<u>Initial</u> Volume:	<u>1</u> :	5,381				
Swell factor:	1	.000				

Source of estimated volume:	Appendix A Table A-7.2				
Source of estimated swell <u>factor:</u>	Operator Estimate	_			
HOURLY PRODUCTION	N				
Average push distance:	225 feet				
<u>Unadjusted hourly</u>	842.1 LCY/hr	_			
production:	<u>01211 2017m</u>				
production.		—			
Materials consistency description:	Compacted	fill or embankment 0.9			
<u>Average push</u> gradient:	<u>10 %</u>				
	,400 feet				
altitude:	,				
<u></u>					
Material weight:	2,550 lbs/LC	Y			
Weight	User F	Provided			
description:					
i					
Job Condition Correction Fa	actor Source				
Operator Skill:	0.750	<u>(AVG.)</u>			
Material consistency:	0.900	(CAT HB))			
Dozing method:	1.000	(GEN.)			
Visibility:	1.000	(AVG.)			
Job efficiency:	0.830	(1 SHIFT/DAY)			
Spoil pile:	0.900	(SSD-FC)			
Push gradient:	0.786	(CAT HB)			
Altitude:	1.000	(CAT HB)			
Material Weight:	0.902	(CAT HB)			
Blade type:	1.000	(PAT)			
Net correction:	0.3575				
Adjusted unit					
production:	<u>301.05 LCY/hr</u>				
Adjusted fleet					
production:	<u>301.05 LCY/hr</u>				
±					
JOB TIME AND COST					
	Dozer(s)				
	637/LCY				
Total job time: 51.	09 Hours				
	25,183				
<u></u>					

BULLDOZER WORK

-					
<u>: Trapper N</u>	Mine Permit Acti	on:	<u>PR12</u>	Permit/Job#:	<u>C198101(</u>
PROJECT IDENT	FIFICATION				
<u>Task #:</u> 08		Col	<u>orado</u>	Abbreviation:	None
Date: <u>4/19/2</u>	2025 County:	M	<u>offat</u>	Filename:	<u>PR12 F</u>
User: RA	<u>AR</u>				
Agency or organi	zation name:		DR	MS	
HOURLY EQUIP	MENT COST				
Basic Machine:	<u>Cat D10T - 10SU</u>				
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	<u>NA</u>				
Shift Basis:	<u>1 per day</u>				
Data Source:	<u>(CRG)</u>				
Cost Breakdown:					
			Utilization 9	<u>%</u>	
Ownership	<u>\$257.39</u>		NA		
Cost/Hour:	<u> </u>		<u>1111</u>		
<u>Operating</u> <u>Cost/Hour:</u>	<u>\$196.93</u>		<u>100</u>		
<u>Ripper own.</u>					
<u>Cost/Hour:</u>	<u>\$0.00</u>		NA		
Ripper op.	\$0.00		<u>0</u>		
Cost/Hour:	<u>\$0.00</u>		<u>U</u>		
<u>Operator</u>	\$38.59				
Cost/Hour:			<u>NA</u>		
<u>Total unit</u>	\$492.91				
Cost/Hour:	<u></u>				
Total Fleet	<u>\$492.91</u>				
Cost/Hour:	. <u>.</u>		_		
MATERIAL QUA	NTITIES				
Initial					
Volume:	342				
Swell factor:	<u>1.000</u>				
Loose volume:	<u>342 LCY</u>				

Source of estimated	Appendix	A Table A-7.2			
<u>volume:</u> Source of estimated swell <u>factor:</u>	Operator Estimate				
HOURLY PRODUCTION Average push distance: Unadjusted hourly production:	<u>100 feet</u> <u>1,718.9 LCY/hr</u>	_			
Materials consistency description:	Compacted	fill or embankment 0.9			
Average pushgradient:Average site6, altitude:	<u>0 %</u> 400 feet				
Material weight:	<u>2,550 lbs/LC</u>	<u>CY</u>			
Weight description:	<u>User I</u>	Provided			
Job Condition Correction Fa	ctor Source				
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>			
Material consistency:	<u>0.900</u>	<u>(CAT HB))</u>			
Dozing method:	1.000	(GEN.)			
Visibility:	<u>1.000</u>	<u>(AVG.)</u>			
Job efficiency:	0.830	(1 SHIFT/DAY)			
Spoil pile:	0.900	(SSD-FC)			
Push gradient:	1.000	(CAT HB)			
Altitude:	1.000	(CAT HB)			
Material Weight:	0.902	(CAT HB)			
Blade type:	1.000	(PAT)			
Net correction:	<u>0.4548</u>				
Adjusted unit production:	781.76 LCY/hr				
Adjusted fleet production:	<u>781.76 LCY/hr</u>				
JOB TIME AND COST					
<u>Fleet size:</u> <u>1 D</u>	<u>ozer(s)</u>				
Unit cost: \$0.6	31/LCV				

\$0.631/LCY

0.44 Hours

Unit cost:

Total job time:

Total job cost:	\$216
10141 00 0050	$\mathbf{\mathbf{v}}$

BULLDOZER WORK

Task description:	Regr	Regrade Sage Impoundments (1 and 2)			
Site: Trapper M	line Permit Acti	on: <u>PR12</u>	Permit/Job#:	<u>C1981010</u>	
PROJECT IDENT		Colorado	Abbreviation:	None	
$\frac{\text{Date:}}{\text{User:}} = \frac{\frac{001}{4}}{\text{RA}}$	025 County:	Moffat	<u>Filename:</u>	<u>PR12 F</u>	
Agency or organiz		DRI	MS		
HOURLY EQUIPM	MENT COST				
<u>Basic</u> <u>Machine:</u>	<u>Cat D10T - 10SU</u>				
Horsepower: Blade Type:	<u>574</u> Semi-Universal				
<u>Attachment:</u> Shift Basis:	<u>NA</u> 1 per day				
Data Source:	<u>(CRG)</u>				
Cost Breakdown:			.,		
<u>Ownership</u> <u>Cost/Hour:</u>	<u>\$257.39</u>	Utilization 9 <u>NA</u>	<u>//o</u>		
<u>Operating</u> <u>Cost/Hour:</u>	<u>\$196.93</u>	<u>100</u>			
<u>Ripper own.</u> <u>Cost/Hour:</u>	<u>\$0.00</u>	NA			
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>0</u>			
<u>Operator</u> <u>Cost/Hour:</u>	<u>\$38.59</u>	NA			
<u>Total unit</u> Cost/Hour:	<u>\$492.91</u>				
<u>Total Fleet</u> <u>Cost/Hour:</u>	<u>\$492.91</u>				

MATEDIAL OUANTITIES

Material Weight:

Blade type:

Net correction:

Adjusted unit production:

<u>MATERIAL QU</u>	JANIIIE	<u>)</u>			
<u>Initial</u>	8,302				
Volume:					
Swell factor:	1.000				
Loose	8,302 LCY	7			
volume:					
Source of estimation volume:	ated	<u>Appendix</u>	A Table 1	<u>4-6</u>	
Source of estimation factor:	ated swell	Operator	<u>Estimate</u>	_	
HOURLY PROI	DUCTION				
<u>Average push di</u> <u>Unadjusted hour</u> production:		<u>150 feet</u> 1,243.2 LC	Y/hr	_	
Materials consis	stency	Compa	cted fill or e	embankment 0.9	
Average push	<u>5 %</u>				
gradient:					
Average site	<u>6,400</u>) feet			
<u>altitude:</u>			_		
Material weight	: <u>2,550</u>) lbs/LCY			
Weight description:	User	Provided			
Job Condition Co	rrection Fa	ctor So	urce		
Operator Skill:	_	<u>0.750</u>		<u>(AVG.)</u>	
Material consist	ency:	0.900		<u>(CAT HB))</u>	
Dozing method:		1.000		<u>(GEN.)</u>	
Visibility:	_	1.000		<u>(AVG.)</u>	
Job efficiency:	_	0.830		(1 SHIFT/DAY)	
Spoil pile:	_	0.900		(SSD-FC)	
Push gradient:	_	<u>0.903</u>		(CAT HB)	
Altitude:		1.000		<u>(CAT HB)</u>	

0.902

1.000

0.4107

510.58 LCY/hr

(CAT HB)

(PAT)

Adjusted fleet production:

510.58 LCY/hr

JOB TIME AND COST

<u>Fleet size:</u>	<u>1 Dozer(s)</u>
Unit cost:	\$0.965/LCY
<u>Total job time:</u>	<u>16.26 Hours</u>

<u>Total job cost:</u>	<u>\$8,015</u>
-	

Task description:		Reg	rade West Ho	orse Impou	<u>indment</u>	
ite: Trappo	er Mine	Permit Actio	<u>n: P</u>	<u>R12</u>	Permit/Job#:	<u>C1981010</u>
PROJECT IDE	ENTIFICAT	ION				
<u>Task #:</u>	<u>082</u>	State:	<u>Colorado</u>	Ab	breviation:	<u>None</u>
		County:	<u>Moffat</u>	<u> </u>	Filename:	<u>PR12 F</u>
User:	RAR					
Agency or org	ganization na	me:		DRMS		
HOURLY EQU	JIPMENT (COST				
Basic Machine:	Cat	<u> D10T - 10SU</u>				
Horsepower:		<u>574</u>				
Blade Type:	Sei	<u>mi-Universal</u>				
Attachment:		NA				
<u>Shift Basis:</u>		<u>1 per day</u>				
Data Source:		<u>(CRG)</u>				
Cost Breakdowr	<u>1:</u>		1			
			<u>Utiliz</u>	ation %		
<u>Ownershir</u> Cost/Hour		<u>\$257.39</u>	1	<u>IA</u>		
Operating	-	* 1 0 1 0 7			_	
<u>Cost/Hour</u>		<u>\$196.93</u>	<u>1</u>	<u>00</u>		
Ripper owr		\$0.00	N	IA		
Cost/Hour		<u>40.00</u>	<u> </u>	<u>17 I</u>		
<u>Ripper op.</u> Cost/Hour		<u>\$0.00</u>		<u>0</u>		
Operator		<u>\$38.59</u>				
Cost/Hour	<u> </u>	<u>\</u>	<u> </u>	<u>IA</u>	_	
<u>Total unit</u>		<u>\$492.91</u>				
Cost/Hour		<u> </u>				
Total Fleet		<u>\$492.91</u>				
Cost/Hour	<u> </u>					

MATERIAL QUANTITIES

Altitude:

Blade type:

Material Weight:

Net correction:

MATERIAL Q	UANIIII	<u>6</u>			
<u>Initial</u> Volume:	<u>3,315</u>				
Swell factor:	1.000				
<u>Loose</u> volume:	<u>3,315</u> LC	<u>Y</u>			
Source of estim	nated	Appendix A T	Table A-7.2		
<u>volume:</u> Source of estim <u>factor:</u>	nated swell	Operator Estir	<u>nate</u>		
HOURLY PRO	DUCTION	<u>N</u>			
Average push on <u>Unadjusted hou</u> production:		<u>55 feet</u> 2,670.0 LCY/hr			
Materials consi description:	stency	Compacted :	fill or embankn	<u>1ent 0.9</u>	
<u>Average push</u> gradient: <u>Average site</u> altitude:	<u>0 %</u> <u>6,40</u>	00 feet			
Material weigh	<u>t: 2,55</u>	50 lbs/LCY			
<u>Weight</u> description:	Use	r Provided			
Job Condition C	orrection E	actor Source			
Operator Skill:				<u>0.750</u>	<u>(AVG.)</u>
<u>Material</u> consistency:				<u>0.900</u>	<u>(CAT HB))</u>
Dozing method	<u>l:</u>		_	<u>1.000</u>	<u>(GEN.)</u>
<u>Visibility:</u>			-	<u>1.000</u>	<u>(AVG.)</u>
Job efficiency:			-	<u>0.830</u>	(<u>1</u> SHIFT/DAY)
Spoil pile:			-	0.900	(SSD-FC)
Push gradient:				1.000	(CAT HB)

<u>1.000</u> (PAT) 0.4548

1.000

0.902

(CAT HB)

(CAT HB)

Adjusted unit production: Adjusted fleet production:

1,214.32 LCY/hr

1214.32 LCY/hr

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	<u>\$0.406/LCY</u>
<u>Total job time:</u>	2.73 Hours
Total job cost:	<u>\$1,346</u>

Task description:		Regrade Impound	lment H	
Site: Trapper Mi	ne Permit Actio	on: <u>PR12</u>	Permit/Job#:	<u>C1981010</u>
	PROJECT II	DENTIFICATION		
$\begin{array}{c c} \underline{\text{Task #:}} & \underline{083} \\ \hline \underline{\text{Date:}} & \underline{4/19/20} \\ \hline \underline{\text{User:}} & \underline{\text{RAR}} \end{array}$		<u>Colorado</u> <u>Moffat</u>	Abbreviation: Filename:	None PR12 F
Agency or organiza	tion name:	DR	MS	
HOURLY EQUIPM	ENT COST			
BasicMachine:Horsepower:Blade Type:Attachment:Shift Basis:Data Source:	<u>Cat D10T - 10SU</u> <u>574</u> <u>Semi-Universal</u> <u>NA</u> <u>1 per day</u> <u>(CRG)</u>			
Cost Breakdown:		Utilization 6	<u>%</u>	
<u>Ownership</u> <u>Cost/Hour:</u>	<u>\$257.39</u>	<u>NA</u>		
<u>Operating</u> <u>Cost/Hour:</u>	<u>\$196.93</u>	<u>100</u>		
<u>Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	<u>NA</u>		
<u>Ripper op.</u> <u>Cost/Hour:</u>	<u>\$0.00</u>	<u>0</u>		
Operator Cost/Hour:	<u>\$38.59</u>	NA		
<u>Total unit</u> <u>Cost/Hour:</u> <u>Total Fleet</u> <u>Cost/Hour:</u>	<u>\$492.91</u> \$492.91			

MATERIAL QUANTITIES

<u>Initial</u> Volume: <u>3</u> ,	<u>198</u>
	000
Loose volume: <u>3,</u>	<u>198 LCY</u>
Source of estimated	d <u>Appendix A Table A-7.2</u>
Source of estimated factor:	d swell Operator Estimate
HOURLY PRODU	CTION
Average push dista Unadjusted hourly production:	
Materials consister description:	<u>Compacted fill or embankment 0.9</u>
<u>Average push</u> gradient: Average site	<u>0 %</u> 6,400 feet
<u>altitude:</u>	
Material weight:	2,550 lbs/LCY
<u>Weight</u> <u>description:</u>	User Provided

Job Condition Correction Factor Source

too condition concette		
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	0.900	(CAT HB))
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	1.000	<u>(AVG.)</u>
Job efficiency:	<u>0.830</u>	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	<u>1.000</u>	<u>(CAT HB)</u>
<u>Altitude:</u>	<u>1.000</u>	<u>(CAT HB)</u>
Material Weight:	<u>0.902</u>	<u>(CAT HB)</u>
<u>Blade type:</u>	1.000	<u>(PAT)</u>
Net correction:	0.4548	
Adjusted unit production:	<u>565.41 LCY/hr</u>	

Adjusted fleet production:

565.41 LCY/hr

JOB TIME AND COST

Fleet size:	1 Dozer(s)		
Unit cost:	\$0.872/LCY		
	- // 11		

<u>Total job time:</u>	5.66 Hours
Total job cost:	\$2,788

	Task description:	<u></u> <u>R</u>	egrade Ir	ndustrial V	Vaste Pond	
Site:	<u>Trapper M</u>	ine Permit Actio	<u>on:</u>	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
<u>P</u>	ROJECT IDENTI	FICATION				
	Task #: 084 Date: 4/19/20 User: RAF	025 County:	<u>Colorad</u> <u>Moffa</u>		Abbreviation: Filename:	<u>None</u> <u>PR12 F</u>
	Agency or organization	ation name:		DRN	<u>MS</u>	
H	OURLY EQUIPM	<u>1ENT COST</u>				
	<u>Basic</u> Machine:	<u>Cat D10T - 10SU</u>				
	Horsepower:	574				
	Blade Type:	Semi-Universal				
	Attachment:	NA				
	Shift Basis:	1 per day				
	Data Source:	(CRG)				
-						
<u>C</u>	ost Breakdown:				,	
	Olin		<u> </u>	tilization %	<u>0</u>	
	<u>Ownership</u>	<u>\$257.39</u>		NA		
	<u>Cost/Hour:</u>					
	<u>Operating</u> Cost/Hour:	<u>\$196.93</u>		<u>100</u>		
	<u>Ripper own.</u>					
	<u>Cost/Hour:</u>	<u>\$0.00</u>		<u>NA</u>		
	Ripper op.					
	Cost/Hour:	<u>\$0.00</u>		<u>0</u>		
	Operator	¢20.50				
	Cost/Hour:	<u>\$38.59</u>		NA		
	<u>Total unit</u>	<u>\$492.91</u>				
	Cost/Hour:					
	Total Fleet	<u>\$492.91</u>				
	Cost/Hour:					

MATERIAL QUANTITIES

<u>Initial</u> <u>Volume:</u> <u>3,27</u>	
Swell factor: 1.00	<u>0</u>
$\frac{\text{Loose}}{\text{volume:}} \qquad \underline{3,27}$	<u>9 LCY</u>
Source of estimated volume:	Appendix A TableA-7.2
Source of estimated	swell Operator Estimate
factor:	
HOURLY PRODUC	TION
Average push distand Unadjusted hourly production:	<u>150 feet</u> <u>1,243.2 LCY/hr</u>
Materials consistency description:	<u>Compacted fill or embankment 0.9</u>
<u>Average push</u> gradient:	<u>0 %</u>
Average site	<u>6,400 feet</u>
<u>altitude:</u>	
Material weight:	2,550 lbs/LCY
Weight	User Provided
description:	

Job Condition Correction Factor Source

too condition contectio		
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	0.900	(CAT HB))
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
<u>Visibility:</u>	<u>1.000</u>	<u>(AVG.)</u>
Job efficiency:	<u>0.830</u>	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
<u>Altitude:</u>	1.000	(CAT HB)
Material Weight:	<u>0.902</u>	<u>(CAT HB)</u>
<u>Blade type:</u>	1.000	<u>(PAT)</u>
Net correction:	0.4548	
<u>Adjusted unit</u> production:	<u>565.41 LCY/hr</u>	

Adjusted fleet production:

565.41 LCY/hr

JOB TIME AND COST

Fleet size:	<u>1 Dozer(s)</u>		
<u>Unit cost:</u>	\$0.872/LCY		
Tradal inh diman	5 90 11		

<u>Total job time:</u>	5.80 Hours
Total job cost:	<u>\$2,859</u>

Trapper Mine			t Action: PR12	Permit/Job	#: <u>C1981010</u>
	<u>T IDENTIFI(</u>		Calanala		Nama
Task #:	085	State:	Colorado	Abbreviation:	None
Date:	4/19/2025	County:	Moffat	Filename:	PR12 F
User:	RAR				

Basic Machine:	Cat D10T - 10SU
Horsepower:	574
Blade Type:	Semi-Universal
Attachment:	3-shank ripper
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

Cost Breakdown:		
		Utilization %
Ownership Cost/Hour:	\$257.39	NA
Operating Cost/Hour:	\$196.93	100
Ripper own. Cost/Hour:	\$25.02	NA
Ripper op. Cost/Hour:	\$5.87	50
Operator Cost/Hour:	\$38.59	NA
Total unit	\$523.79	
Cost/Hour: Total Fleet Cost/Hour:	\$523.79	

MATERIAL QUANTITIES

Initial	9,555
Volume:	9,555
Swell factor:	1.000

Loose volume:	9,555 LCY	7
Source of estivolume:	imated	A-7.2
Source of estifactor:	mated swell	Cat Handbook

HOURLY PRODUCTION

Average push distanc Unadjusted hourly production:		eet 8.7 LCY/hr	_
Materials consistency description:	(Compacted fill or	embankment 0.9
Average push gradient: Average site altitude:	0 % 7,500 feet	t	
Material weight:	2,550 lbs/	LCY	
Weight description:	Earth - Di	ry packed	
Job Condition Correcti	on Factor	Source	
Operator Skill:	0.75		(AVG.)
Material consistency:	0.90		(CAT HB))
Dozing method:	1.00		(GEN.)
Visibility:	1.00	0	(AVG.)
Job efficiency:	0.83	0	(1 SHIFT/DAY)
Spoil pile:	0.90	0	(SSD-FC)
Push gradient:	1.00	0	(CAT HB)
Altitude:	1.00	0	(CAT HB)
Material Weight:	0.90	2	(CAT HB)
Blade type:	1.00	0	(PAT)
Net correction:	0.45	48	
Adjusted unit production:	1,250.1	1 LCY/hr	
Adjusted fleet production:	1250.11	LCY/hr	

JOB TIME AND COST

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.419/LCY	_
Unit cost:	\$0.419/LCY	

Total job time:7.64 HoursTotal job cost:\$4,004

Trapp	er Mine Permit Action:		t Action: PR12	Permit/Job	#: <u>C1981010</u>
PROJEC'	T IDENTIFIC.	ATION			
Task #: Date: User:	086 4/19/2025 RAR	_ State: _ County:	Colorado Moffat	Abbreviation: Filename:	None PR12 F

Machine:	Cat D101 - 10SU
Horsepower:	574
Blade Type:	Semi-Universal
Attachment:	3-shank ripper
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

Cost Breakdown:		
		Utilization %
Ownership Cost/Hour:	\$257.39	NA
Operating Cost/Hour:	\$196.93	100
Ripper own. Cost/Hour:	\$25.02	NA
Ripper op. Cost/Hour:	\$5.87	50
Operator Cost/Hour:	\$38.59	NA
Total unit Cost/Hour:	\$523.79	
Total Fleet Cost/Hour:	\$523.79	

MATERIAL QUANTITIES

Initial	92,093
Volume:	92,095
Swell factor:	1.000

Loose volume:	92,093 LC	Y		
Source of estim volume:	nated	A-7.2		
Source of estimated swell factor:		Cat Handbook	ζ.	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:	e: 50 feet 2,748.7 LCY/hr	
Materials consistency description:	Compacted fill or	embankment 0.9
Average push gradient:	0 % 7,500 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correction	on Factor Source	
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:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4548	
Adjusted unit production:	1,250.11 LCY/hr	
Adjusted fleet production:	1250.11 LCY/hr	

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.419/LCY

 Total job time:
 73.67 Hours

 Total job cost:
 \$38,587

Task descri	ption: F	Regrade W.	Buzzard #	4 Impoundment	t	
e: <u>Trapper</u>	Mine	Permi	t Action:	PR12	Permit/Job	o#: <u>C1981010</u>
PROJECT	<u>IDENTIFIC</u>	ATION				
	087	State:	Colorad	0	Abbreviation:	None
	4/19/2025	County:	Moffat		Filename:	PR12 F
User:	RAR					
Basic Machine:	Cat D	10T - 10SU				
Horsepowe	er: 574			_		
Blade Type	-	Universal		_		
Attachmen		k ripper		_		
Shift Basis				_		
Data Sourc	e: (CRG)			_		
Cost Breakd	<u>own</u> :					

Ownership Cost/Hour:	\$257.39	NA
Operating Cost/Hour:	\$196.93	100
Ripper own. Cost/Hour:	\$25.02	NA
Ripper op. Cost/Hour:	\$5.87	50
Operator Cost/Hour:	\$38.59	NA
Total unit Cost/Hour:	\$523.79	
Total Fleet Cost/Hour:	\$523.79	

MATERIAL QUANTITIES

Initial	4,923
Volume:	4,923
Swell factor:	1.000

Loose volume:	4,923 LCY		
Source of estin volume:	nated	A-7.2	
Source of estimated swell factor:		Cat Handbook	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:	e: _	80 feet 2,028.0 LCY/hr	_
Materials consistency description:		Compacted fill or e	embankment 0.9
Average push gradient:	0 %		
Average site altitude:	7,50	0 feet	
Material weight:	2,55	0 lbs/LCY	
Weight description:	Earth	n - Dry packed	
Job Condition Correction	on Fa	ctor Source	
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:		0.900	(SSD-FC)
Push gradient:	_	1.000	(CAT HB)
Altitude:	_	1.000	(CAT HB)
Material Weight:	_	0.902	(CAT HB)
Blade type:	_	1.000	(PAT)
Net correction:	_	0.4548	
Adjusted unit production:	92	2.33 LCY/hr	
Adjusted fleet production:	92	2.33 LCY/hr	

_

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.568/LCY

Total job time:5.34 HoursTotal job cost:\$2,796

Task description	on: Regrade E. Buzzard	#3 Impoundment		
Site: Trapper Mi	ine Permit Action:	PR12	Permit/Job	#: <u>C1981010</u>
PROJECT ID	ENTIFICATION			
Task 088 #:	State: Colorad	o At	breviatio n:	None
Date: 4/19	2/2025 County Moffat	Η	Filename:	PR12 F
User: RAI			-	
Agency of	name: DRMS			
HOURLY EQ	UIPMENT COST			
Basic Machine:	Cat D10T - 10SU	_		
Horsepower :	574			
	Semi-Universal	_		
	3-shank ripper	_		
Data	1 per day	_		
Source:	(CRG)	_		
Cost Breakdow	<u>'n</u> :			
Orymonal		<u>Utilization %</u>		
Ownersł Cost/Ho	$ \sqrt{3}/30$	NA	_	
Operati Cost/Ho		100		
Ripper ov Cost/Ho	\$ /5 (1)	NA	_	
Ripper o Cost/Ho		50		
Opera Cost/Ho		NA	_	

Total unit	\$523.79	
Cost/Hour:		
Total Fleet	\$523.79	
Cost/Hour:		

MATERIAL QUANTITIES

Initial Volume:	6,414
Swell factor:	1.000
Loose volume:	6,414 LCY
Source of estivolume:	imated A-7.2
Source of esti swell factor:	imated Cat Handbook
HOURLY PR	ODUCTION
Average push distance:	n 70 feet
Unadjusted he production:	ourly 2,253.9 LCY/hr
Materials con description:	compacted fill or embankment 0.9
Average push gradient:	n 0 %
Average site altitude:	7,500 feet
Material weig	ght: _2,550 lbs/LCY
Weight description:	Earth - Dry packed

Job Condition Correctio	Source	
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:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4548

Adjusted unit production: Adjusted fleet	1,025.07 LCY/hr			
Adjusted fleet production:	1025.07 LCY/hr			

JOB TIME AND COST

Fleet size:	1 Dozer(s)		
Unit cost:	\$0.511/LCY		

Total job time:6.26 HoursTotal job cost:\$3,277

	Task description	<u>: R</u>	egrade Dive	ersions			
Site:	Trapper Min	<u>e</u>	Permi	t Action:	<u>PR12</u>	Permit/Job	<u>#: C1981010</u>
P	PROJECT IDEN	NTIFICA	ATION				
	Task #: 089 Date: 4/19 User: RAR	/2025	<u>State:</u> <u>County:</u>	<u>Colorado</u> <u>Moffat</u>	2	Abbreviation: Filename:	None PR12 F
	Agency or organ	nization r	name: D	<u>RMS</u>			
H	HOURLY EQU	IPMEN7	COST				
	Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	310					
<u>C</u>	Cost Breakdown:			1			
	<u>Ownership</u> Cost/Hour:	<u>\$1</u>	73.32		<u>Utilization %</u> <u>NA</u>		
	<u>Operating</u> Cost/Hour:	<u>\$1</u>	<u>09.71</u>		<u>100</u>		
	Ripper own. Cost/Hour:	\$1	4.53		NA		
	<u>Ripper op.</u> Cost/Hour:	<u>\$3</u>	.98		<u>50</u>		
	<u>Operator</u> <u>Cost/Hour:</u>	<u>\$3</u>	<u>8.59</u>		<u>NA</u>		
	<u>Total unit</u> <u>Cost/Hour:</u> <u>Total Fleet</u>		40.12 40.12				
	Cost/Hour:						

MATERIAL QUANTITIES

<u>Initial</u> Volume:	<u>33,374</u>
Swell factor:	<u>1.000</u>

Loose volume: 33,374 LC	<u>Y</u>
Source of estimated volume:	<u>A-8.2</u>
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:	e: <u>50 feet</u> <u>1,400.0 LCY/hr</u>	
Materials consistency description:	Compacted fil	l or embankment 0.9
gradient:	<u>0 %</u> 7,500 feet	
Material weight:	2,650 lbs/LCY	
Weight description:	Decomposed rock - 259	% Rock, 75% Earth
Job Condition Correction	on Factor Source	
Operator Skill:	1.000	(EXCL.)
Material consistency:	0.900	(CAT HB))
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>
Job efficiency:	<u>0.830</u>	(1 SHIFT/DAY)
Spoil pile:	<u>0.900</u>	(SSD-FC)
Push gradient:	<u>1.000</u>	<u>(CAT HB)</u>
<u>Altitude:</u>	<u>1.000</u>	<u>(CAT HB)</u>
Material Weight:	<u>0.868</u>	(CAT HB)
<u>Blade type:</u>	<u>1.000</u>	<u>(PAT)</u>
Net correction:	0.5836	
<u>Adjusted unit</u> production:	817.04 LCY/hr	
Adjusted fleet production:	817.04 LCY/hr	

JOB TIME AND COST

Fleet size:	<u>1 Dozer(s)</u>
Unit cost:	\$0.416/LCY

Total job time:	40.85 Hours
Total job cost:	<u>\$13,893</u>

Task description	n: Re	grade Dive	ersions			
e: Trapper Min	e	Pern	nit Action: _	PR12	Permit/Job	o#: <u>C1981010</u>
PROJECT IDE	NTIFICA	TION				
Task #: 0891	MR228	State:	Colorado		Abbreviation:	None
	/2025	County:	Moffat		Filename:	PR12 F
User: RAI						
Agency or org	ganization	name: D	RMS			
HOURLY EQU	IPMENT	COST				
Basic Machine:	Cat D87	T - 8SU				
	310					
Horsepower: Blade Type:	Semi-U	niversal				
Attachment:	3-shank					
Shift Basis:	1 per da					
Data Source:	(CRG)	y				
Cost Breakdown:						
<u>Cost Broakdown</u>				Utilization %		
Owners	-		\$173.32	NA		
Cost/H			¢170.02			
Opera			\$109.71	100		
Cost/H						
Ripper o Cost/H			\$14.53	NA		
Ripper	-					
Cost/H	-		\$3.98	50		
Oper						
Cost/H			\$38.59	NA		
Total unit	\$34	0.12				
Cost/Hour:						
Total Fleet	\$34	0.12				
Cost/Hour:						
MATERIAL OF		DQ				
MATERIAL QU	JANIIII	<u> </u>				
Initial	532					
Volume:						
Swell factor:	1.000					
Loose volume:	532 LCY	-				
-						
Source of estim volume:	ated	A-8.2				

Source of estimated s	well	Cat Handbook	
factor: HOURLY PRODUCT	ΓΙΟΝ	<u> </u>	
Average push distanc Unadjusted hourly production:		50 feet 1,400.0 LCY/hr	
Materials consistency description:		Compacted fill or	embankment 0.9
Average push gradient: Average site	0 %	00 feet	
altitude:	7,50		
Material weight:	2,55	50 lbs/LCY	
Weight description:	Eart	h - Dry packed	
Job Condition Correcti	on E	actor	Source
Job Condition Correcti Operator Sk		0.750	Source (AVG.)
Material consisten	-	0.900	(CAT HB))
Dozing meth		1.000	(GEN.)
Visibil	-	1.000	(AVG.)
Job efficien		0.830	(1 SHIFT/DAY)
Spoil p	•	0.900	(SSD-FC)
Push gradie	-	1.000	(CAT HB)
Altitu	-	1.000	(CAT HB)
Material Weig	t:	0.902	(CAT HB)
Blade ty	•	1.000	(PAT)
Net correcti	on:	0.4548	
Adjusted unit production:	63	6.72 LCY/hr	
Adjusted fleet production:	63	6.72 LCY/hr	
JOB TIME AND COS	<u>ST</u>		
Fleet size: 1	Doz	er(s)	
		4/LCY	
Total job time: _0) .84 I	Hours	

Total job cost: \$284

SCRAPER TEAM WORK

Task desc	ription: _	Replace Tops	oil on Ash Pits (ASH1)		
Site: Trappe	er Mine	Permit	Action: PR12	Permit/Job	o#: <u>C1981010</u>
PROJECT	<u>IDENTIFIC</u>	ATION			
Task #:	090	State:	Colorado	Abbreviation:	None
Date:	4/19/2025	County:	Moffat	Filename:	090
User:	RAR			-	
HOURLY	r organization EQUIPMEN	TCOSTSh	RMS ift basis: <u>1 per day</u>		
-Scraper:		-P	Cat 637G w/push-pull		
-Dozer:			NA		

	1171
Support Equipment -Load Area:	Cat D10T - 10SU
-Dump Area:	Cat D10T - 10SU
Road Maintenance – Motor Grader:	CAT 16M
-Water Truck:	Water Tanker, 2,500 Gal.

Cost Breakdown: Scraper Work Team		upport Equipm	ent Mainte	nance Equipm	ent	
	Scraper	Dozer	Load Area	Dump	Motor	Water
				Area	Grader	Truck
% Utilization-machine:	100	NA	50	50	50	60
Ownership cost/hour:	\$281.32	NA	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$319.35	NA	\$98.47	\$98.47	\$59.82	\$13.47
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	\$38.59	\$38.59	\$27.76	\$21.12
Unit Subtotals:	\$631.57	NA	\$394.44	\$394.44	\$266.97	\$46.24
Number of Units:	8	0	1	1	1	1
Group Subtotals:	Work:	\$5,052.56	Support:	\$788.88	Maint:	\$313.21

CCY

LCY

Total work team cost/hour: \$6,154.65

MATERIAL QUANTITIES

Initial volume:	11,254
Loose volume:	11,254

Swell factor: 1.000

Source of estimated volume: Source of estimated swell factor: Appendix A, Table A-9.1 Cat Handbook

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight: Material description:	1,600 lbs/LCY Top Soil	Struck Volume: Heaped Volume:	<u>24.00</u> 34.00	LCY LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: <u>Rutted dirt</u>, little maintenance, no water, 1" tire penetration 4.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	1978.00	10.00	4.00	14.00	657	3.02

Haul Time:

3.02 minutes

Return Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel
	(Ft)	(%)	(%)	(%)	(fpm)	Time (min)
1	1978.00	-10.00	4.00	-6.00	2972	0.72

Return Time: 0.72 minutes

Total Scrape	r team cycle tii	me:		5.34	minutes
Adjusted for	job conditions	:		540.90	LCY/Hour
Selected Nur	nber of Scrape	rs:		8	Scraper(s)
Adjusted sing	gle scraper teai	n (unit) hou	urly production:	2,163.60	LCY/Hour
Adjusted mu	ltiple scraper to	eam (fleet)	hourly production:	2,163.60	LCY/Hour
Unadjusted un Optimal Numł push dozer:	-		551.69 LCY/Hour		
JOB TIME AN	D COST				
Fleet size:	1	Team(s)	Total job time:	5.20	Hours

Unit cost: \$2.845 /LCY Total job cost: \$32,014	Unit cost: \$	2.845	/LCY	Total job cost:	\$32,014
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SCRAPER TEAM WORK

,	Task desc	ription: _]	Replace Tops	oil on Ash Pits (ASH2)		
Site:	Trappe	r Mine	Permit	Action: PR12	Permit/Job	o#: <u>C1981010</u>
<u>P</u>	ROJECI	<u>IDENTIFIC</u>	CATION			
	Task #:	090A	State:	Colorado	Abbreviation:	None
	Date: User:	4/19/2025 RAR	County:	Moffat	_ Filename:	_90A
	Agency o	r organization	name: DI	RMS		
	0.	EQUIPMEN		ift basis: <u>1 per day</u>		
	Equ	ipment Descr	iption			
_	-Scraper:			Cat 637G w/push-pull		

NA
Cat D10T - 10SU
Cat D10T - 10SU
CAT 16M
Water Tanker, 2,500 Gal.

Cost Breakdown	upport Equipm	ent Mainter	nance Equipm	ent		
	Scraper	Dozer	Load Area	Dump	Motor	Water
				Area	Grader	Truck
% Utilization-machine:	100	NA	50	50	50	60
Ownership cost/hour:	\$281.32	NA	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$319.35	NA	\$98.47	\$98.47	\$59.82	\$13.47
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	\$38.59	\$38.59	\$27.76	\$21.12
Unit Subtotals:	\$631.57	NA	\$394.44	\$394.44	\$266.97	\$46.24
Number of Units:	8	0	1	1	1	1
Group Subtotals:	Work:	\$5,052.56	Support:	\$788.88	Maint:	\$313.21

Total work team cost/hour: <u>\$6,154.65</u>

MATERIAL QUANTITIES

Initial volume:	60,000	CCY	Swell factor:	1.000
Loose volume:	60,000	LCY		
~				

Source of estimated volume: Source of estimated swell factor: Appendix A, Table A-10.1 Cat Handbook

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight: Material description:	1,600 lbs/LCY Top Soil	Struck Volume: Heaped Volume:	<u>24.00</u> 34.00	LCY LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 1" tire penetration 4.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	711.00	-12.00	4.00	-8.00	1628	0.56

Haul Time:

0.56 minutes

Return Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel
	(Ft)	(%)	(%)	(%)	(fpm)	Time (min)
1	711.00	-12.00	4.00	-8.00	2972	0.30

Return Time: **0.30** minutes

Total Scraper team cycle time:	2.46	minutes
Adjusted for job conditions:	1,174.15	LCY/Hour
Selected Number of Scrapers:	8	Scraper(s)
Adjusted single scraper team (unit) hourly production:	4,696.59	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	4,696.59	LCY/Hour

Unadjusted unit production/hour: Optimal Number of Scrapers per	1,414.63	LCY/Hour	
push dozer: JOB TIME AND COST			

Fleet size:	1	Team(s)	Total job time:	12.78	Hours
Unit cost:	\$1.310	/LCY	Total job cost:	\$78,627	

TRUCK/LOADER TEAM WORK

,	Task description:Replace Topsoil on Ash Pits (A92-4 to Pit)						
Site:	Trappe	r Mine	Permit	Action:	PR12	Permit/Job	#: <u>C1981010</u>
<u>P</u>	ROJECI	<u>IDENTIF</u>	ICATION				
	Task #: Date: User:	090B 4/19/2025 RAR	State: County:	Colorado Moffat)	Abbreviation: Filename:	None 090B
	Agency o	r organizatio	on name: DI	RMS			
<u>H</u>	IOURLY	EQUIPME	NT COST S	hift basis:	<u>1 per day</u>		
_	Equ	ipment Des	cription				
	Truck Loa	ader Team -'	Truck:	Cat 77'	7F		

Cat 385C L 18'-1" Stick
Cat D10T - 10SU
Cat D10T - 10SU
CAT 16M
Water Tanker, 2,500 Gal.

<u>Cost Breakdown</u>: Truck/Loader Team Support Equipment Maintenance Equipment

	Truck	Excavator	Load Area	Dump Area	Motor Grader	Water Truck
% Utilization- machine:	100	100	25	25	25	50
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23
%Utilization- riper:	NA	0	15	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$22.07
Unit Subtotals:	\$377.15	\$386.10	\$347.11	\$345.21	\$237.06	\$44.95
Number of Units:	4	1	1	1	1	1
Group Subtotals:	Work:	\$1,894.70	Support:	\$692.32	Maint:	\$282.01

Total work team cost/hour: <u>\$2,869.03</u>

MATERIAL QUANTITIES

Net Correction:	0.830	0.830			
Job Efficiency:	0.830	0.830	(CAT H	іБ)	
Altitude Adj:	1.000	1.000	(CAT H	,	
	Truck	Loader	Source		
[1				
Job Condition Corr	rections: Site A	ltitude (ft.):	<u>6400</u> feet		
Aujusieu Capaelly.	0.033				
Adjusted Capacity:		LCY		100-120/	
Bucket Fill Factor:	1.100		- rock/dirt mixtur	res (100-120%	6) 1 100
Rated Capacity:	7.850	ICY	heaped)		
-		Buck	et Size Class:		Large
Loading Tool Capaci	<u>ity</u>				
Final Truck Volume	e Based on Nur	nber of Loa	der Passes:	77.72	LCY
Adjusted Volume:	78.80	LCY			
Average Volume:	69.70	LCY			
Heaped Volume:	78.80	LCY			
Struck Volume:	60.60	LCY			
Truck Bed (volume)					
Payload Capacity:	125.00		LCY		
Rated Payload:	200,000		Pounds		
Description:	Top Soil		D 1		
Material weight:			Pounds/LCY		
Truck Payload (weig					
Truck Capacity:					
HOURLY PRODU	<u>CTION</u>				
Total Cost.		\$0.00			
Total Cost:	_0st.	\$0.00			
Source of estimated Material Purchase (\$0.00	ndbook		
Source of estimated		-	Appendix A Tal	ble A-3.1	
				1 4 0 1	
	115,215	LCY		1.000	-
Initial volume:	115,215	CCY	Swell factor:	1.000	

Number of Loading Tool Passes Required
to Fill Truck:9passes

Loading Tool Cycle Time:

Excavators and Front Shovels:

Rating: Selected Value within this Basic Rating:		ing: <u>A</u>	ABOVE AVERAGE AVERAGE					
Track Loaders – Mater	rial Description	n:						
Cycle Time Elements (r	nin.):							
Load: NA	Maneuver:	N	IA	Dump:	_	0.100)	
Wheel and Track Load dump, maneuver):	lers - Unadjust	ed Basic L	loader Cyc	ele Time	(load,	NA	mii	nutes
Cycle Time Factors					Factor (mi	n.)	Source	
Material:	NA				NA	/	(Cat HB)	
Stockpile:	NA				NA		(Cat HB)	
Truck Ownership:	NA				NA		(Cat HB)	
Operation:	NA				NA		(Cat HB)	
Dump Target:	NA				NA		(Cat HB)	
	Net Cycle Time Adjustment:				NA		minutes	
	Adjusted Lo	Adjusted Loader Cycle Time:			0.302		minutes	
Net Load		Time per Truck:		-	2.516		minutes	
<u>Truck Cycle Time:</u>								
	0.80	Minutes	Adjusted	l for site	altitude:	0.	.800	Minutes
Fruck Exchange Time:	0.80	Minutes Minutes	Adjustec Adjustec				.800	Minutes Minutes
<u>Truck Cycle Time:</u> Fruck Exchange Time: Fruck Load Time: Fruck Maneuver and			5	l for site	altitude:	2.		

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time
		~ /				(min)
1	5147.00	10.00	3.00	13.00	620	8.345

Haul Time: **8.345** minutes

	Return R	1		~ .						
	Seg #	Hau (Ft)	al Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)		
	1	514	7.00	-10.00	3.00	-7.00	3450	1.538		
				Return Time Total Truck		::	1.538 14.399		ninutes ninutes	
Loadi Produ Truck Produ	Unit	init	<u>1,406.18</u> 323.83	LCY/Ho	5	ted for job e ted for job e		<u>1,167</u> 268.7		LCY/Hour
					5	·	-			
Optin Truck	nal No. of s:	-	4	Truck(s)	Select	ed Number	of Trucks:	4		Fruck(s)
	Adjus	ted si	ngle truck/lo	eam producti ader team pr /loader team	oduction:		1,075. 1,075. 1,075.	13	LCY/Ho LCY/Ho LCY/Ho	ur
	JOB TIN	ME A	ND COST							
	Fleet siz	ze:	1	Team(s)	Total jo	ob time:	107.16		Hours	
	Unit co	st:	\$2.669	/LCY	Total jo	ob cost:	\$307,455		_	

TRUCK/LOADER TEAM WORK

Task description: <u>Replace Topso</u>	il on D/E Pits (Truc	<u>ek/Excavator)</u>	
Site: Trapper Mine Permit A	Action: <u>PR12</u>	Permit/Job	<u>#: C1981010</u>
PROJECT IDENTIFICATION			
	<u>Colorado</u> Moffat	Abbreviation: Filename:	<u>None</u> 091
Agency or organization name: <u>DRI</u> HOURLY EQUIPMENT COST Sh	<u>MS</u> ift basis: 1 per day		
Equipment Description			
Truck Loader Team -Truck:	<u>Cat 777F</u>		
-Loader:	Cat 385C L 18'-1	<u>"Stick</u>	
Support Equipment -Load Area:	<u>Cat D10T - 10SU</u>		
-Dump Area:	<u>Cat D10T - 10SU</u>		
Road Maintenance – Motor Grader:	<u>CAT 16M</u>		

Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment

Water Tanker, 2,500 Gal.

	Truck	Excavator	Load Area	Dump Area	Motor Grader	Water Truck
<u>%Utilization-</u> machine:	<u>100</u>	<u>100</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>50</u>
<u>Ownership</u> cost/hour:	<u>\$199.47</u>	<u>\$220.92</u>	<u>\$257.39</u>	<u>\$257.39</u>	<u>\$179.39</u>	<u>\$11.65</u>
Operating cost/hour:	<u>\$152.44</u>	<u>\$131.31</u>	<u>\$49.23</u>	<u>\$49.23</u>	<u>\$29.91</u>	<u>\$11.23</u>
<u>%Utilization-</u> riper:	NA	<u>0</u>	<u>15</u>	NA	NA	NA
Ripper own. cost/hour:	<u>NA</u>	<u>\$0.00</u>	<u>\$20.05</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>Ripper op.</u> <u>cost/hour:</u>	NA	<u>\$0.00</u>	<u>\$1.90</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Operator cost/hour:	<u>\$25.24</u>	<u>\$33.87</u>	<u>\$38.59</u>	<u>\$38.59</u>	<u>\$27.76</u>	<u>\$22.07</u>
Unit Subtotals:	<u>\$377.15</u>	<u>\$386.10</u>	<u>\$347.11</u>	<u>\$345.21</u>	<u>\$237.06</u>	<u>\$44.95</u>
Number of Units:	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Group Subtotals:	Work:	<u>\$1,517.55</u>	Support:	<u>\$692.32</u>	Maint:	<u>\$282.01</u>

Total work team cost/hour: \$2,491.88

-Water Truck:

MATERIAL QUANTITIES

Initial volume: <u>470,723</u>	<u>CCY</u> <u>Swell factor:</u> <u>1.000</u>
Loose volume: 470,723	LCY
Source of estimated volume:	TR124 Appendix A Table A-3.1
Source of estimated swell factor:	Cat Handbook
Material Purchase Cost:	\$0.00
Total Cost:	\$0.00

HOURLY PRODUCTION

Truck Capacity: Truck Payload (weight) Basic

Truck Payload (weight) E	<u>Basis:</u>	
Material weight:	<u>1,600</u>	Pounds/LCY
Description:	<u>Top Soil</u>	
Rated Payload:	200,000	Pounds
Payload Capacity:	125.00	LCY

Truck Bed (volume) Basis:

Struck Volume:	<u>60.60</u>	LCY
Heaped Volume:	<u>78.80</u>	LCY
Average Volume:	<u>69.70</u>	LCY
Adjusted Volume:	<u>78.80</u>	<u>LCY</u>

Final Truck Volume Based on Number of Loader Passes:

<u>77.72</u> <u>LCY</u>

Loading Tool Capacity

		Bucket Size Class:	Large
Rated Capacity:	7.850	LCY (heaped)	
Bucket Fill Factor:	<u>1.100</u>	Other - rock/dirt mixtures	(100-120%) 1.100
Adjusted Capacity:	<u>8.635</u>	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	<u>0.830</u>	<u>0.830</u>	

Number of Loading Tool Passes Required to Fill Truck:

passes

<u>9</u>

Loading Tool Cycle Time:

Excavators and Front Shovels:

Machine Cycle Time vs. Jo Selected Value within this			<u>OVE AVERAGE</u> ERAGE			
<u> Track Loaders – Material E</u>	Description:					
Cycle Time Elements (min.)	<u>:</u>					
Load: <u>NA</u>	Maneuver:	<u>NA</u>	Dump:	<u>0.10</u>	<u>)0</u>	
Wheel and Track Loaders - maneuver):	Unadjusted Basic	Loader Cy	cle Time (load, dum	n <u>p.</u> <u>NA</u>	<u>1</u>	<u>minutes</u>
Cycle Time Factors				Factor (min.)	Source	
Material:	NA			NA	(Cat HB))
Stockpile:	NA			NA	(Cat HB)	<u> </u>
Truck Ownership:	NA			NA	(Cat HB)	<u>)</u>
Operation:	NA			NA	(Cat HB)	<u>)</u>
Dump Target:	NA			NA	(Cat HB)	<u>)</u>
	Net Cycle Time	Adjustment	<u>t:</u>	<u>NA</u>	minutes	
	Adjusted Loader	Cycle Tim	<u>e:</u>	<u>0.302</u>	minutes	
	Net Load Time p	er Truck:	-	2.516	minutes	
Truck Cycle Time:						
Truck Exchange Time:	<u>0.80</u>	Minutes	Adjusted for site al	titude:	<u>0.800</u>	Minut
Truck Load Time:	2.516	Minutes	Adjusted for site al	titude:	2.516	Minut
Truck Maneuver and Dump		Minutes	Adjusted for site al		1.200	Minut
Time:						

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

|--|

$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	
Image:	
1 4788.00-8.60 3.00 -5.60 1870 $\overline{2.695}$ Haul Time: 2.695 minutesReturn Route:Seg #Haul DistanceGrade (%)Roll. Res (%)Total Res (%)Velocity (fpm)Travel Time (min)	
Haul Time:2.695minutesReturn Route:Seg #Haul DistanceGrade (%)Roll. ResTotal ResVelocityTravel(Ft)(%)(%)(%)(min)Time(min)	
Return Route:Seg #Haul Distance (Ft)Grade (%)Roll. Res (%)Total Res (%)Velocity (fpm)Travel Time (min)	
Return Route:Seg #Haul Distance (Ft)Grade (%)Roll. Res (%)Total Res (%)Velocity (fpm)Travel Time (min)	
Seg #Haul Distance (Ft)Grade (%)Roll. Res (%)Total Res (%)Velocity (fpm)Travel Time (min)	
(Ft) (%) (fpm) Time (min)	
$1 \frac{4788.00}{8.60} \frac{8.60}{3.00} \frac{3.00}{11.60} \frac{1628}{1628} \frac{3.064}{3.064}$	
Return Time:3.064minutesTotal Truck Cycle Time:10.275minutes	
Total Truck Cycle Time: <u>10.275</u> minutes	
Loading Tool unit	
Production 1,406.18 LCY/Hour Adjusted for job efficiency: 1,167.13	LCY/Hour
Truck Unit Production	
453.81 LCY/Hour Adjusted for job efficiency: 376.66	LCY/Hour
Optimal No. of3Truck(s)Selected Number of Trucks:3	Truck(s)
Trucks:	
Adjusted hourly truck team production: <u>1,129.99</u> LCY/	/Hour
Adjusted single truck/loader team production: <u>1,129.99</u> LCY/	/Hour
Adjusted multiple truck/loader team production: 1,129.99 LCY/	/Hour
JOB TIME AND COST	
Fleet size: $\underline{1}$ Team(s)Total job time: $\underline{416.57}$ Ho	ours
Unit cost: \$2.205 /LCY Total job cost: \$1,038,052	

SCRAPER TEAM WORK

Trappe	r Mine	Permit Act	ion: PR12	Permit/Job#: C1981	010
ROJECT	<u> IDENTIFIC</u>	CATION			
Task #:	091A	State:	Colorado	Abbreviation:	None
	4/10/2025	County:	Moffat	Filename:	091A
Date:	4/19/2025	County.	Monut	i nonumo.	

HOURLY EQUIPMENT COSTShift basis: <u>1 per day</u>

Equipment Description	
-Scraper:	Cat 637G w/push-pull
-Dozer:	NA
Support Equipment -Load Area:	Cat D10T - 10SU
-Dump Area:	OBSOLETE - Cat D10T - 10U
Road Maintenance – Motor Grader:	CAT 16M
-Water Truck:	Water Tanker, 2,500 Gal.

Cost Breakdown:	Scraper Work Team	Support Equipment	Maintenance Equipment
-----------------	-------------------	-------------------	-----------------------

	Scraper	Dozer	Load	Dump	Motor	Water
	_		Area	Area	Grader	Truck
%Utilization-machine:	100	NA	50	50	50	60
Ownership cost/hour:	\$281.32	NA	\$257.39	\$10.00	\$179.39	\$11.65
Operating cost/hour:	\$319.35	NA	\$98.47	\$5.00	\$59.82	\$13.47
% Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	\$38.59	\$38.59	\$27.76	\$0.00
Unit Subtotals:	\$631.57	NA	\$394.44	\$53.59	\$266.97	\$25.12
Number of Units:	8	0	1	1	1	1
Group Subtotals:	Work:	\$5,052.56	Support:	\$448.03	Maint:	\$292.09

Total work team cost/hour: \$5,792.68

MATERIAL QUANTITIES

Initial volume: Loose volume:	62,216 62,216	CCY LCY	Swell factor:	1.000	
Source of estimated Source of estimated		Appendi Cat Han	x A, Table 1.4-9 dbook		

HOURLY PRODUCTION

Scraper Bo	wl (volume) Basis:			
Material weight:	1,600 lbs/LCY	Struck Volume:	24.00	LCY
Material description:	Top Soil	Heaped Volume:	34.00	LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 1" tire penetration 4.0</u>

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(F t)	(%)	(%)	(%)	(fpm)	(min)
1	1496.00	0.00	4.00	4.00	2394	0.79

Haul Time: **0.79** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	-3.00	4.00	1.00	2963	0.35
			Return Time:	_0.	35 min	utes
Total S	craper team cycle tim	ne:			2.74	minutes
Adjust	ed for job conditions:				1,054.16	LCY/Hour
Selecte	d Number of Scraper	s:			8	Scraper(s)
Adjust	ed single scraper team	ı (unit) hourly	production:		4,216.64	LCY/Hour
Adjust	ed multiple scraper te	am (fleet) hou	rly production	:	4,216.64	LCY/Hour
Optimal dozer:	ted unit production/ho Number of Scrapers		1,270.07	LCY/Hour		
Optimal dozer:	Number of Scrapers j		 Total job		14.75	Hours

Task description:	Replace To	psoil at L F	Pit K Kı	nob L23-1 to K	Knob		
Site: Trapper Mine	Perm	it Action:	<u>PR12</u>	2	Permit/Job#:	<u>C1981010</u>	_
PROJECT IDENT	TIFICATION						
Task #: 091A Date: 4/25/ User: RAR	2025 Cour		<u>olorado</u> loffat		<u>Abbreviatio</u> <u>Filename:</u>	on: <u>None</u> <u>091 AT</u>	<u>R</u>
Agency or organiz		<u>DRMS</u> Shift basis:	_	ay			
Equipment I -Scraper: -Dozer: Support Equipmer -Dump Area: Road Maintenance -Water Truck:	nt -Load Area:		<u>NA</u> Cat D1(Cat D1(CAT 16	<u>G w/push-pull</u> <u>OT - 10SU</u> <u>OT - 10SU</u> <u>5M</u> Fanker, 2,500 Ga	<u>al.</u>		
Cost Breakdown:	Scraper Work	Team Sur Dozer	oport Eq	uipment Main Load Area	ntenance Equipm Dump Area	ent Motor Grader	Water Truc
<u>% Utilization-machine:</u> <u>Ownership cost/hour:</u> <u>Operating cost/hour:</u> <u>% Utilization-ripper:</u> <u>Ripper own. cost/hour:</u> <u>Operator cost/hour:</u> <u>Operator cost/hour:</u> <u>Unit Subtotals:</u> <u>Number of Units:</u> <u>Group Subtotals:</u> <u>Total work team cost</u> <u>MATERIAL QUA</u> <u>Initial volume:</u> <u>Loose volume:</u>		<u>(</u>	<u>.56</u>	<u>50</u> <u>\$257.39</u> <u>\$98.47</u> <u>NA</u> <u>\$0.00</u> <u>\$0.00</u> <u>\$38.59</u> <u>\$394.44</u> <u>1</u> <u>Support:</u>	<u>50</u> <u>\$257.39</u> <u>\$98.47</u> <u>NA</u> <u>\$0.00</u> <u>\$38.59</u> <u>\$394.44</u> <u>1</u> <u>\$788.88</u>	<u>50</u> <u>\$179.39</u> <u>\$59.82</u> <u>NA</u> <u>\$0.00</u> <u>\$27.76</u> <u>\$266.97</u> <u>1</u> <u>Maint:</u>	<u>60</u> <u>\$11.65</u> <u>\$13.47</u> <u>NA</u> <u>\$0.00</u> <u>\$21.12</u> <u>\$46.24</u> <u>1</u> <u>\$313.21</u>
Source of estimate Source of estimate	ed swell factor:		Appendi Cat Hand	<u>x A, Table A-10</u> lbook).7		
HOURLY PRODU	JCTION						

<u>Material weight:</u> <u>Material</u>	1,600 lbs/LCY Top Soil	<u>Struck Volume:</u> <u>Heaped Volume:</u>	<u>24.00</u> <u>34.00</u>	LCY LCY
description: Rated Payload:	81,600 pounds	<u>Average</u> Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	<u>Adjusted</u> Capacity:	<u>29.00</u>	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00 Minutes</u>
Maneuver and Spread Time:	0.60 Minutes

Job Condition Correction: Site Altitude: 6400 feet

	<u>Scraper</u>	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	<u>0.830</u>	NA	

Travel Time:

Road Condition: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0

Haul Route:

<u>Seg #</u>	Haul Distance	Grade	<u>Roll. Res</u>	<u>Total Res</u>	<u>Velocity</u>	<u>Travel Time</u>
	<u>(Ft)</u>	<u>(%)</u>	<u>(%)</u>	<u>(%)</u>	<u>(fpm)</u>	<u>(min)</u>
2	<u>732.00</u>	<u>-3.40</u>	<u>4.00</u>	<u>0.60</u>	<u>2952</u>	<u>0.41</u>

Haul Time:

<u>0.41</u> <u>minutes</u>

Return Route: Seg # **Haul Distance** Grade **Roll. Res Total Res** Velocity **Travel Time** (%) (%) (%) (fpm) (**Ft**) (min) 732.00 3.40 4.00 7.40 2240 0.46 1

Return Time:

<u>0.46</u>

minutes

<u>Total Scraper team cycle time:</u>	2.47	<u>minutes</u>
<u>Adjusted for job conditions:</u>	<u>1,169.39</u>	<u>LCY/Hour</u>
<u>Selected Number of Scrapers:</u>	<u>8</u>	<u>Scraper(s)</u>
<u>Adjusted single scraper team (unit) hourly production:</u>	<u>4,677.57</u>	<u>LCY/Hour</u>
<u>Adjusted multiple scraper team (fleet) hourly production:</u>	<u>4,677.57</u>	<u>LCY/Hour</u>

Unadjusted unit production/hour:

<u>1,408.91</u> <u>LCY/Hour</u>

Demo Worksheet	Cont'd		Task # TTT		Page 186 of 404
<u>Optimal Num</u> dozer:	ber of Scrapers p	ber push			
JOB TIME A	ND COST				
Fleet size:	<u>1</u>	Team(s)	Total job time:	<u>1.69</u>	Hours
<u>Unit cost:</u>	<u>\$1.316</u>	/LCY	<u>Total job cost:</u>	<u>\$10,421</u>	

Task description:	Replace Top	soil on D/H	<u>E Pits (D1-07)</u>			
Site: Trapper Mine	Permi	it Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>	_
PROJECT IDENT	TIFICATION					
$\begin{array}{c} \underline{\text{Task } \#:} \\ \underline{\text{Date:}} \\ \underline{\text{User:}} \\ \hline \\$	2025 Coun		<u>lorado</u> offat	<u>Abbreviati</u> <u>Filename:</u>	on: <u>None</u> <u>C010-09</u>	9 <u>1B</u>
Agency or organiz	ation name:	DRMS				
HOURLY EQUIP	MENT COSTS	hift basis:	1 per day			
Equipment I -Scraper: -Dozer: Support Equipmen -Dump Area: Road Maintenance -Water Truck:	nt -Load Area:		Cat 637G w/push-pull <u>NA</u> Cat D10T - 10SU OBSOLETE - Cat D10 CAT 16M Water Tanker, 2,500 C			
<u>Cost Breakdown:</u>	Scraper Work	Team Sup	port Equipment Ma Load Area	intenance Equipm Dump Area	nent Motor Grader	Water Truc
%Utilization-machine:	100	NA	50	<u>50</u>	50	60
Ownership cost/hour:	\$281.32	NA	\$257.39	<u>50</u> \$10.00	\$179.39	<u>811.65</u>
Operating cost/hour:	\$319.35	NA	\$98.47	\$5.00	\$59.82	<u>\$13.47</u>
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	<u>\$0.00</u>	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	<u>\$0.00</u>	\$0.00	<u>\$0.00</u>
Operator cost/hour:	<u>\$30.90</u>	NA	<u>\$38.59</u>	<u>\$38.59</u>	<u>\$27.76</u>	<u>\$0.00</u>
<u>Unit Subtotals:</u>	<u>\$631.57</u>	NA	<u>\$394.44</u>	<u>\$53.59</u>	<u>\$266.97</u>	<u>\$25.12</u>
Number of Units:	<u>8</u>	<u>0</u>	<u>1</u>	1	1	<u>1</u>
<u>Group Subtotals:</u>	Work:	<u>\$5,052.5</u>	56 Support:	<u>\$448.03</u>	Maint:	<u>\$292.09</u>
<u>Total work team co</u> MATERIAL QUA						
Initial volume:	7,476	C	<u>CY</u> <u>Swell factor:</u>	1.000		
Loose volume:	<u>7,476</u>		$\frac{CT}{CY} = \frac{SWCH Hactor.}{SWCH Hactor.}$			
Source of estimate Source of estimate	ed volume: ed swell factor:	<u>A</u>	ppendix A, Table 1.4- at Handbook	<u>9</u>		
<u>HOURLY PRODU</u>	JUTION					

<u>Material weight:</u> <u>Material</u>	1,600 lbs/LCY Top Soil	Struck Volume: Heaped Volume:	<u>24.00</u> <u>34.00</u>	<u>LCY</u> LCY
description: Rated Payload:	81,600 pounds	<u>Average</u> Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	<u>Adjusted</u> Capacity:	<u>29.00</u>	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00 Minutes</u>
Maneuver and Spread Time:	0.60 Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	<u>0.830</u>	NA	

Travel Time:

Road Condition: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	<u>(Ft)</u>	<u>(%)</u>	(%)	<u>(%)</u>	(fpm)	<u>(min)</u>
<u>1</u>	<u>1221.00</u>	<u>3.00</u>	<u>4.00</u>	<u>7.00</u>	<u>1362</u>	<u>0.95</u>

Haul Time:

<u>0.95</u> <u>minutes</u>

Return Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	<u>(%)</u>	(%)	(%)	(fpm)	(min)
<u>1</u>	<u>1221.00</u>	<u>-3.00</u>	<u>4.00</u>	<u>1.00</u>	<u>2963</u>	<u>0.53</u>

Return Time:

<u>0.53</u> minutes

Total Scrap	er team cycle ti	me:		<u>3.08</u>	minutes
Adjusted for	or job conditions	<u>:</u>		<u>937.79</u>	LCY/Hour
Selected Nu	umber of Scrape	<u>rs:</u>		<u>8</u>	Scraper(s)
Adjusted si	ngle scraper tear	<u>m (unit) hourly p</u>	production:	3,751.17	LCY/Hour
Adjusted m	ultiple scraper t	eam (fleet) hourl	y production:	3,751.17	LCY/Hour
	nit production/h nber of Scrapers .ND COST		<u>1,129.87</u> <u>LCY/Hou</u>	<u>r</u>	
Fleet size:	<u>1</u>	Team(s)	Total job time:	<u>1.99</u>	Hours
Unit cost:	<u>\$1.544</u>	/LCY	Total job cost:	<u>\$11,545</u>	

SCRAPER TEAM WORK

Task description:	Replace Tops	oil JPE 1 to J	East					
Site: Trapper Mine	Permit	Action: <u>PI</u>	<u>R12</u>	Permit/Job#: <u>C</u>	<u>C1981010</u>	_		
PROJECT IDENTIE	TICATION							
Task #: 091TR1 Date: 2/25/20 User: RAR		<u>Colora</u> <u>Moffat</u>		<u>Abbreviatio</u> <u>Filename:</u>	<u>n: None</u> 091 TR	135		
Agency or organizati	ion name:	<u>DRMS</u>						
HOURLY EQUIPM	ENT COSTShi	ft basis: 1 pe	<u>r day</u>					
Equipment De	scription							
-Scraper:		Cat 6	637G w/push-pull					
-Dozer:		NA	NA					
Support Equipment -	Load Area:	Cat	<u>Cat D10T - 10SU</u>					
-Dump Area:		Cat l	<u>Cat D10T - 10SU</u>					
Road Maintenance –	Motor Grader:	CAT	<u>CAT 16M</u>					
-Water Truck:		Wate	Water Tanker, 2,500 Gal.					
Cost Breakdown:	Scraper Work To	eam Support	Equipment Main	ntenance Equipme	ent			
	<u>Scraper</u>	Dozer	Load Area	Dump Area	Motor Grader	Water Truck		
%Utilization-machine:	100	NA	50	50	50	60		
Ownership cost/hour:	\$281.32	NA	\$257.39	\$257.39	\$179.39	\$11.65		
Operating cost/hour:	\$319.35	NA	\$98.47	\$98.47	\$59.82	\$13.47		
%Utilization-ripper:	NA	NA	NA	NA	NA	NA		
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00		

<u>Ripper op. cost/hour:</u>	<u>NA</u>	<u>NA</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
Operator cost/hour:	\$30.90	NA	\$38.59	\$38.59	<u>\$27.76</u>
Unit Subtotals:	\$631.57	NA	<u>\$394.44</u>	<u>\$394.44</u>	<u>\$266.97</u>
Number of Units:	<u>8</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>1</u>
Group Subtotals:	Work:	\$5,052.56	Support:	<u>\$788.88</u>	Maint:

Total work team cost/hour: \$6,154.65

MATERIAL QUANTITIES

Initial volume: Loose volume:	74,052 74,052	$\frac{CCY}{LCY}$	Swell factor:	1.000	_
Source of estimated	volume:	Append	ix A, Table A-10.7		
Source of estimated	swell factor:	Cat Han	dbook		

<u>\$0.00</u>

\$21.12 \$46.24 1

\$313.21

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

<u>Material weight:</u> <u>Material</u>	<u>1,600 lbs/LCY</u> <u>Top Soil</u>	<u>Struck Volume:</u> <u>Heaped Volume:</u>	<u>24.00</u> <u>34.00</u>	- <u>LCY</u> LCY
description: Rated Payload:	81,600 pounds	<u>Average</u> Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	<u>Adjusted</u> Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00 Minutes</u>
Maneuver and Spread Time:	0.60 Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	<u>1.000</u>	NA	(CAT HB)
Job Efficiency:	<u>0.830</u>	NA	(CAT HB)
Net Correction:	<u>0.830</u>	<u>NA</u>	

Travel Time:

Road Condition: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	<u>(Ft)</u>	(%)	<u>(%)</u>	(%)	<u>(fpm)</u>	<u>(min)</u>
2	400.00	6.25	4.00	10.25	922	0.46
<u>3</u>	764.00	<u>-3.90</u>	4.00	<u>0.10</u>	<u>2965</u>	<u>0.36</u>
<u>4</u>	<u>1053.00</u>	<u>-6.70</u>	<u>4.00</u>	<u>-2.70</u>	<u>2972</u>	0.42

<u>Haul Time:</u> <u>1.24</u>

minutes

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time		
	(Ft)	(%)	<u>(%)</u>	<u>(%)</u>	(fpm)	<u>(min)</u>		
<u>2</u>	400.00	<u>-6.25</u>	4.00	-2.25	2972	0.19		
<u>3</u>	<u>764.00</u>	<u>3.90</u>	<u>4.00</u>	<u>7.90</u>	<u>1931</u>	<u>0.19</u>		
<u>4</u>	<u>1053.00</u>	<u>6.70</u>	<u>4.00</u>	<u>10.70</u>	<u>1434</u>	<u>0.65</u>		
<u>Return Time:</u> <u>1.03</u> minutes								
Total S	craper team cycle time	:			<u>3.87</u>	minutes		
Adjusted for job conditions: 746.36 LCY/Hour								
Selected	Selected Number of Scrapers: 8 Scraper(s)							
<u>Adjuste</u>	ed single scraper team (<u>(unit) hourly</u>	production:		<u>2,985.43</u>	LCY/Hour		
<u>Adjuste</u>	ed multiple scraper tear	n (fleet) hou	rly production:		<u>2,985.43</u>	LCY/Hour		
	Unadjusted unit production/hour:899.22LCY/HourOptimal Number of Scrapers per push							
<u>uozer.</u>								
JOB TIME AND COST								
<u>Fleet size</u>	<u> </u>	Team(s)	<u>Total job</u>	<u>time:</u> <u>2</u>	<u>4.80</u>	Hours		
<u>Unit cost</u>	: \$2.062	/LCY	<u>Total job</u>	cost: <u>\$</u>	152,663			

Task descriptio	n: <u>Replace Top</u>	osoil at C Pit Fu	iture TS Pile TR	134		
Site: <u>Trapper Min</u>	ne Perm	it Action: PF	<u>R12</u>	Permit/Job#:	<u>C1981010</u>	_
PROJECT IDE	INTIFICATION					
Date: 2/	DescriptionState25/2025CourAR			<u>Abbreviati</u> <u>Filename:</u>	on: <u>None</u> 092A T	<u>R134</u>
Agency or orga	anization name:	DRMS				
<u>HOURLY EQU</u>	JIPMENT COSTS	hift basis: 1 per	r day			
- <u>Scraper:</u> - <u>Dozer:</u> Support Equip: -Dump Area:	ment -Load Area: nnce –Motor Grader:	NA Cat I Cat I CAT	537G w/push-pull D10T - 10SU D10T - 10SU 16M er Tanker, 2,500 G	<u>al.</u>		
<u>Cost Breakdow</u>	n: Scraper Work	Team Support	<u>Equipment Mai</u>	ntenance Equipm	nent	
	<u>Scraper</u>	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
<u>%Utilization-machine:</u>	<u>100</u>	<u>NA</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>60</u>
<u>Ownership cost/hour:</u>	<u>\$281.32</u>	<u>NA</u>	<u>\$257.39</u>	<u>\$257.39</u>	<u>\$179.39</u>	<u>\$11.65</u>
Operating cost/hour:	<u>\$319.35</u>	NA	<u>\$98.47</u>	<u>\$98.47</u>	<u>\$59.82</u>	<u>\$13.47</u>
<u>%Utilization-ripper:</u>	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	<u>\$0.00</u>	<u>\$0.00</u>
Ripper op. cost/hour:	<u>NA</u>	NA	\$0.00	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>
<u>Operator cost/hour:</u>	\$30.90	<u>NA</u>	\$38.59	\$38.59	<u>\$27.76</u>	<u>\$21.12</u>
Unit Subtotals: Number of Units:	<u>\$631.57</u>	<u>NA</u>	\$394.44	\$394.44	<u>\$266.97</u>	<u>\$46.24</u>
Group Subtotals:	8 Work:	<u>0</u> \$5,052.56	<u>I</u> Support:	<u>1</u> \$788.88	<u>1</u> Maint:	<u>1</u> \$313.21
*	cost/hour: \$6,154.65		Support.	<u> </u>	<u>interne</u>	<u>\$915.21</u>
Initial volume:	122,242	CCY	Swell factor:	1.000		
Loose volume:						
Source of estin Source of estin	nated volume: nated swell factor:		ndix A, Table A-10 andbook).2		
HOURLY PRO	DUCTION					

<u>Material weight:</u> <u>Material</u>	<u>1,600 lbs/LCY</u> <u>Top Soil</u>	Struck Volume: Heaped Volume:	<u>24.00</u> <u>34.00</u>	- <u>LCY</u> LCY
description: Rated Payload:	81,600 pounds	<u>Average</u> Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	<u>Adjusted</u> Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00 Minutes</u>
Maneuver and Spread Time:	0.60 Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	<u>0.830</u>	NA	

Travel Time:

Road Condition: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	<u>(Ft)</u>	<u>(%)</u>	<u>(%)</u>	<u>(%)</u>	<u>(fpm)</u>	<u>(min)</u>
1	2000.00	-4.50	4.00	-0.50	2972	0.72

Haul Time:

<u>0.72</u> <u>minutes</u>

Return Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
<u>1</u>	2000.00	<u>4.50</u>	<u>4.00</u>	<u>8.50</u>	<u>1931</u>	<u>1.13</u>

Return Time:

<u>1.13</u> minutes

Total Scrap	er team cycle tii	<u>me:</u>		<u>3.45</u>	minutes
Adjusted for	r job conditions	<u>:</u>		837.22	LCY/Hour
Selected Nu	umber of Scrape	<u>rs:</u>		<u>8</u>	Scraper(s)
Adjusted sin	ngle scraper tear	<u>m (unit) hourly p</u>	production:	3,348.87	LCY/Hour
Adjusted m	ultiple scraper to	eam (fleet) hourl	y production:	3,348.87	LCY/Hour
•	nit production/h iber of Scrapers ND COST		<u>1,008.70</u> <u>LCY/Hou</u>	<u>1</u>	
Fleet size:	<u>1</u>	Team(s)	<u>Total job time:</u>	<u>36.50</u>	Hours
Unit cost:	<u>\$1.838</u>	/LCY	<u>Total job cost:</u>	<u>\$224,660</u>	

Task # TTT

Site: Trapper Min	Site: Trapper Mine Permit Actio		PR	12	Permit/Job#:	C19810	10	
PROJECT IDE	NTIFICATION							
Task #: 09	6 Stat	e: C	Colorad	0	Abbrevia	tion:	None	
Date: 4/1	19/2025 Cou	nty: N	Aoffat		Filename	:	096	
User: <u>R</u> A	AR							
Agency or orga	nization name:	DRM	S					
HOURLY EQU	IPMENT COST	Shift basis:	: <u>1 per</u>	<u>day</u>				
Equipmer	nt Description							
-Scraper:		-		37G w/push-pull				_
-Dozer:			NA					_
	nent -Load Area:	-		10T - 10SU				
-Dump Area:				<u>10T - 10SU</u>				_
	nce – Motor Grader:	-	CAT					
-Water Truck:			water	Tanker, 2,500 G	ral.			
Cost Breakdown	<u>n:</u> Scraper Work		ipport E	Equipment Mai	intenance Equip	ment		
	Scraper	Dozer		Load Area	Dump Area	Motor		ater Truck
	100					Grader		
Utilization-machine:	100	NA		50	50	50	60	
wnership cost/hour:	\$281.32	NA		\$257.39	\$257.39	\$179.3		1.65
perating cost/hour:	\$319.35	NA		\$98.47	\$98.47	\$59.82 NA		3.47
Utilization-ripper:	NA	NA		NA \$0.00	NA \$0.00			
ipper own. cost/hour:	NA NA	NA		\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00		.00 .00
ipper op. cost/hour:		NA						
perator cost/hour:	\$30.90	NA		\$38.59	\$38.59	\$27.76		1.12 6.24
init Subtotals: Sumber of Units:	\$631.57 8	NA		\$394.44	\$394.44	\$266.9	/ \$4	5.24
		0	56	1 Support:	1	1 Moint:		12 21
roup Subtotals:	Work: cost/hour: \$6,154.6	\$5,052.	56	Support:	\$788.88	Maint:	\$3	13.21
Initial volume:	66,713		CCY	Swell factor:	1.000			
Loose volume:	66,713		LCY					
Source of estim	ated volume:		A-9.1					
	ated swell factor:			ndbook				

Material weight: Material description:	1,600 lbs/LCY Top Soil	Struck Volume: Heaped Volume:	<u>24.00</u> 34.00	LCY LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	498.00	1.00	4.00	5.00	1867	0.37

Haul Time:

0.37 minutes

minutes

Return Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	498.00	-1.00	4.00	3.00	2949	0.32

Return Time: 0.32

Adjusted fo Selected Nu Adjusted si	ber team cycle ti or job conditions umber of Scrape ngle scraper tea uultiple scraper t	2.29 1,261.31 8 5,045.24 5,045.24	minutes LCY/Hour Scraper(s) LCY/Hour LCY/Hour		
0	nit production/l nber of Scrapers	-	1,519.65 LCY/Hou	r	
JOB TIME A	ND COST				
Fleet size:	1	Team(s)	Total job time:	13.22	Hours
Unit cost:	\$1.220	/LCY	Total job cost:	\$81,383	

TRUCK/LOADER TEAM WORK

Task dese	cription:	Replace T	opsoil at W	/est P	Panel, BC rd, Sl	hop (Truc	:k/Exca	vator)		
te: Trapp	er Mine	Per	mit Action:	Р	R12	Perm	it/Job#:	C1981	010	
PROJEC'	<u> TIDENTIF</u>	CATION								
Task #:	096A	Sta	ite: _(Colora	ado		Abbrev	iation:	Non	e
Date:	4/19/202	5 Co	unty: <u>I</u>	Moffa	ıt		Filenan	ne:	0964	4
User:	RAR									
	uipment Des			Cat	777F					
	ader Team -'	Truck:			777F	<u><u> </u></u>				
-Loader:	Equipment -I	and Aron			385C L 18'-1" D10T - 10SU	Stick				
-Dump A		Joau Alea.			D10T - 10SU					
ł	intenance – N	Aotor Grader	••		T 16M					
-Water T			•		ter Tanker, 2,50	0 Gal.				
Cost Brea	kdown: 7	Fruck/Loade	r Team Si	uppor	t Equipment	Maintenan	ice Equ	ipment		
	Tı	uck	Excavato	r	Load Area	Dump /	Area	Motor Grader		Water Truc

			20001100	2 minp i nou		
					Grader	
%Utilization- machine:	100	100	25	25	25	50
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23
%Utilization-riper:	NA	0	15	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$22.07
Unit Subtotals:	\$377.15	\$386.10	\$347.11	\$345.21	\$237.06	\$44.95
Number of Units:	3	1	1	1	1	1
Group Subtotals:	Work:	\$1,517.55	Support:	\$692.32	Maint:	\$282.01

Total work team cost/hour: <u>\$2,491.88</u>

MATERIAL QUANTITIES

171,625	CCY	Swell factor:	1.000	
171,625	LCY			
volume:		Appendix A Table	A-3.1	
swell factor:	Cat Har	ldbook		
ost:	\$0.00			
	\$0.00			
	171,625 volume: swell factor:	171,625LCYvolume:TR124swell factor:Cat Harost:\$0.00	171,625LCYvolume:TR124 Appendix A Tableswell factor:Cat Handbookost:\$0.00	171,625LCYvolume:TR124 Appendix A Table A-3.1swell factor:Cat Handbookost:\$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) I	<u>Basis:</u>	
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

Final Truck Volume Based on Number of Loader Passes:	77.72	LCY

Loading Tool Capacity

		Bucket Size Class:	Large
	7.050		
Rated Capacity:	7.850	LCY (heaped)	
Bucket Fill Factor:	1.100	Other - rock/dirt mixtures	(100-120%) 1.100
Adjusted Capacity:	8.635	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 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:	Number of Loading Tool Passes Required to Fill
	Truck:

passes

Excavators and Front Shovels:

9

Demo Worksheet Cont'd		Task # TTT				Page 201 of	404
Machine Cycle Time vs. J Selected Value within this			OVE AVERAG	E			
Track Loaders – Material	Description:						
Cycle Time Elements (min	.):						
Load: NA	Maneuver:	NA	Dun	ıp:	0.100		
Wheel and Track Loaders maneuver):	- Unadjusted Ba	sic Loader C	ycle Time (load,	dump,	NA	mi	nutes
Cycle Time Factors				Factor (r	nin.)	Source	
Material:	NA		NA		/	(Cat HB)	
Stockpile:	NA			NA		(Cat HB)	
Truck Ownership:	NA			NA		(Cat HB)	
Operation:	NA			NA		(Cat HB)	
Dump Target:	NA			NA		(Cat HB)	
-	Net Cycle Tin	ne Adjustmer	nt:	NA		minutes	
	Adjusted Load	ler Cycle Tir	ne:	0.302		minutes	
	Net Load Tim	e per Truck:		2.516		minutes	
Truck Cycle Time:							
Truck Exchange Time:	0.80	Minutes	Adjusted for si	te altitude:		0.800	Minut
Truck Load Time:	2.516	Minutes	Adjusted for si	te altitude:		2.516	Minut
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted for si	te altitude:	_	1.200	Minut
Truck Travel (Haul & Retu maintained 3.0	<u>rn) Time: </u> Road C	Condition: <u>Fi</u>	rm, smooth, rollir	ng, dirt/lt. surf	faced, wa	<u>itered,</u>	
Haul Route:	C red $(0/)$	Dall Dag	Tatal Dag	Valasita	Tuorval		

Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel
	(Ft)		(%)	(%)	(fpm)	Time
					_	(min)
1	7375.00	-1.00	3.00	2.00	3328	2.961

Haul Time: **2.961** minutes

_	Hau	l Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time	
							(min)	
1	7375	5.00	1.00	3.00	4.00	3411	2.477	
		Re	turn Time:			2.477	minutes	
		То	tal Truck Cycle	e Time:		9.954	minutes	
Loading Tool	unit							
Production	unit	1,406.18	LCY/Hou	r Adjust	ed for job effi	ciency:	1,167.13	LCY/Hour
Truck Unit Pro	oduction						••••	
		468.44	LCY/Hou	r Adjust	ed for job effi	ciency:	388.81	LCY/Hour
Optimal No. o Trucks:	f	3	Truck(s)	Selecte	d Number of	Trucks:	3	Truck(s)
Adiı	usted hour	rly truck team	production:			1,166.43	3 LCY/	/Hour
•		•	r team product	ion:		1,166.43		/Hour
Adju	usted mul	tiple truck/loa	der team produ	iction:		1,166.43	B LCY/	/Hour
JOB T	IME AN	D COST						
Fleet	size:	1	Team(s)	Total jo	o time:	147.14	Но	ours
Unit c	cost:	\$2.136	/LCY	Total jol	o cost:	\$366,648		

Site:	Trapper Mine	Perm	nit Action:	PR	12	Permit/Job#:	C1981010	_
<u>P</u>	ROJECT IDENI	TIFICATION						
-	Task #: 097 Date: 4/19/			Colorado Ioffat	0	Abbreviati	on: <u>None</u> 097	
	User: <u>RAR</u>			C				
	Agency or organiz		DRM		day			
<u>n</u>	OURLY EQUIP		SIIII Dasis.	<u>i per</u>	<u>uay</u>			
	Equipment I -Scraper: -Dozer:	Description		Cat 63 NA	87G w/push-pull			
	-Dozer. Support Equipmer -Dump Area:	nt -Load Area:		Cat D	10T - 10SU 10T - 10SU			
	Road Maintenance	e –Motor Grader:		CAT 1		al.		
C	ost Breakdown:	Scraper Work	Team Su	pport E	Equipment Main	ntenance Equipm	ient	
		Scraper	Dozer	••	Load Area	Dump Area	Motor Grader	Water Truck
%Utilizat	ion-machine:	100	NA		50	50	50	60
Ownershi	p cost/hour:	\$281.32	NA		\$257.39	\$257.39	\$179.39	\$11.65
Operating	g cost/hour:	\$319.35	NA		\$98.47	\$98.47	\$59.82	\$13.47
%Utilizat	ion-ripper:	NA	NA		NA	NA	NA	NA
Ripper ov	vn. cost/hour:	NA	NA		\$0.00	\$0.00	\$0.00	\$0.00
Ripper op	o. cost/hour:	NA	NA		\$0.00	\$0.00	\$0.00	\$0.00
Operator	cost/hour:	\$30.90	NA		\$38.59	\$38.59	\$27.76	\$21.12
Unit Subt		\$631.57	NA		\$394.44	\$394.44	\$266.97	\$46.24
Number o		8	0		1	1	1	1
Group Su	btotals:	Work:	\$5,052	.56	Support:	\$788.88	Maint:	\$313.21
	otal work team co IATERIAL QUA	<u></u>	5					
	Initial volume: Loose volume:	114,647 114,647		CCY LCY	Swell factor:	1.000		
	Source of estimate	ed volume:		Append	lix A, Table 1.4-9 ndbook)		

Material weight: Material description:	1,600 lbs/LCY Top Soil	Struck Volume: Heaped Volume:	<u>24.00</u> 34.00	LCY LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	390.00	-5.50	3.00	-2.50	2972	0.18

Haul Time:

0.18 minutes

minutes

Return Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	390.00	5.50	3.00	8.50	1931	0.30

Return Time: **0.30**

Total Scrap	er team cycle ti	me:		2.08	minutes
Adjusted fo	or job conditions	:		1,388.65	LCY/Hour
Selected Nu	umber of Scrape	rs:		8	Scraper(s)
Adjusted sin	ngle scraper tear	m (unit) hourly p	production:	5,554.62	LCY/Hour
Adjusted m	ultiple scraper t	eam (fleet) hourl	y production:	5,554.62	LCY/Hour
•	init production/h nber of Scrapers .ND COST	-	<u>1,673.08</u> LCY/Hour	L	
Fleet size:	1	Team(s)	Total job time:	20.64	Hours
Unit cost:	\$1.108	/LCY	Total job cost:	\$127,032	

TRUCK/LOADER TEAM WORK

Task description	: Replace	Topsoil at	East P	anel Ponds, A	Rd (Truck/Exca	avator)		
Site: Trapper Min	<u>e</u>]	Permit Action	n: <u>F</u>	PR12	Permit/Job	#: <u>C1981</u>	.010	
PROJECT IDE	NTIFICATION	<u>N</u>						
Task #:09	7A	State:	Color	ado	Abbre	viation:	None	
Date: $4/1$	9/2025	County:	Moffa	at	Filena	me:	097A	
User: RA	R							
Agency or organ	nization name:	DR	MS					
ingeney of orga								
HOURLY EQU	IPMENT COS	<u>T</u> Shift ba	sis: <u>1 p</u>	ber day				
F								
Truck Loader T	t Description		Cot	777F				
-Loader:	eani - Truck.			385C L 18'-1"	? Stick			
Support Equipm	ent Load Area	•		D10T - 10SU	Stick			
-Dump Area:				D10T - 10SU				
Road Maintenar	nce – Motor Gra	der		T 16M				
-Water Truck:				ter Tanker, 2,50	0 Gal.			
Cost Breakdown	Truck/Loa	der Team	Suppor	rt Equipment	Maintenance Eq	uipment		
	Truck	Excavat	tor	Load Area	Dump Area	Motor Grader	Water Truck	
%Utilization- machine:	100	100		25	25	25	50	_
Ownership cost/hour:	\$199.47	\$220.92	2	\$257.39	\$257.39	\$179.39	\$11.65	

\$49.23

\$20.05

\$1.90

\$38.59

\$347.11

Support:

1

15

\$49.23

NA

\$0.00

\$0.00

1

\$38.59

\$345.21

\$692.32

\$29.91

NA

\$0.00

\$0.00

1

\$27.76

Maint:

\$237.06

\$11.23

NA

\$0.00

\$0.00

\$22.07

\$44.95

\$282.01

1

Total work team cost/hour: <u>\$2,491.88</u>

3

\$152.44

NA

NA

NA

\$25.24

\$377.15

Work:

\$131.31

\$0.00

\$0.00

\$33.87

\$386.10

\$1,517.55

0

1

Operating cost/hour:

Ripper op. cost/hour:

Operator cost/hour:

Unit Subtotals:

Number of Units:

Group Subtotals:

%Utilization-riper:

Ripper own.

cost/hour:

MATERIAL QUANTITIES

Initial volume:	244,270	CCY Swell	factor:	1.000
Loose volume:	244,270	LCY		
Source of estimated	l volume:	TR124 Appendi	x A Table A	A-3.1
Source of estimated	l swell factor:	Cat Handbook		
Material Purchase	Cost:	\$0.00		
Total Cost:		\$0.00		

HOURLY PRODUCTION

Truck Capacity:

Truck Payload (weight) I	<u>Basis:</u>	
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

Final Truck Volume Based on Number of Loader Passes: 77.72 LCY
--

Loading Tool Capacity

		Bucket Size Class:	Large
	7.050		
Rated Capacity:	7.850	LCY (heaped)	
Bucket Fill Factor:	1.100	Other - rock/dirt mixtures	(100-120%) 1.100
Adjusted Capacity:	8.635	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 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	

Excavators	and	Front	Shovels:
------------	-----	-------	----------

Machine Cycle Time vs. J Selected Value within this		·	BOVE AVERAGE VERAGE		-		
Track Loaders – Material	Description:						
Cycle Time Elements (min	.):						
Load: NA	Maneuver:	N	A Dump):	0.100)	
Wheel and Track Loaders maneuver):	- Unadjusted E	Basic Loader C	Cycle Time (load, d	ump,	NA	1	minutes
Cycle Time Factors				Factor	(min.)	Source	
Material:	NA			NA	()	(Cat HB))
Stockpile:	NA			NA		(Cat HB)	
Truck Ownership:	NA			NA		(Cat HB)	
Operation:	NA			NA		(Cat HB)	
Dump Target:	NA			NA		(Cat HB)	
	Net Cycle T	ime Adjustme	ent:	NA		minutes	<u> </u>
	•	ader Cycle Ti		0.302		minutes	
		me per Truck:		2.516		minutes	
Truck Cycle Time:							
Truck Exchange Time:	0.80	Minutes	Adjusted for site	altitude:		0.800	Minut
Truck Load Time:	2.516	Minutes	Adjusted for site	altitude:	-	2.516	Minut
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted for site	altitude:	-	1.200	Minu
Truck Travel (Haul & Retu	rn) Time: Road	l Condition: <u>Fi</u>	irm, smooth, rolling	g, dirt/lt. su	rfaced, wa	atered,	

maintained 3.0

Haul Route: Grade (%) Poll Pa Haul Dist

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	4345.00	-1.00	3.00	2.00	3328	2.050

Haul Time: 2.050 minutes

S	Seg #	Haul Distanc	e Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)		(%)	(%)	(fpm)	Time	
							(min)	
1		7375.00	1.00	3.00	4.00	3411	2.477	
			Return Time:			2.477	minutes	
			Total Truck Cycl	e Time:		9.043	minutes	
Loading]	Tool unit							
Productio		1,406.	18 LCY/Hou	ır Adjust	ed for job effi	ciency:	1,167.13	LCY/Hour
Fruck Un	it Produc	tion 515.64	LCY/Hou	ır Adjust	ed for job effi	ciency:	427.98	LCY/Hour
Optimal N Frucks:	No. of	3	Truck(s)	Selecte	ed Number of	Trucks:	3	Truck(s)
	Adjusted	hourly truck	team production:			1,283.9	03 LCY/	Hour
		U	loader team product			1,167.1		
	Adjusted	multiple truc	k/loader team produ	uction:		1,167.1	LCY/	Hour
<u>JC</u>)B TIME	AND COST						
F	Fleet size:	_1	Team(s)	Total jo	b time:	209.29	Но	urs
Т	Jnit cost:	\$2.135	/LCY	Total jo	h cost·	\$521,528		

Site:	Trapper N	line	Permit Action	: <u>PR</u> 1	12	Permit/Job#:	C1981010	_
<u>]</u>	PROJECT II	DENTIFICATIO	<u>DN</u>					
	Task #: _ Date: _ User: _	098 4/19/2025 RAR		Colorado Moffat)	Abbreviati	on: None 098	
	Agency or o	rganization name	: DRN	1S				
<u>]</u>	HOURLY E	QUIPMENT (COSTShift basis	s: <u>1 per</u>	<u>day</u>			
_		ment Description						
	-Scraper: -Dozer:			Cat 63 NA	7G w/push-pull			
=		ipment -Load Ar	ea:		10T - 10SU			
-Dump Area: Road Maintenance –Motor Grader:			rader:	Cat D	10T - 10SU 16M			
-	-Water Truc			Water	Tanker, 2,500 G	al.		
	Cost Breakdo	own: Scraper	Work Team S	upport E	Equipment Mai	ntenance Equipn	nent	
		Scrape	r Dozer	r	Load Area	Dump Area	Motor Grader	Water Truck
%Utiliza	tion-machine	: 100	NA		50	50	50	60
	nip cost/hour:	\$281.3			\$257.39	\$257.39	\$179.39	\$11.65
-	g cost/hour:	\$319.3			\$98.47	\$98.47	\$59.82	\$13.47
	tion-ripper:	NA	NA		NA	NA	NA	NA
. .	wn. cost/hour		NA		\$0.00	\$0.00	\$0.00	\$0.00
11	p. cost/hour:	NA	NA		\$0.00	\$0.00	\$0.00	\$0.00
1	cost/hour:	\$30.90			\$38.59	\$38.59	\$27.76	\$21.12
Unit Sub		\$631.5			\$394.44	\$394.44	\$266.97	\$46.24
	of Units:	8	0		1	1	1	1
	ubtotals:	Work:	\$5,05	2.56	Support:	\$788.88	Maint:	\$313.21
	Fotal work tea	am cost/hour: <u>\$6.</u>	154.65					
<u>1</u>	MATERIAL	QUANTITIES						
	Initial volum	ne: 20,360		CCY	Swell factor:	1.000		
	Loose volum	ne: 20,360		LCY				
	Source of an	timated volume:		Divisio	n Estimate			

Material weight: Material description:	1,600 lbs/LCY Top Soil	Struck Volume: Heaped Volume:	<u>24.00</u> 34.00	LCY LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(F t)	(%)	(%)	(%)	(fpm)	(min)
1	625.00	3.20	3.00	6.20	1477	0.48

Haul Time:

0.48 minutes

Return Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	625.00	-3.20	3.00	-0.20	2972	0.27

Return Time: 0.27 minutes

Total Scrap	er team cycle tin	ne:		2.35	minutes
Adjusted fo	r job conditions:			1,229.11	LCY/Hour
Selected Nu	umber of Scraper	s:		8	Scraper(s)
Adjusted sin	ngle scraper tean	n (unit) hourly p	production:	4,916.43	LCY/Hour
Adjusted m	ultiple scraper te	am (fleet) hourl	y production:	4,916.43	LCY/Hour
0	nit production/honder of Scrapers	-	<u>1,480.85</u> LCY/Hour	Γ	
Fleet size:	1	Team(s)	Total job time:	4.14	Hours
Unit cost:	\$1.252	/LCY	Total job cost:	\$25,488	

Task # TTT

SCRAPER TEAM WORK

Task description:	Re-topsoil aJ23-1	to J Pit	MR 229				
Site: Trapper Mine	Pern	nit Actio	n: PR12		Permit/Job#: <u>C</u>	1981010	
PROJECT IDENTIFI	<u>CATION</u>						
Task #: 098MR2 Date: 2/25/202 User: RAR			Colorado Moffat		Abbrev	iation: <u>None</u> name: <u>C010-098</u>	MR229
Agency of	r organization name:	DRM	5				
HOURLY EQUIPME	<u>NT</u>		C	COSTShift basis: <u>1 p</u>	per day		
		Equipr	nent Descrip	tion			
	-	craper: Dozer:	NA	w/push-pull			
	port Equipment -Load -Dump	Area:	Cat D10T Cat D10T	- 10SU			
Road N	Maintenance – Motor C -Water		CAT 16M Water Tan	ker, 2,500 Gal.			
Cost Breakdown:	Scraper Work Team		Suppor	rt Equipment	Maintenar	ce Equipment	
	Scraper	D	ozer	Load Area	Dump Area	Motor Grader	Water Truc
%Utilization-machine:	100		NA	50	50	50	
Ownership cost/hour:	\$281.32		NA	\$257.39	\$257.39	\$179.39	\$11
Operating cost/hour:	\$319.35		NA	\$98.47	\$98.47	\$59.82	\$13
%Utilization-ripper:	NA		NA	NA	NA	NA	
Ripper own. cost/hour:	NA		NA	\$0.00	\$0.00	\$0.00	\$0
Ripper op. cost/hour:	NA		NA	\$0.00	\$0.00	\$0.00	\$0
Operator cost/hour:	\$30.90		NA	\$38.59	\$38.59	\$27.76	\$21
Unit Subtotals:	\$631.57		NA	\$394.44	\$394.44	\$266.97	\$46
Number of Units:	8		0	1	1	1	
Group Subtotals:	Work:	\$5,0	052.56	Support:	\$788.88	Maint:	\$313.21
Total work team cost/hour	:: <u>\$6,154.65</u>						
MATERIAL QUANT	ITIES						
Initial volume:	29,657		CCY	Swell facto	r: 1.000		
Loose volume:	29,657		LCY				

Source of estimated volume:Division EstimateSource of estimated swell factor:Cat Handbook

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight:	1,600 lbs/LCY	Struck Volume:	24.00	LCY
Material description:	Top Soil	Heaped Volume:	34.00	LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	51.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	
Maneuver and Spread Time:	

 $\frac{1.00}{0.60}$ Minutes

Job Condition Correction:

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel 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	950.00	7.80	3.00	10.80	786	1.22

Haul Time: **1.22** minutes

Site Altitude: 6400 feet

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	950.00	-7.80	3.00	-4.80	2972	0.39

	Return Time:	0.39	minutes	
Total S	craper team cycle time	e: 3.	21	minutes
Adju	isted for job conditions	s: 899	9.81	LCY/Hour
Select	ed Number of Scrapers	s: 8	3	Scraper(s)
Adjusted single scraper team (unit) hourly productior	n: 3,59	9.25	LCY/Hour
Adjusted multiple scraper team (f	leet) hourly productior	n: 3,59	9.25	LCY/Hour
Unadjusted unit production/hour: 1,084.11	LCY/Hour			

Fleet size:	1	Team(s)	Total job time:	8.24	Hours
Unit cost:	\$1.710	/LCY	Total job cost:	\$50,713	

TRUCK/LOADER TEAM WORK

Task description:	Replace T	opsoil at Di	ragliı	ne Walk Road	(ASH4)			
Site: Trapper Mine	Site: Trapper Mine Permit Action		PR12 Perm		Permi	t/Job#: <u>C19</u>	981010	
PROJECT IDEN	TIFICATION							
Task #:099	Sta	ite: _C	Colora	ado	<i>I</i>	Abbreviation:	None	
Date: 4/19/	/2025 Co	unty: <u>N</u>	/loffa	t	I	Filename:	099	
User: RAR								
Agency or organiz HOURLY EQUIP Equipment	MENT COST	DRM Shift basis		er day				
Truck Loader Tea			Cat	777F				
-Loader:			Cat	385C L 18'-1'	" Stick			
Support Equipme	nt -Load Area:		Cat D10T - 10SU					
-Dump Area:			Cat D10T - 10SU					
Road Maintenanc	e – Motor Grader		CAT 16M					
-Water Truck:			Wat	er Tanker, 2,50	00 Gal.			
<u>Cost Breakdown</u> :	Truck/Loade	r Team Su	ipport	t Equipment	Maintenano	ce Equipment		
	Truck	Excavator	ſ	Load Area	Dump A	Area Moto Grad		Water Truck
%Utilization- machine:	100	100		25	25	25	2	50
Ownership cost/hour:	\$199.47	\$220.92		\$257.39	\$257.39	\$179	.39 .9	\$11.65
Operating cost/hour:	\$152.44	\$131.31		\$49.23	\$49.23	\$29.9)1	\$11.23

15

\$20.05

\$1.90

\$38.59

\$347.11

Support:

1

Total work team cost/hour: <u>\$2,114.73</u>

2

NA

NA

NA

\$25.24

\$377.15

Work:

MATERIAL QUANTITIES

%Utilization-riper:

Ripper op. cost/hour:

Operator cost/hour:

Unit Subtotals:

Number of Units:

Group Subtotals:

Ripper own.

cost/hour:

Initial volume:	8,695	CCY
Loose volume:	8,695	LCY

0

1

\$0.00

\$0.00

\$33.87

\$386.10

\$1,140.40

Swell factor:

NA

\$0.00

\$0.00

\$38.59

\$345.21

\$692.32

1

1.000

NA

\$0.00

\$0.00

1

\$27.76

\$237.06

Maint:

NA

\$0.00

\$0.00

\$22.07

\$44.95

\$282.01

1

Source of estimated volume:	TR124 Appendix A Table A-3.1
Source of estimated swell factor:	Cat Handbook
Material Purchase Cost:	\$0.00
Total Cost:	\$0.00

HOURLY PRODUCTION

Truck Capacity:

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

.

Final Truck Volume Based on Number of Loader Passes: 77.72 LCY Loading Tool Capacity Bucket Size Class: Large

		Bucket Size Class.	Laige
Rated Capacity:	7.850	LCY (heaped)	
Bucket Fill Factor:	1.100	Other - rock/dirt mixtures	(100-120%) 1.100
Adjusted Capacity:	8.635	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 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	

Maneuver:

Loading Tool Cycle Time: Number of L Truck:		Loading Tool Passes Required to Fill	9	passes
Excavators and Front Shovels:				
Machine Cycle Time vs. Job Condi Selected Value within this Basic Ra	U	ABOVE AVERAGE AVERAGE		
Track Loaders – Material Description	on: _			

Cycle Time Elements (min.):

Load: NA

NA

Dump:

0.100

CIRCES Cost Estimating Software

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump,	NA	minutes
maneuver):	NA	_

Cycle Time Factors		Factor (min.)	Source
Material:	NA	NA	(Cat HB)
Stockpile:	NA	NA	(Cat HB)
Truck Ownership:	NA	NA	(Cat HB)
Operation:	NA	NA	(Cat HB)
Dump Target:	NA	NA	(Cat HB)
	Net Cycle Time Adjustment:	NA	minutes
	Adjusted Loader Cycle Time:	0.302	minutes
	Net Load Time per Truck:	2.516	minutes

Truck Cycle Time:

Truck Exchange Time:	0.80	Minutes	Adjusted for site altitude:	0.800	Minut
Truck Load Time:	2.516	Minutes	Adjusted for site altitude:	2.516	Minut
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted for site altitude:	1.200	Minut

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

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time
						(min)
1	2288.00	2.80	3.00	5.80	1266	1.932

Haul Time: **1.932** minutes

S	Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity (fam)	Travel Time	
		(Ft)			(%)	(%)	(fpm)	(min)	
1	l	2288.	.00	-2.80	3.00	0.20	3503	0.826	
				turn Time: tal Truck Cycle	e Time:		0.826 7.274	minut minut	
Productio	Tool unit on nit Produc		1,406.18	LCY/Hour	-	ed for job effi	-	1,167.1	
			641.04	LCY/Hou	r Adjust	ed for job effi	ciency:	532.06	LCY/Hour
Optimal I Trucks:	No. of	-	2	Truck(s)	Selecte	ed Number of	Trucks:	2	Truck(s)
	Adjusted	l single		production: r team producti der team produ			1,064.12 1,064.12 1,064.12	L	.CY/Hour .CY/Hour .CY/Hour
<u>JC</u>	OB TIME	E AND	OCOST						
F	Fleet size:	-	1	Team(s)	Total jo	b time:	8.17		Hours

TRUCK/LOADER TEAM WORK

Trappe	r Mine	Permit Act	ion: PR12	Permit/Job#: C198	1010
ROJECT	<u>IDENTIFICA</u>	TION			
Гask #:	099A	State:	Colorado	Abbreviation:	None
Date:	4/19/2025	County:	Moffat	Filename:	099A
User:	RAR				

Truck Loader Team -Truck:	Cat 777F
-Loader:	Cat 385C L 18'-1" Stick
Support Equipment -Load Area:	Cat D10T - 10SU
-Dump Area:	Cat D10T - 10SU
Road Maintenance – Motor Grader:	CAT 16M
-Water Truck:	Water Tanker, 2,500 Gal.

Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment

	Truck	Excavator	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization- machine:	100	100	25	25	25	50
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23
%Utilization-riper:	NA	0	15	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$22.07
Unit Subtotals:	\$377.15	\$386.10	\$347.11	\$345.21	\$237.06	\$44.95
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$1,140.40	Support:	\$692.32	Maint:	\$282.01

Total work team cost/hour: **<u>\$2,114.73</u>**

MATERIAL QUANTITIES

Initial volume:	38,684	CCY	Swell factor:	1.000	
Loose volume:	38,684	LCY			
Source of estimate	d volume:	TR124	Appendix A Table	A-3.1	
Source of estimate	d swell factor:	Cat Har	ndbook		
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

Final Truck Volume Based on Number of Loader Passes:	77.72	LCY
--	-------	-----

Loading Tool Capacity

		Bucket Size Class:	Large
Rated Capacity:	7.850	LCY (heaped)	
Bucket Fill Factor:	1.100	Other - rock/dirt mixtures	(100-120%) 1.100
Adjusted Capacity:	8.635	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 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:

Number of Loading Tool Passes Required to Fill Truck:

passes

Excavators and Front Shovels:

Machine Cycle Time Selected Value withi	vs. Job Condition Ratin n this Basic Rating:		BOVE AV	ERAGE			
Track Loaders – Mat	erial Description:						
Cycle Time Elements	(min.):						
Load: NA	Maneuver:	NA	A	_ Dump:	0.1	00	<u>.</u>
Wheel and Track Lo maneuver):	aders - Unadjusted Basi	c Loader C	ycle Time	(load, dum	p, N.	A	minutes
Cycle Time Factors					Factor (min.)	Source	
Material:	NA				NA	(Cat HI	3)
Stockpile:	NA		NA		NA	(Cat HI	3)
Truck Ownership:	NA				NA	(Cat HI	3)
Operation:	NA				NA	(Cat HI	3)
Dump Target:	NA				NA	(Cat HI	3)
	Net Cycle Time	Adjustme	nt:	_	NA	minutes	\$
	Adjusted Loade	r Cycle Tiı	me:	_	0.302	minutes	\$
	Net Load Time	per Truck:		-	2.516	minutes	3
<u>Truck Cycle Time:</u>							
Truck Exchange Time:	0.80	Minutes	Adjuste	d for site al	titude:	0.800	Minut
Truck Load Time:	2.516	Minutes	Adjuste	d for site al	titude:	2.516	Minut
Truck Maneuver and Dur Time:	np 1.20	Minutes	Adjuste	d for site al	titude:	1.200	Minut
Truck Travel (Haul & maintained 3.0 Haul Route:	<u>Return) Time:</u> Road Co	ndition: <u>Fi</u>	<u>rm, smoot</u>	h, rolling, d	lirt/lt. surfaced,	watered,	

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time
						(min)
1	2130.00	-3.80	3.00	-0.80	3503	0.688

Haul Time: **0.688** minutes

Demo Worksheet Cont'd

S	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	_	(Ft)			(%)	(%)	(fpm)	Time	
								(min)	
1		2130.	.00	3.80	3.00	6.80	2398	1.082	
			Ret	urn Time:			1.082	minutes	
			Tot	al Truck Cycle	e Time:	_	6.286	minutes	
Loading 7	Tool unit								
Productio	on	-	1,406.18	LCY/Hour	r Adjust	ed for job effi	ciency:	1,167.13	LCY/Hour
Truck Un	it Produc	tion _	741.79	LCY/Hour	r Adjust	ed for job effi	ciency:	615.69	LCY/Hour
Optimal I Trucks:	No. of	-	2	Truck(s)	Selecte	ed Number of	Trucks:	2	Truck(s)
	Adjusted	l hourl	y truck team	production:			1,231.37	LCY/	Hour
			•	team producti	ion:		1,167.13		Hour
	Adjusted	l multi	ple truck/load	ler team produ	ction:		1,167.13	LCY/	Hour
<u>JC</u>)B TIME	E AND	O COST						
F	Fleet size:		1	Team(s)	Total jo	b time:	33.14	Ηοι	ırs
τ	Unit cost:		\$1.812	/LCY	Total jo	b cost:	\$70,092		

REVEGETATION WORK

	Task descri	ption:	Facilities Area			
Site:	Trapper	Mine	Permit Act	ion: PR12	Permit/Job#: C198	1010
<u>P</u>	PROJECT	IDENTIFI	CATION			
	Task #:	100	State:	Colorado	Abbreviation:	None
	Date: User:	4/19/202 RAR	5 County:	Moffat	Filename:	100
	Agency or	organizatio	on name:D	ORMS		

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Application

Description

Cost /Acre

Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	75	Cost /Acre:	\$360.87
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING,SEEI	DING	

Initial Job Cost:	\$27,065.25
Reseeding Job Cost:	\$4,736.42
Total Job Cost:	\$31,802
Job Hours:	75.00

REVEGETATION WORK

Task descri	-	Seed D Pit Range A-B	DD12	Domesit/Lok	
te: Trapper	Mine	Permit Action:	PR12	Permit/Jot	o#: <u>C1981010</u>
<u>PROJECT</u>	IDENTIFIC	<u>CATION</u>			
	100A	State: Colorado		Abbreviation:	None
Task #:	100A				
Task #: Date:	4/25/2025	County: Moffat		Filename:	100A

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78

Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$236.64
	Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Cost /Acre	Description
\$	
Total Mulch Application 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
					\$
	k Cost / Acre	\$0.00			

No. of Acres:	335	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING,SEEDING		
Initial Job Cost: \$308 7/6 05			

Initial Job Cost:	\$308,746.05
Reseeding Job Cost:	\$54,030.56
Total Job Cost:	\$362,777
Job Hours:	319.30

REVEGETATION WORK

Task descrip	otion:	Roads (including BC road) b	elow 6700'		
Site: Trapper	Mine	Permit Action:	PR12	Permit/Job	#: <u>C1981010</u>
PROJECT	IDENTIFIC	ATION			
Task #:	101	State: Colorado		Abbreviation:	None
Date:	4/25/2025	County: Moffat		Filename:	101
User:	RAR				
Age	ency or organiz	zation name: DRMS			

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94

Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$236.64
	Total Seed Application Cost/Acre	\$236.64

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 Stoc	ek Cost / Acre	\$0.00

	No. of Acres:	196.3		Cost /Acre:	\$360.87
Estimated Failure Rate:		17.5%		Cost /Acre*:	\$360.87
*Selected Replanting Work Items:		TILLING,SEEI	DING		
Initial Job Cost: Reseeding Job Cost:	,				

Total Job Cost:	\$83,236
Job Hours:	196.00

REVEGETATION WORK

Task desc	cription:	Ponds below 6700	elow 6700' (Coyote, Sage, E Buzzard)			
: <u>Trappe</u>	er Mine	Permit Act	ion: PR12	Permit/Job#: C1981	010	
PROJEC	<u>r identifi</u>	CATION				
Task #:	103	State:	Colorado	Abbreviation:	None	
Date:	4/19/2025	County:	Moffat	Filename:	103	
Date.						

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Application

Description

Cost /Acre

Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	26	Cost /Acre:	\$360.87
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEE		

Initial Job Cost:	\$9,382.62
Reseeding Job Cost:	\$1,641.96
Total Job Cost:	\$11,025
Job Hours:	26.00

REVEGETATION WORK

	Task descri	ption:	Johnson Coal Sto	ckpile		
Site:	Trapper	Mine	Permit Act	ion: PR12	Permit/Job#:C	1981010
<u>P</u>	PROJECT	IDENTIFI	CATION			
	Task #:	104	State:	Colorado	Abbreviation	
	Date:	4/19/202	5 County:	Moffat	Filename:	104
	User:	RAR				

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS

No. of Acres:	12.6	Cost /Acre:	\$360.87
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$4,546.96
Reseeding Job Cost:	\$795.72
Total Job Cost:	\$5,343
Job Hours:	12.00

REVEGETATION WORK

Task	description: Top	soil piles belo	w 6700'			
ite: Tra	apper Mine	Permit Act	ion: PR12	Po	ermit/Job#:	_C1981010
<u>PROJ</u>	ECT IDENTIFICAT	ION				
Task Date: User:	4/19/2025	State: County:	Colorado Moffat		Abbrev Filenam	
Agen <u>SEED</u>	icy or organization nam ING	ne: D	RMS			
See	d Mix			Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arr	owleaf Balsamroot			0.40	0.50	\$39.81
Bea	Beardless Wheatgrass - Whitmar			0.31	1.01	\$4.29
Mo	Mountain Brome - Bromar			0.72	1.16	\$4.33
Gre	at Basin Wildrye - Mag	gnar		0.92	3.74	\$10.75
Ker	ntucky Bluegrass - Ging	ger		0.06	2.96	\$0.25
Alf	Alfalfa - Ladak (inoculated)			0.10	0.48	\$0.40
Bur	Burnett, Small (or Little) - Delar			0.40	0.51	\$1.78
	Sheep Fescue - Covar			0.15	2.34	\$0.92
	Milk Vetch, Cicer - Lutana			0.30	1.00	\$2.94
	nder Wheatgrass - San			0.28	1.02	\$1.69
	eambank Wheatgrass -			0.26	0.85	\$2.16
Thi	ckspike Wheatgrass - C	Critana		0.28	0.99	\$2.28
We	Western Wheatgrass - Arriba			0.38	0.96	\$3.43

0.24

0.30

0.02

0.14

0.07

0.08

0.02

0.08

5.51

1.00

1.99

2.29

2.19

4.26

0.91

0.35

0.92

31.41

\$2.07

\$0.21

\$8.60

\$3.38

\$10.31

\$2.80

\$9.13

\$124.23

\$12.69

Totals	Seed	Mix
--------	------	-----

Aster, Pacific

Flax, Lewis Blue

Yarrow, Western

Globemallow, Munro

Goldeneye - Showy

Red Top

Needlegrass, Green - Lodorm

Penstemon, Rocky Mountain

Application

Description

Cost /Acre

Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	27.1	Cost /Acre:	\$360.87
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$9,779.58
Reseeding Job Cost:	\$1,711.43
Total Job Cost:	\$11,491
Job Hours:	27.00

REVEGETATION WORK

Task c	lescription:	Roads: >6700 ft	Rangeland with Shrub	S	
te: <u>Tra</u>	pper Mine	Permit Act	ion: PR12	Permit/Job#: C198	1010
<u>PROJI</u>	ECT IDENTIFI	CATION			
Task -	#: 107	State:	Colorado	Abbreviation:	None
Date:	4/19/202	5 County:	Moffat	Filename:	107
Date:	1/1/202				

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80

Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	54.2	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING, SEEDING		

Initial Job Cost:	\$49,952.35
Reseeding Job Cost:	\$8,741.66
Total Job Cost:	\$58,694
Job Hours:	54.00

REVEGETATION WORK

Fask desc	ription:	Ash pitRangela	nd with Shrubs		
Trappe	r Mine	Permit Act	ion: PR12	Permit/Job#: C198	1010
ROJECI	<u> IDENTIFIC</u>	ATION			
ask #:	108	State:	Colorado	Abbreviation:	None
		a	$\mathbf{M} = \mathbf{f} \mathbf{f} = \mathbf{f}$	D '1	108
Date:	4/19/2025	County:	Moffat	Filename:	108

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80

Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Application

Description	Cost /A sur
Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	115.6	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$106,540.43
Reseeding Job Cost:	\$18,644.57
Total Job Cost:	\$125,185
Job Hours:	115.00

REVEGETATION WORK

Task desc	cription:	opsoil piles abo	ve 6700'		
Trappe	er Mine	Permit Act	tion: PR12	Permit/Job#: C1981	1010
ROJEC	FIDENTIFIC	ATION			
Task #:	112	State:	Colorado	Abbreviation:	None
Data	4/19/2025	County:	Moffat	Filename:	112
Date:					

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80

Goldeneye, Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	5.1	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$4,700.31
Reseeding Job Cost:	\$822.55
Total Job Cost:	\$5,523
Job Hours:	5.00

BOREHOLE SEALING WORK

Task description: Seal Land Slide Monitoring Stations								
Site:	Trapper Mine	Permit Action: PR12 Permi		Permit/J	ob#:	C1981010		
PROJE	CT IDENTIFICAT	TION						
Task #: Date: User:	: <u>120</u> <u>4/19/2025</u> RAR	State: County:	Colorado Moffat		Abbreviation: Filename:	Non 120	e	
	y or organization na	me:	DRMS					

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Plug and Seal Station 8	Portland cement grout - 6 in. (labor, equip, materials)	6	172	841.00	LF	\$9.68	\$8,142.90

 Job Hours:
 4.00
 Total Cost:
 \$8,143.00

BOREHOLE SEALING WORK

Task description: Plug and Seal Exploration Drill Holes									
Site: <u>T</u>	rapper Mine	Per	rmit Action:	PR12	Permit/.	Job#:	C1981010		
PROJECT IDENTIFICATION									
Task #:	121	State:	Colorado		Abbreviation:	Non	e		
Task #: Date:	<u>121</u> <u>4/19/2025</u>	State: County:	Colorado Moffat		Abbreviation: Filename:	Non 121	e		

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Plug and Seal Boreholes	Portland cement grout - 6 in. (labor, equip, materials)	6	4000	4,000.00	LF	\$9.68	\$38,729.60

Job Hours:

80.00

Total Cost:

\$38,730.00

BOREHOLE SEALING WORK

Т	ask description:	Plug and	l Seal Monito	ring Wells		
Site:	Frapper Mine	Pe	ermit Action:	PR12	Permit/J	Job#: <u>C1981010</u>
<u>PROJEC</u>	CT IDENTIFICAT	TION				
Task #: Date: User:	122 4/19/2025 RAR	State: County:	Colorado Moffat		Abbreviation: Filename:	None 122
Agency	or organization na	me:	DRMS			

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
81-03A	Portland cement grout - 2 in. (labor, equip, materials)	2	650	650.00	LF	\$8.57	\$5,571.15
COY-A	Portland cement grout - 2 in. (labor, equip, materials)	2	59	59.00	LF	\$8.57	\$505.69
СОҮ-В	Portland cement grout - 2 in. (labor, equip, materials)	2	49	49.00	LF	\$8.57	\$419.98
СОҮ	Portland cement grout - 4 in. (labor, equip, materials)	4	54	54.00	LF	\$8.71	\$470.51
GC1	Portland cement grout - 4 in. (labor, equip, materials)	2.5	180	180.00	LF	\$8.71	\$1,568.38
GC2	Portland cement grout - 4 in. (labor, equip, materials)	2.5	165	165.00	LF	\$8.71	\$1,437.68
GC3	Portland cement grout - 4 in. (labor, equip, materials)	2.5	64	64.00	LF	\$8.71	\$557.64
GC3A	Portland cement grout - 2 in. (labor, equip, materials)	2	50	50.00	LF	\$8.57	\$428.55
GC3B	Portland cement grout - 2 in. (labor, equip, materials)	2	67	67.00	LF	\$8.57	\$574.26
GD2	Portland cement grout - 4 in. (labor, equip, materials)	4	210	210.00	LF	\$8.71	\$1,829.77

GD3	Portland cement grout - 4 in. (labor,	4	198	198.00	LF	\$8.71	\$1,725.21
GF1	equip, materials) Portland cement grout - 4 in. (labor, equip, materials)	4	640	640.00	LF	\$8.71	\$5,576.45
GF4	Portland cement grout - 4 in. (labor, equip, materials)	4	270	270.00	LF	\$8.71	\$2,352.56
GF5	Portland cement grout - 6 in. (labor, equip, materials)	4.25	153.5	153.50	LF	\$9.68	\$1,486.25
GF6	Portland cement grout - 4 in. (labor, equip, materials)	4	200	200.00	LF	\$8.71	\$1,742.64
GF7	Portland cement grout - 6 in. (labor, equip, materials)	4.25	127	127.00	LF	\$9.68	\$1,229.66
GF8	Portland cement grout - 6 in. (labor, equip, materials)	4.25	220	220.00	LF	\$9.68	\$2,130.13
GP2	Portland cement grout - 4 in. (labor, equip, materials)	4	307	307.00	LF	\$8.71	\$2,674.95
GP3	Portland cement grout - 4 in. (labor, equip, materials)	4	154	154.00	LF	\$8.71	\$1,341.83
GP3A	Portland cement grout - 2 in. (labor, equip, materials)	2	143	143.00	LF	\$8.57	\$1,225.65
GP4	Portland cement grout - 4 in. (labor, equip, materials)	4	281	281.00	LF	\$8.71	\$2,448.41
GP5	Portland cement grout - 4 in. (labor, equip, materials)	4	284	284.00	LF	\$8.71	\$2,474.55
GP7	Portland cement grout - 4 in. (labor, equip, materials)	4	99	99.00	LF	\$8.71	\$862.61
GP8	Portland cement grout - 4 in. (labor, equip, materials)	4	198	198.00	LF	\$8.71	\$1,725.21
GP9	Portland cement grout - 4 in. (labor, equip, materials)	4	202	202.00	LF	\$8.71	\$1,760.07
J1	Portland cement grout - 4 in. (labor, equip, materials)	4	30	30.00	LF	\$8.71	\$261.40

P1	Portland cement grout - 4 in. (labor,	4	21	21.00	LF	\$8.71	\$182.98
P2	equip, materials) Portland cement grout - 4 in. (labor, equip, materials)	4	21	21.00	LF	\$8.71	\$182.98
P4	Portland cement grout - 4 in. (labor, equip, materials)	4	80	80.00	LF	\$8.71	\$697.06
Р5	Portland cement grout - 4 in. (labor, equip, materials)	4	21	21.00	LF	\$8.71	\$182.98
P6	Portland cement grout - 4 in. (labor, equip, materials)	4	51	51.00	LF	\$8.71	\$444.37
P7	Portland cement grout - 4 in. (labor, equip, materials)	4	37	37.00	LF	\$8.71	\$322.39
P8	Portland cement grout - 4 in. (labor, equip, materials)	4	33	33.00	LF	\$8.71	\$287.54
GMP-1	Portland cement grout - 4 in. (labor, equip, materials)	4	200	200.00	LF	\$8.71	\$1,742.64
GD1	Portland cement grout - 6 in. (labor, equip, materials)	6	1132	1,132.00	LF	\$9.68	\$10,960.48
GD1(2)	Portland cement grout - 6 in. (labor, equip, materials)	6	1144	1,144.00	LF	\$9.68	\$11,076.67
GLEV-1	Portland cement grout - 6 in. (labor, equip, materials)	4.25	238	238.00	LF	\$9.68	\$2,304.41
GLEV-2	Portland cement grout - 6 in. (labor, equip, materials)	4.25	27	27.00	LF	\$9.68	\$261.42
GLEV-3	Portland cement grout - 6 in. (labor, equip, materials)	4.25	45	45.00	LF	\$9.68	\$435.71
CY-A	Portland cement grout - 6 in. (labor, equip, materials)	4.25	35	35.00	LF	\$9.68	\$338.88
CY-1	Portland cement grout - 6 in. (labor, equip, materials)	4.25	165	165.00	LF	\$9.68	\$1,597.60
CY-2	Portland cement grout - 6 in. (labor, equip, materials)	4.25	285	285.00	LF	\$9.68	\$2,759.48

Demo Worksheet Cont'd

CY-3	Portland cement grout - 6 in. (labor, equip, materials)	4.25	430	430.00	LF	\$9.68	\$4,163.43
GX1	Portland cement grout - 6 in. (labor, equip, materials)	4.25	318	318.00	LF	\$9.68	\$3,079.00
GW-23	Portland cement grout - 6 in. (labor, equip, materials)	4.25	280	280.00	LF	\$9.68	\$2,711.07
GW-26	Portland cement grout - 6 in. (labor, equip, materials)	4.25	321	321.00	LF	\$9.68	\$3,108.05
GW-29	Portland cement grout - 6 in. (labor, equip, materials)	4.25	320	320.00	LF	\$9.68	\$3,098.37
GW-30	Portland cement grout - 6 in. (labor, equip, materials)	4.25	320	320.00	LF	\$9.68	\$3,098.37
GW-31	Portland cement grout - 6 in. (labor, equip, materials)	4.25	320	320.00	LF	\$9.68	\$3,098.37
Ks_DW-1A	Portland cement grout - 6 in. (labor, equip, materials)	4.25	188	188.00	LF	\$9.68	\$1,820.29
NP-1	Portland cement grout - 6 in. (labor, equip, materials)	4.25	185	185.00	LF	\$9.68	\$1,791.24
NP-2	Portland cement grout - 6 in. (labor, equip, materials)	4.25	135	135.00	LF	\$9.68	\$1,307.12
NP-3	Portland cement grout - 6 in. (labor, equip, materials)	4.25	299	299.00	LF	\$9.68	\$2,895.04
East Pyeatt Well #1	Portland cement grout - 6 in. (labor, equip, materials)	5	700	700.00	LF	\$9.68	\$6,777.68
05-LW-17	Portland cement grout - 4 in. (labor, equip, materials)	2.375	816	816.00	LF	\$8.71	\$7,109.97
05-LW-21	Portland cement grout - 4 in. (labor, equip, materials)	2.375	1325.4	1,325.40	LF	\$8.71	\$11,548.48
05-LW-25	Portland cement grout - 4 in. (labor, equip, materials)	2.375	1358	1,358.00	LF	\$8.71	\$11,832.53
05-LW-27	Portland cement grout - 4 in. (labor, equip, materials)	2.375	1594	1,594.00	LF	\$8.71	\$13,888.84

95-LW-09	Portland cement	4	695	995.00	LF	\$8.71	\$8,669.63
	grout - 4 in. (labor,						
	equip, materials)						

Job Hours:

185.00 Total Cost:

\$168,156.00

Task # TTT

REVEGETATION WORK

Task dese	cription:	Reveg for 20 x .3	acres drillholes		
e: Trapper Mine		Permit Action: PR12		Permit/Job#: C1981010	
PROJEC'	<u>r identifi</u>	CATION			
Task #:	128	State:	Colorado	Abbreviation:	None
Datas	4/19/2025	5 County:	Moffat	Filename:	128
Date:					

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80

Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	6	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$5,529.78
Reseeding Job Cost:	\$967.71
Total Job Cost:	\$6,497
Job Hours:	6.00

Task # TTT

BULLDOZER WORK INSERT REVEG TASKS

Trapper Mine P		Permit Act	ion: PR12	Permit/Job#: C198	Permit/Job#: <u>C1981010</u>		
ROJECT	IDENTIFIC	ATION					
Task #:	129	State:	Colorado	Abbreviation:	None		
Date: User:	3/21/2025 RAR	County:	Moffat	Filename:	PR12 F		
Agency or	organization	name: D	ORMS				
IOURLY	EQUIPMEN'	T COST					
Basic Mac	hine: Cat	D8T - 8SU					
Horsepow	er: 310						
Blade Typ		ni-Universal					
Attachmen	nt: 3-sh	ank ripper					
Shift Basis	s: <u>1 pe</u>	er day					
Data Sour	ce: (CR	.G)					
Cost Breake	lown:						
	<u> </u>		Utilizat	ion <u>%</u>			
Ownership	o Cost/Hour:	\$173.32	NA				
Operating	Cost/Hour:	\$109.71	100				
Ripper ow		¢1452	NT A				
Cost/Hour	:	\$14.53	NA				
Ripper op.	Cost/Hour:	\$3.98	50				
Operator	Cost/Hour:	\$38.59	NA				
Total unit	Cost/Hour:	\$340.12					
Total Flee	t	\$340.12					
Cost/Hour	•						
<u>AATERIA</u>	L QUANTIT	TIES					
Initial Vol	ume: 30,00	00					
Swell fact	,						
Loose volu	ume: 30,00	00 LCY					
Source of	estimated volu	ume: A-7.2					
	estimated voit		ndbook				
Nource of		ar valitat	NUUUN				

Average push distance:

50 feet

Task # TTT

Unadjusted hourly production:	1,400.0 LCY/hr	
Materials consistency description:	Compacted fill or en	ıbankment 0.9
Average push gradient: Average site altitude:	0 % 7,500 feet	
Material weight:	2,550 lbs/LCY	
Weight description:	Earth - Dry packed	
Job Condition Correction	Factor Source	
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:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4548	
Adjusted unit production:	636.72 LCY/hr	
Adjusted fleet production:	636.72 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.534/LCY
Total job time:	47.12 Hours
Total job cost:	\$16,025

DEMOLITION WORK

Tas	sk description:	Demolish str	Demolish structures, remove materials and debris							
Site: T	rapper Mine	H	Permit Action: PR12			Permit/Job#:C1981010				
PROJECT	<u> IDENTIFICA</u>	<u>'ION</u>								
Task #:	130	State:	Colorado		Abbr	eviation:	None			
Date:	5/1/2025	County:	Moffat		F	ilename:	C010-130			
User:	RAR									

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 91.30 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Main office	31,7548 CF	Bldg. (MN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	317,548.00	CF	\$0.33	\$104,346.27
Office bldg. floor	15,288 SF	Floor, concrete, demolition only, average reinforcing - 10 in. thick	15,288.00	SF	\$1.84	\$28,094.76
Reinforced concrete floor office bldg.	251 SF	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 10,000 ft. haul	251.00	SF	\$2.31	\$580.59
Office footers	804 SF	Demo. and on-site disposal in existing pit, 1.5 ft. x 2 ft Max. 10,000 ft. haul	804.00	LF	\$6.94	\$5,579.12
Remove fencing	700 LF	Fencing, chain link, including posts and fabric - 8 ft. to 10 ft. high	700.00	LF	\$3.53	\$2,471.00
Shop\Warehouse	1,925,700 CF	Bldg. (MN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,925,700.00	CF	\$0.33	\$632,785.02
Warehouse concrete floor	9,270 SF	Floor, concrete, demolition only, average reinforcing - 12 in. thick	9,270.00	SF	\$2.21	\$20,442.20
Warehouse 4" Concrete floor	7,925 SF	Floor, concrete, demolition only, average reinforcing - 4 in. thick	7,925.00	SF	\$0.74	\$5,825.67
Warehouse Footers	1,822 LF	Demo. and on-site disposal in existing pit, 1.5 ft. x 2 ft Max. 10,000 ft. haul	1,822.00	LF	\$6.94	\$12,643.22

Silver storage trailer	40 X10X10	Bldg. (SN) demo./on-site disposal in existing	4,000.00	CF	\$0.24	\$973.60
		pit or cut - Max. 10,000 ft. haul				
Ble caterpillar parts trailer	35X10X8	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max.	2,800.00	CF	\$0.24	\$681.52
Wash/Lube Bay	173,500 CF	10,000 ft. haulBldg. (MN)demo./on-sitedisposal in existingpit or cut - Max.10,000 ft. haul	173,500.00	CF	\$0.33	\$57,012.10
Wash bay concrete floor	9,275 SF	Floor, concrete, demolition only, average reinforcing - 6 in. thick	9,275.00	SF	\$1.10	\$10,226.62
Wash bay footers	480 LF	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 10,000 ft. haul	480.00	LF	\$4.63	\$2,220.53
Shop concrete floor	2,400 SF	Floor, concrete, demolition only, average reinforcing - 6 in. thick	2,400.00	SF	\$1.10	\$2,646.24
Shop Footers	290 LF	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 10,000 ft. haul	290.00	LF	\$4.63	\$1,341.57
Seed Trailer	30X10X8	Bldg. (MN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,400.00	CF	\$0.33	\$788.64
Pump House	4,840 CF	Bldg. (MN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	4,840.00	CF	\$0.33	\$1,590.42
Pump House floor	484 SF	Floor, concrete, demolition only, average reinforcing - 6 in. thick	484.00	SF	\$1.10	\$533.66
Pump House footers	88 LF	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 10,000 ft. haul	88.00	LF	\$4.63	\$407.10
Old cars and equipment at water tanks	120X10X4	Bldg. (SC) demo./on-site disposal in existing	4,800.00	CF	\$0.29	\$1,380.96

		pit or cut - Max. 10,000 ft. haul				
Light Duty and Electrical Shop	94,500 CF	Bldg. (SC) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	94,500.00	CF	\$0.29	\$27,187.65
Concrete floor	5,250 SF	Floor, concrete, demolition only, average reinforcing - 6 in. thick	5,250.00	SF	\$1.10	\$5,788.65
Footers	348 LF	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 10,000 ft. haul	348.00	LF	\$4.63	\$1,609.88
Break Up and Bury Parking Lot Asphalt	2,448 SY	Pavement, bituminous, demolition only - 4 in. to 6 in. thick	2,448.00	SY	\$8.66	\$21,199.68
Water Tank	80,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	10,667.00	CF	\$0.24	\$2,596.35
Water Tank	80,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	10,667.00	CF	\$0.24	\$2,596.35
Diesel Tank	100,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	13,333.00	CF	\$0.24	\$3,245.25
Diesel Tank	100,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	13,333.00	CF	\$0.24	\$3,245.25
Diesel Tank	20,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,667.00	CF	\$0.24	\$649.15
Diesel Tank	20,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,667.00	CF	\$0.24	\$649.15
Diesel Tank	20,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,667.00	CF	\$0.24	\$649.15

Diesel Tank Removed but onsite	20,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,667.00	CF	\$0.24	\$649.15
Diesel Tank Removed but onsite	20,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,667.00	CF	\$0.24	\$649.15
Gasoline Tank	15,000 Gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,000.00	CF	\$0.24	\$486.80
Concrete Pads for Storage Tank	6,500 SF	Floor, concrete, demolition only, average reinforcing - 6 in. thick	6,500.00	SF	\$1.10	\$7,166.90
Fuel Tank Sludge Removal - 8 Tanks	6,300 Gallons	Remove sludge, water, and rem. product from tank - 6,000 to 8,000 gal.	1.00	EA	\$324.00	\$324.00
Disposal of Tank Sludge	26 Tons	Hazardous waste removal - Bulk liquids, large quantities (over 2,500 gal.)	6,300.00	GAL	\$1.98	\$12,480.93
Powerlines	75 330 LF	Utility Poles, Wood 35' - 45' high (each pole)	75.00	EA	\$325.00	\$24,375.00
Tire Shed-Skid Mounted	6,000 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	6,000.00	CF	\$0.24	\$1,460.40
Main Substation	6,000 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	6,000.00	CF	\$0.24	\$1,460.40
Concrete Pads	1,200 SF	Floor, concrete, demolition only, average reinforcing - 6 in. thick	1,200.00	SF	\$1.10	\$1,323.12
4 Portables	4,200 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	4,200.00	CF	\$0.24	\$1,022.28
ANFO Silos and Emolsion Tank	10,940 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	10,940.00	CF	\$0.24	\$2,662.80

New 2007 Emulsion tank	15,000 gal	Bldg. (SN) demo./on-site disposal in existing	1,600.00	CF	\$0.24	\$389.44
		pit or cut - Max. 10,000 ft. haul				
Concrete Pad	1,642 SF	Floor, concrete, demolition only, average reinforcing - 6 in. thick	1,642.00	SF	\$1.10	\$1,810.47
Footers	52 LF	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 10,000 ft. haul	52.00	LF	\$4.63	\$240.56
Explosive storage- 2 magazines	2 X 853.3 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,707.00	CF	\$0.24	\$415.48
Explosive Storage Trailer	2,560 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,560.00	CF	\$0.24	\$623.10
2 Large Explosives Magazines	2 X 22.5. 8X6	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	2,160.00	CF	\$0.24	\$525.74
Tub Pad railroad Track	2 X 312	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	624.00	CF	\$0.24	\$151.88
5 Cargo Containers	5 X 25 and 8x8	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	8,000.00	CF	\$0.24	\$1,947.20
Queen Anne Dragline Repair Pad	70'Lx70'wx.067'h	Floor, concrete, demolition only, average reinforcing - 8 in. thick	4,900.00	SF	\$1.47	\$7,203.49
Bury boneyard storage material	84,000 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	84,000.00	CF	\$0.24	\$20,445.60
Waste oil and Anit-Freeze drum disposal	50 used oil, 20 Solvent	Solid pickup - 55 gal. drums	70.00	EA	\$240.00	\$16,800.00
Waterlines and Waste Solvent Lines	Shop to waste oil pad	Pipe, sewer/water - 12 in. diameter pipe	100.00	LF	\$5.24	\$524.00
Transformer Pad	225 SF	Floor, concrete, demolition only,	225.00	SF	\$0.74	\$165.40

		average reinforcing - 4 in. thick				
4 skid mounted substations	4'x10', 8'x20'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	6,400.00	CF	\$0.24	\$1,557.76
3x50,000 Tanks	20,040 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	20,040.00	CF	\$0.24	\$4,877.74
2x20,000 Tanks	5,348 CF	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	5,348.00	CF	\$0.24	\$1,301.70
MgCl Tank @ H Impoundment	10,000 gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,005.00	CF	\$0.24	\$244.62
Red silo @ used oil storage area	15,000 gallons	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,600.00	CF	\$0.24	\$389.44
Blasters Equipment Building	45X85X22	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	76,021.88	CF	\$0.24	\$17,956.37
-Blasters Equipment Building Foundation	146 CY	Slab on grade, concrete, demolition only - No reinforcing	106.00	СҮ	\$104.00	\$11,024.00
Radio Tower Skid Mounted	NA	USER PROVIDED ITEM	1.00	EA	\$1,500.00	\$1,500.00

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	100.00	(unadjusted):	\$1,106,142.24	location):	\$1,009,907.87

DEMOLITION WORK

Task	description:	Culvert Re	moval and	Disposal			
Site: Tra	pper Mine	Perm	nit Action:	PR12	Permit	Job#:	C1981010
PROJE	CT IDENTIFIC	ATION					
Task #:	131	State:	Colorado		Abbreviation:	None	
Date: User:	4/19/2025 RAR	County:	Moffat		Filename:	131	
Agency	y or organization	name:	DRMS				

<u>UNIT COSTS</u> <u>Location adjustment: 91.30 %</u>

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
A-1	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	240.00	LF	\$24.52	\$5,885.42
A-2	60" Diam	Pipe, corrugated metal (CMP) - 60 in. diameter pipe	240.00	LF	\$33.06	\$7,935.02
ASH-1	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	190.00	LF	\$10.60	\$2,013.07
A-3	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	240.00	LF	\$24.52	\$5,885.42
A-4	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	210.00	LF	\$24.52	\$5,149.75
A-5	2 @ 48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	480.00	LF	\$24.52	\$11,770.85
A-7	36" Diam	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	210.00	LF	\$16.96	\$3,561.66
A9	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	180.00	LF	\$24.52	\$4,414.07

A-10	48" Diam	Pipe, corrugated	240.00	LF	\$24.52	\$5,885.42
/ 1 -10		metal (CMP) - 48	270.00		Ψ24.32	φ3,003. 1 2
		in. diameter pipe				
A-11	18" Diam	Pipe, corrugated	180.00	LF	\$8.10	\$1,457.50
		metal (CMP) - 18				
		in. diameter pipe				
A-12	36"Diam	Pipe, corrugated	210.00	LF	\$16.96	\$3,561.66
		metal (CMP) - 36				
		in. diameter pipe				**
A-14	36" Diam	Pipe, corrugated	210.00	LF	\$16.96	\$3,561.66
		metal (CMP) - 36				
AE-4	24" Diam	in. diameter pipe	210.00	LF	\$10.60	\$2,224,07
AE-4	24 Dialii	Pipe, corrugated metal (CMP) - 24	210.00	LF	\$10.00	\$2,224.97
		in. diameter pipe				
AE-7	24" Diam	Pipe, corrugated	300.00	LF	\$10.60	\$3,178.53
		metal (CMP) - 24	500.00		ψ10.00	ψ5,170.55
		in. diameter pipe				
AE-10	48" Diam	Pipe, corrugated	240.00	LF	\$24.52	\$5,885.42
		metal (CMP) - 48				1 - 9
		in. diameter pipe				
AE-11	48" Diam	Pipe, corrugated	240.00	LF	\$24.52	\$5,885.42
		metal (CMP) - 48				
		in. diameter pipe				
BC-1	24" Diam	Pipe, corrugated	540.00	LF	\$10.60	\$5,721.35
		metal (CMP) - 24				
DCA		in. diameter pipe	2 4 0 0 0		\$22.0 4	*= •= •=
BC-2	60" Diam	Pipe, corrugated	240.00	LF	\$33.06	\$7,935.02
		metal (CMP) - 60				
BC-5	24" Diam	in. diameter pipe Pipe, corrugated	180.00	LF	\$10.60	\$1,907.12
DC-J	24 Dialii	metal (CMP) - 24	180.00	LI	\$10.00	\$1,907.12
		in. diameter pipe				
BC-6	36"Diam	Pipe, corrugated	210.00	LF	\$16.96	\$3,561.66
		metal (CMP) - 36	210.00		¢10.70	<i>\$2,201.00</i>
		in. diameter pipe				
*FEB-1	24" Diam	Pipe, corrugated	180.00	LF	\$10.60	\$1,907.12
		metal (CMP) - 24				
		in. diameter pipe				
D-9	24" Diam	Pipe, corrugated	210.00	LF	\$10.60	\$2,224.97
		metal (CMP) - 24				
		in. diameter pipe				
D-10	18" Diam	Pipe, corrugated	180.00	LF	\$8.10	\$1,457.50
		metal (CMP) - 18				
		in. diameter pipe				

D-12	18" Diam	Pipe, corrugated metal (CMP) - 18 in. diameter pipe	180.00	LF	\$8.10	\$1,457.50
D-15	36" Diam	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	180.00	LF	\$16.96	\$3,052.85
D-16	2 @ 24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	360.00	LF	\$10.60	\$3,814.24
D-17	2 @ 24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	360.00	LF	\$10.60	\$3,814.24
FT-1	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	110.00	LF	\$10.60	\$1,165.46
EMF-1	2 @ 36"	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	120.00	LF	\$16.96	\$2,035.24
GRS-1	24"Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
GRS-2	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	240.00	LF	\$24.52	\$5,885.42
RW-1	12" Diam	Pipe, corrugated metal (CMP) - 12 in. diameter pipe	180.00	LF	\$5.91	\$1,063.55
SA-1	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	240.00	LF	\$24.52	\$5,885.42
SA-7	30" Diam	Pipe, corrugated metal (CMP) - 30 in. diameter pipe	180.00	LF	\$13.98	\$2,516.35
SAH-1	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
AE-8	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	240.00	LF	\$24.52	\$5,885.42
AE-12	36" Diam	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	130.00	LF	\$16.96	\$2,204.84
AX-3	60" Diam	Pipe, corrugated metal (CMP) - 60 in. diameter pipe	240.00	LF	\$33.06	\$7,935.02

AX-4	36" Diam	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	240.00	LF	\$16.96	\$4,070.47
AX-5	36" Diam	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	210.00	LF	\$16.96	\$3,561.66
IH-1	18"Diam	Pipe, corrugated metal (CMP) - 18 in. diameter pipe	180.00	LF	\$8.10	\$1,457.50
IWP-1	6" Diam	Pipe, corrugated metal (CMP) - 8 in. diameter pipe	180.00	LF	\$4.51	\$811.22
Jgag-1	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
JG-2	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
NN-5	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
OH-3	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
OH-5	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
MC-1	15" Diam	Pipe, corrugated metal (CMP) - 15 in. diameter pipe	180.00	LF	\$6.97	\$1,254.15
MC-3	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	180.00	LF	\$10.60	\$1,907.12
MC-5	18"	Pipe, corrugated metal (CMP) - 18 in. diameter pipe	120.00	LF	\$8.10	\$971.66
A-15	48" Diam	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	223.00	LF	\$24.52	\$5,468.54
AE-13A	24" Diam	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	175.00	LF	\$10.60	\$1,854.14
AE-13B	36" Diam	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	170.00	LF	\$16.96	\$2,883.25

BC-7	36"Diam	Pipe, corrugated	192.00	LF	\$16.96	\$3,256.38
		metal (CMP) - 36				
		in. diameter pipe				
OH-6	18" Diam	Pipe, corrugated	78.00	LF	\$8.10	\$631.58
		metal (CMP) - 18				
		in. diameter pipe				
A-13	24" Diam	Pipe, corrugated	210.00	LF	\$10.60	\$2,224.97
		metal (CMP) - 24				
		in. diameter pipe				

				Total Cost	
Job		Subtotal		(adjusted for	
Hours:	60.00	(unadjusted):	\$193,388.61	location):	\$176,563.80

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: M	obilize and Demobilize from Hay	den, CO
Site: Trapper Mine	Permit Action: PR12	Permit/Job#: <u>C1981010</u>
PROJECT IDENTIFICA	TION	
Task #: 132	State: Colorado	Abbreviation: None
Date: 4/19/2025	County: Moffat	Filename: 132
User: RAR		
Agency or organization na		
Shift basis:		1 per day
Cost Data Source:		CRG Data
Truck Tractor Description	GENERIC ON-HIGHV POWERED, 400 HP (2	WAY TRUCK TRACTOR, 6X4, DIESEL 2ND HALF, 2006)
Truck Trailer Description	GENERIC FOLDING	GOOSENECK, DROP DECK EQUIPMENT
	TRAILER (25T, 50T, 4	AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

NON ROADABLE EQUIPMENT:

Machine	Weight/	Owner	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	ship	Cost/hr/unit	Size	Cost/hr/	Cost/hr/	Cost/ fleet
	(TONS)	Cost/hr/			fleet	fleet	
		unit					
Cat D11T -	134.12	\$496.62	\$125.64	10	\$6,222.60	\$1,256.40	\$2,000.00
11U							
Cat D10T -	84.53	\$257.39	\$125.64	4	\$1,532.12	\$502.56	\$1,000.00
10SU							
Light plant, 30	1.46	\$4.76	\$59.44	4	\$256.80	\$237.76	\$1,000.00
ft. tower, 4							

lights - 13.5 HP							
Cat 637G w/push-pull	59.59	\$281.32	\$125.64	8	\$3,255.68	\$1,005.12	\$2,500.00
Altas Capco DM25SP - 6- 3/4"	0.00	\$394.50	\$59.44	1	\$453.94	\$59.44	\$250.00
KOM45.00U 830E	244.00	\$209.47	\$125.64	4	\$1,340.44	\$502.56	\$1,500.00
CAT 16M	28.73	\$179.39	\$122.78	4	\$1,208.68	\$491.12	\$1,000.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
CAT 6090	1,078.00	\$302.35	\$125.64	1	\$427.99	\$125.64	\$250.00
Water Tanker, 5,000 Gal.	15.00	\$51.70	\$59.44	1	\$111.14	\$59.44	\$250.00

Subtotals:

\$14,909.85 \$4,299.48 \$10,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/
	um		fleet	fleet
Water Tanker, 2,500 Gal.	\$55.22	2	\$110.44	\$110.44
Fuel Tanker, 6x4, 210 HP	\$75.02	1	\$75.02	\$75.02
Lube Truck, 6x4, 250 HP	\$75.02	1	\$75.02	\$75.02

Subtotals:

\$260.48 \$260.48

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	HAYDEN	
Total one-way travel distance:	25.00	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:	\$87,862.43 \$289.42	

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.56	0.56
Return Time (Hours):	0.56	0.56
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	0.56	NA
Subtotals:	2.67	1.11

JOB TIME AND COST

Total job time:	5.34	Hours
		•

Total job cost:

\$88,152

<u>Trapper Mine</u>	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTIF	ICATION			
Task #: L01 Date: 3/21/202: User: RAR	<u>State:</u> <u>Colorac</u> <u>5 County: Moffat</u>	<u>lo</u>	Abbreviation: Filename:	<u>None</u> PR12 F
Agency or organization	on name: DRMS			
OURLY EQUIPME	ENT COST			
Horsepower:85Blade Type:UrAttachment:NAShift Basis:3 p	niversal			
ost Breakdown:		Utilization %		
<u>Ownership</u> Cost/Hour:	<u>\$496.62</u>	<u>NA</u>		
<u>Operating</u> Cost/Hour:	<u>\$324.90</u>	<u>100</u>		
<u>Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u> Operator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Fotal unit</u> Cost/Hour:	<u>\$860.36</u>			
Total Fleet	<u>\$3,441.42</u>			

<u>Initial</u> Volume:	<u>93,302</u>
Swell factor:	1.000

Loose volume: 93,30	<u>12 LCY</u>	
Source of estimated vo Source of estimated sw factor:		
HOURLY PRODUCT	<u>ION</u>	
Average push distance: Unadjusted hourly production:	<u>305 feet</u> <u>1,041.3 LCY/hr</u>	
Materials consistency description:	Consolidated stock	kpile 1.0
<u>Average push</u> gradient: <u>Average site</u> altitude:	<u>-20 %</u> <u>6,950 feet</u>	
Material weight:	2,475 lbs/LCY User Provided	
<u>Job Condition Correction</u> <u>Operator Skill:</u> <u>Material consistency:</u>	<u>n Factor Source</u> <u>0.750</u> 1.000	(AVG.) (CAT HB)
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	<u>1.000</u>	(DOZ-OC)
Push gradient:	<u>1.426</u>	<u>(CAT HB)</u>
Altitude:	<u>1.000</u>	<u>(CAT HB)</u>
Material Weight:	0.929	<u>(CAT HB)</u>
Blade type:	1.000	<u>(PAT)</u>
Net correction:	0.9419	
Adjusted unit production:	<u>980.80 LCY/hr</u>	
<u>Adjusted fleet</u> production:	<u>3923.2 LCY/hr</u>	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.877/LCY
Total job time:	23.78 Hours
Total job cost:	<u>\$81,844</u>

Trapper Mine		<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTIF	ICATION			
Task #: L02 Date: 3/21/2025 Jser: RAR	State:ColoradCounty:Moffat	<u>do</u>	Abbreviation: Filename:	<u>None</u> <u>PR12 F</u>
Agency or organization	on name: DRMS			
OURLY EQUIPME	ENT COST			
Horsepower:850Blade Type:UnAttachment:NAShift Basis:3 p	iversal			
st Breakdown:		Utilization %		
<u>Dwnership</u> Cost/Hour:	<u>\$496.62</u>	<u>NA</u>		
<u>perating</u> ost/Hour:	<u>\$324.90</u>	<u>100</u>		
<u>ipper own.</u> lost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Dperator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>`otal unit</u> Cost/Hour:	<u>\$860.36</u>			

<u>Initial</u> Volume:	222,222
Swell factor:	1.000

Loose volume: 222,22	<u>22 LCY</u>	
Source of estimated vol Source of estimated swe factor:		
HOURLY PRODUCTI	<u>ON</u>	
Average push distance: Unadjusted hourly production:	<u>345 feet</u> <u>929.5 LCY/hr</u>	
Materials consistency description:	Consolidated stock	bile 1.0
gradient:	<u>-20 %</u> 7,050 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
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:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.9419	
<u>Adjusted unit</u> production:	875.50 LCY/hr	
Adjusted fleet production:	<u>3502 LCY/hr</u>	

Fleet size:	$4 \operatorname{Dozer}(s)$
Unit cost:	<u>\$0.983/LCY</u>
<u>Total job time:</u>	63.46 Hours
<u>Total job cost:</u>	<u>\$218,378</u>

Trapper Mine	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
PROJECT IDENTIFI	CATION			
Task #:L03Date: $3/21/2025$ User:RAR	<u>State:</u> <u>Colora</u> <u>County:</u> <u>Moffat</u>		<u>Abbreviation:</u> <u>Filename:</u>	<u>None</u> <u>PR12 F</u>
Agency or organization	on name: DRMS			
IOURLY EQUIPME	NT COST			
Horsepower:850Blade Type:UnAttachment:NAShift Basis:3 p	iversal			
Cost Breakdown:				
<u>Ownership</u> Cost/Hour:	<u>\$496.62</u>	Utilization % NA		
Operating Cost/Hour:	\$324.90	100		
<u>Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Operator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Total unit</u> Cost/Hour	<u>\$860.36</u>			
Cost/Hour:	\$3,441.42			

<u>Initial</u> Volume:	<u>141,481</u>
Swell factor:	<u>1.000</u>

Loose volume: <u>141,4</u>	<u>81 LCY</u>	
Source of estimated vol	ume: <u>Table A-4.3</u>	
Source of estimated swe	ell Cat Handbook	
factor:		
HOURLY PRODUCTI	<u>ON</u>	
Average push distance: Unadjusted hourly	200 feet 1,560.0 LCY/hr	
production:	<u>1,000.0 De 1/m</u>	
Materials consistency	Consolidated	stockpile 1.0
description:		
Average push	<u>-10 %</u>	
gradient:		
Average site	<u>7,050 feet</u>	
altitude:		
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correctior	n Factor Source	
Operator Skill:	<u>0.750</u>	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.200	<u>(S-BY-S)</u>
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	<u>0.8091</u>	
<u>Adjusted unit</u> production:	1,262.20 LCY/hr	
Adjusted fleet production:	5048.8 LCY/hr	
JOB TIME AND COST	r	
	-	

Fleet size: <u>4 Dozer(s)</u>

Unit cost:	<u>\$0.682/LCY</u>

Total job time:24Total job cost:\$

28.02 Hours	
<u>96,438</u>	

<u>Trapper Mine</u>	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTIFI	<u>CATION</u>			
Task #: L04 Date: 3/21/2025 User: RAR	<u>State:</u> <u>Colora</u> <u>County:</u> <u>Moffat</u>		Abbreviation: Filename:	<u>None</u> <u>PR12 F</u>
Agency or organization	n name: <u>DRMS</u>			
OURLY EQUIPME	NT COST			
Horsepower:850Blade Type:UniAttachment:NA	versal er day			
ost Breakdown:				
<u>Dwnership</u> Cost/Hour:	<u>\$496.62</u>	Utilization % NA		
<u>perating</u> ost/Hour:	<u>\$324.90</u>	100		
ipper own. ost/Hour:	<u>\$0.00</u>	NA		
<u>ipper op.</u> ost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Dperator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Fotal unit</u>	<u>\$860.36</u>			
<u>Cost/Hour:</u>	\$3,441.42			

<u>Initial</u> Volume:	<u>148,574</u>
Swell factor:	1.000

Loose volume: 148,5	7 <u>4 LCY</u>	
Source of estimated volu Source of estimated swe factor:		
HOURLY PRODUCTIO	<u>NC</u>	
<u>Average push distance:</u> <u>Unadjusted hourly</u> production:	<u>290 feet</u> <u>1,095.6 LCY/hr</u>	
Materials consistency description:	Consolidated stock	pile 1.0
gradient:	<u>-25 %</u> 7,000 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	Factor Source	
Operator Skill:	0.750	<u>(AVG.)</u>
Material consistency:	<u>1.000</u>	<u>(CAT HB)</u>
Dozing method:	1.200	<u>(S-BY-S)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	<u>1.000</u>	(DOZ-OC)
Push gradient:	<u>1.516</u>	(CAT HB)
<u>Altitude:</u>	<u>1.000</u>	<u>(CAT HB)</u>
Material Weight:	0.929	<u>(CAT HB)</u>
Blade type:	<u>1.000</u>	<u>(PAT)</u>
Net correction:	<u>1.0013</u>	
<u>Adjusted unit</u> production:	1,097.02 LCY/hr	
Adjusted fleet production:	4388.08 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.784/LCY
Total job time:	33.86 Hours
Total job cost:	<u>\$116,522</u>

Trapper Mine	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTIFI	CATION			
Cask #: L05 Date: 3/21/2025 Jser: RAR	State:ColoradCounty:Moffat	<u>lo</u>	Abbreviation: Filename:	<u>None</u> PR12 F
Agency or organizatio	n name: <u>DRMS</u>			
OURLY EQUIPME	NT COST			
Iorsepower:850Blade Type:UnAttachment:NAhift Basis:3 p	iversal			
t Breakdown:		Utilization %		
<u>)wnership</u> 2ost/Hour:	<u>\$496.62</u>	<u>NA</u>		
<u>perating</u> ost/Hour:	<u>\$324.90</u>	<u>100</u>		
pper own. ost/Hour:	<u>\$0.00</u>	NA		
<u>lipper op.</u> bost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>)perator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Cotal unit</u> Cost/Hour:	<u>\$860.36</u>			
otal Fleet	\$3,441.42			

<u>Initial</u> Volume:	402,666
Swell factor:	<u>1.000</u>

Loose volume: 402,66	<u>56 LCY</u>	
Source of estimated volu Source of estimated swe factor:		
HOURLY PRODUCTIO	<u>DN</u>	
Average push distance: Unadjusted hourly production:	<u>520 feet</u> 627.8 LCY/hr	
Materials consistency description:	Consolidated stockp	ile 1.0
gradient:	<u>-10 %</u> 7,150 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
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:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.8091	
<u>Adjusted unit</u> production:	<u>507.95 LCY/hr</u>	
Adjusted fleet production:	2031.8 LCY/hr	

Fleet size:	$4 \operatorname{Dozer}(s)$
Unit cost:	\$1.694/LCY
Total job time:	198.18 Hours
Total job cost:	\$682,027

<u>Trapper Mine</u>	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
$\begin{array}{c} \hline \textbf{ROJECT IDENTIFI} \\ \hline \underline{Task \#:} \\ \hline \underline{Date:} \\ User: \\ \hline \textbf{RAR} \end{array}$	State: Colorad		Abbreviation: Filename:	None PR12 F
Agency or organizatio	n name: DRMS			
Horsepower:850Blade Type:UniAttachment:NA	versal er day			
ost Breakdown:		Utilization %		
<u>Ownership</u> Cost/Hour:	<u>\$496.62</u>	<u>NA</u>		
<u>Operating</u> <u>Cost/Hour:</u>	<u>\$324.90</u>	<u>100</u>		
<u>Ripper own.</u> <u>Cost/Hour:</u>	<u>\$0.00</u>	NA		
<u>Ripper op.</u> <u>Cost/Hour:</u>	<u>\$0.00</u>	<u>10</u>		
<u>Operator</u> <u>Cost/Hour:</u>	<u>\$38.84</u>	NA		
Total unit	<u>\$860.36</u>			
<u>Total unit</u> Cost/Hour:				

<u>Initial</u> Volume:	<u>718,834</u>
Swell factor:	<u>1.000</u>

Loose volume: 718,8	<u>34 LCY</u>	
Source of estimated vol	ume: <u>Table A-4.3</u>	
Source of estimated swe factor:	ell <u>Cat Handbook</u>	
HOURLY PRODUCTION	<u>ON</u>	
Average push distance: Unadjusted hourly production:	<u>500 feet</u> 650.0 LCY/hr	
Materials consistency description:	Consolidated sto	ockpile 1.0
<u>Average push</u> gradient: <u>Average site</u> altitude:	<u>-25 %</u> 7,050 feet	
Material weight:	<u>2,475 lbs/LCY</u>	
Weight description:	User Provided	
Job Condition Correction	Factor Source	
Operator Skill:	0.750	<u>(AVG.)</u>
Material consistency:	<u>1.000</u>	(CAT HB)
Dozing method:	1.200	<u>(S-BY-S)</u>
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	<u>(PAT)</u>
Net correction:	1.0013	
Adjusted unit production:	650.85 LCY/hr	
Adjusted fleet production:	2603.4 LCY/hr	

<u>Fleet size:</u>	<u>4 Dozer(s)</u>
<u>Unit cost:</u>	<u>\$1.322/LCY</u>
<u>Total job time:</u>	<u>276.11 Hours</u>
<u>Total job cost:</u>	<u>\$950,223</u>

<u>Trapper Mine</u> ROJECT IDENTI		<u>PR12</u>	Permit/Job#: _	<u> 21981010</u>
Task #: L07 Date: 3/21/20 User: RAR	State: Colorad	<u>lo</u>	Abbreviation: Filename:	<u>None</u> PR12 F
Agency or organiza	tion name: DRMS			
Blade Type: I Attachment: I Shift Basis: I	350 Universal NA 3 per day (CRG)			
ost Breakdown:		Utilization %		
<u> Ownership</u> <u>Cost/Hour:</u>	<u>\$496.62</u>	<u>NA</u>		
<u>Dperating</u> Cost/Hour:	<u>\$324.90</u>	<u>100</u>		
<u>Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Operator</u> Cost/Hour:	<u>\$38.84</u>	NA		
Total unit	<u>\$860.36</u>			
Cost/Hour:				

<u>Initial</u> Volume:	475,815
Swell factor:	1.000

Loose volume: 475,8	15 LCY	
Source of estimated vol Source of estimated swi factor:		
HOURLY PRODUCTI	<u>ON</u>	
<u>Average push distance:</u> <u>Unadjusted hourly</u> production:	<u>200 feet</u> <u>1,560.0 LCY/hr</u>	
Materials consistency description:	Consolidated s	tockpile 1.0
<u>Average push</u> gradient: <u>Average site</u> altitude:	<u>-25 %</u> 7,200 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	n Factor Source	
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.000</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.200</u>	<u>(S-BY-S)</u>
<u>Visibility:</u>	<u>1.000</u>	<u>(AVG.)</u>
Job efficiency:	<u>0.790</u>	(3 SHIFTS/DAY)
<u>Spoil pile:</u>	<u>1.000</u>	(DOZ-OC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	<u>1.0013</u>	
Adjusted unit production:	1,562.03 LCY/hr	
Adjusted fleet production:	6248.12 LCY/hr	

Fleet size:	$4 \operatorname{Dozer}(s)$
Unit cost:	\$0.551/LCY
Total job time:	76.15 Hours
Total job cost:	\$262,076

ask description: Trapper Mine	<u>Regrade L Pit X-sec:403</u> Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTIF	TICATION			
Cask #: L08 Date: 3/21/202 Jser: RAR	<u>State:</u> <u>Colorad</u>	<u>lo</u>	Abbreviation: Filename:	<u>None</u> PR12 F
Agency or organizati	on name: DRMS			
OURLY EQUIPMI	ENT COST			
Iorsepower:85lade Type:Unttachment:N.hift Basis:3	niversal			
st Breakdown:		Utilization %		
wnership ost/Hour:	<u>\$496.62</u>	<u>NA</u>		
<u>Dperating</u> Cost/Hour:	<u>\$324.90</u>	<u>100</u>		
ipper own. ost/Hour:	<u>\$0.00</u>	NA		
<u> Cipper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Dperator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Cotal unit</u> Cost/Hour:	<u>\$860.36</u>			
JUSU LIUUL.				

<u>Initial</u> Volume:	102,185
Swell factor:	<u>1.000</u>

)
<u>HB)</u>
<u>-S)</u>
)
<u>FTS/DAY)</u>
<u>OC)</u>
HB)
<u>HB)</u>
<u>HB)</u>

Fleet size:

4 Dozer(s)

<u>Unit cost:</u> <u>\$0.434/LCY</u>

Total job time:12.88 HoursTotal job cost:\$44,332

Trapper Mine	Permit Action:	<u>PR12</u>	Permit/Job#:	<u> C1981010</u>
ROJECT IDENTII	FICATION			
Cask #: L09 Date: 3/21/202 Jser: RAR	State:Colorad25County:Moffat	lo	Abbreviation: Filename:	<u>None</u> PR12 F
Agency or organizat	ion name: <u>DRMS</u>			
<u>DURLY EQUIPM</u>	ENT COST			
Iorsepower:8Blade Type:UMatachment:Nhift Basis:3	Lat D11T - 11U 50 Iniversal IA per day CRG)			
st Breakdown:		Utilization %		
<u> Dwnership</u> Cost/Hour:	<u>\$496.62</u>	<u>NA</u>		
D <u>perating</u> Cost/Hour:	<u>\$324.90</u>	<u>100</u>		
<u> Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	NA		
<u> Cipper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
) <u>perator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>`otal unit</u> Cost/Hour <u>:</u>	<u>\$860.36</u>			
Total Fleet	\$3,441.42			

Initial Volume:	<u>101,945</u>
Swell factor:	<u>1.000</u>

Loose volume: 101,9	<u>45 LCY</u>	
Source of estimated vol Source of estimated swe factor:		
HOURLY PRODUCTI	<u>ON</u>	
<u>Average push distance:</u> <u>Unadjusted hourly</u> production:	<u>100 feet</u> 2,870.3 LCY/hr	
Materials consistency description:	Consolidated stock	<u>pile 1.0</u>
gradient:	<u>-30 %</u> 7,250 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.8812	
Adjusted unit production:	<u>2,529.31 LCY/hr</u>	
Adjusted fleet production:	10117.24 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.340/LCY
<u>Total job time:</u>	10.08 Hours
Total job cost:	\$34,677

<u>Trapper Mine</u>		<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTIFI	<u>CATION</u>			
Task #: L10 Date: 3/21/2025 User: RAR	State:ColoradCounty:Moffat	<u>lo</u>	Abbreviation: Filename:	<u>None</u> <u>PR12 F</u>
Agency or organizatio	n name: <u>DRMS</u>			
OURLY EQUIPME	NT COST			
Horsepower:850Blade Type:United to the second se	iversal			
ost Breakdown:		1		
<u>Ownership</u> Cost/Hour:	<u>\$496.62</u>	Utilization % NA		
<u>Operating</u> Cost/Hour:	\$324.90	<u>100</u>		
Ripper own. Cost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Operator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Total unit</u> Cost/Hour:	<u>\$860.36</u>			
<u>Cost/Hour:</u>	\$3,441.42			

<u>Initial</u> Volume:	430,259
Swell factor:	<u>1.000</u>

Loose volume: 430,2	2 59 LCY	
Source of estimated vol	lume: Table A-4.5	
Source of estimated sw factor:		
HOURLY PRODUCTI	<u>ON</u>	
Average push distance: Unadjusted hourly production:	<u>300 feet</u> <u>1,055.6 LCY/hr</u>	
Materials consistency description:	Consolidated sto	ockpile 1.0
<u>Average push</u> gradient: <u>Average site</u> altitude:	<u>-20 %</u> 7,350 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	n 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:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	<u>0.9419</u>	
Adjusted unit production:	994.27 LCY/hr	
Adjusted fleet production:	<u>3977.08 LCY/hr</u>	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.865/LCY
Total job time:	108.18 Hours
Total job cost:	\$372,309

Task description:	Regrade L Pit X-sec:402	2,200		
Trapper Mine	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
PROJECT IDEN	TIFICATION			
Task #: L11 Date: 3/21/ User: RAR			Abbreviation: Filename:	<u>None</u> PR12 F
Agency or organi	zation name: DRMS			
HOURLY EQUIE	PMENT COST			
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D11T - 11U850UniversalNA3 per day(CRG)			
ost Breakdown:		Utilization %		
<u>Ownership</u> <u>Cost/Hour:</u>	<u>\$496.62</u>	<u>NA</u>		
Operating Cost/Hour:	<u>\$324.90</u>	<u>100</u>		
<u>Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Operator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Total unit</u> Cost/Hour:	<u>\$860.36</u>			
COST11001.	\$3,441.42			

<u>Initial</u> Volume:	<u>572,536</u>
Swell factor:	<u>1.000</u>

Loose volume: 572,5	<u>36 LCY</u>	
Source of estimated vol Source of estimated swe factor:		
HOURLY PRODUCTI	<u>ON</u>	
<u>Average push distance:</u> <u>Unadjusted hourly</u> production:	<u>425 feet</u> <u>765.7 LCY/hr</u>	
Materials consistency description:	Compacted fill or e	embankment 0.9
gradient:	<u>-20 %</u> 7,400 feet	
Material weight:	<u>2,475 lbs/LCY</u>	
Weight description:	User Provided	
Job Condition Correction	Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(S-BY-S)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	<u>(PAT)</u>
Net correction:	0.8477	
<u>Adjusted unit</u> production:	649.08 LCY/hr	
Adjusted fleet production:	2596.32 LCY/hr	

Fleet size:	$4 \operatorname{Dozer}(s)$
Unit cost:	\$1.325/LCY
<u>Total job time:</u>	220.52 Hours
Total job cost:	\$758,896

<u>Trapper Mine</u>	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTI	FICATION			
Task #: $L12$ Date: $3/21/202$ User:RAR	<u>State:</u> <u>Colorad</u> 25 <u>County:</u> <u>Moffat</u>	<u>lo</u>	<u>Abbreviation:</u> <u>Filename:</u>	None PR12
Agency or organizat	ion name: <u>DRMS</u>			
OURLY EQUIPM	ENT COST			
Horsepower:8Blade Type:UAttachment:NShift Basis:3	at D11T - 11U 50 Iniversal IA per day CRG)			
ost Breakdown:		Utilization %		
<u>Ownership</u> Cost/Hour:	<u>\$496.62</u>	<u>NA</u>		
<u>Operating</u> Cost/Hour:	<u>\$324.90</u>	<u>100</u>		
<u>Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	NA		
<u>Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Operator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>Total unit</u> Cost/Hour:	<u>\$860.36</u>			
Total Fleet	\$3,441.42			

<u>Initial</u> Volume:	<u>173,389</u>
Swell factor:	<u>1.000</u>

Loose volume: 173,38	<u>89 LCY</u>	
Source of estimated volu Source of estimated swe factor:		
HOURLY PRODUCTIO	<u>DN</u>	_
<u>Average push distance:</u> <u>Unadjusted hourly</u> production:	<u>300 feet</u> <u>1,055.6 LCY/hr</u>	_
Materials consistency description:	Compacted fill or en	nbankment 0.9
gradient:	- <u>15 %</u> 7,400 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(S-BY-S)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.7900	
Adjusted unit production:	833.92 LCY/hr	
Adjusted fleet production:	3335.68 LCY/hr	

Fleet size:	$4 \operatorname{Dozer}(s)$
Unit cost:	\$1.032/LCY
Total job time:	51.98 Hours
Total job cost:	<u>\$178,885</u>

Trapper Mine	Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
ROJECT IDENTIFI	CATION			
Task #: L13 Date: 3/24/2025 Jser: RAR	<u>State:</u> <u>Colorad</u> <u>County:</u> <u>Moffat</u>	<u>lo</u>	Abbreviation: Filename:	None PR12 F
Agency or organization	on name: <u>DRMS</u>			
OURLY EQUIPME	<u>NT COST</u>			
Iorsepower:850Blade Type:UnMatachment:NAhift Basis:3 p	iversal			
t Breakdown:		Utilization %		
<u>wnership</u> ost/Hour:	<u>\$496.62</u>	<u>NA</u>		
<u>perating</u> lost/Hour:	<u>\$324.90</u>	<u>100</u>		
<u> Ripper own.</u> Cost/Hour:	<u>\$0.00</u>	NA		
<u> Ripper op.</u> Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
D <u>perator</u> Cost/Hour:	<u>\$38.84</u>	NA		
<u>`otal unit</u> Cost/Hour <u>:</u>	<u>\$860.36</u>			

<u>Initial</u> Volume:	273,425
Swell factor:	<u>1.000</u>

Loose volume: 273,4	<u>25 LCY</u>	
Source of estimated vol Source of estimated swe factor:		
HOURLY PRODUCTI	<u>ON</u>	
Average push distance: Unadjusted hourly production:	<u>150 feet</u> 2,036.8 LCY/hr	
Materials consistency description:	Compacted fill or e	embankment 0.9
gradient:	<u>-30 %</u> 7,500 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(S-BY-S)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	<u>(CAT HB)</u>
Material Weight:	0.929	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.9517	
<u>Adjusted unit</u> production:	1,938.42 LCY/hr	
Adjusted fleet production:	7753.68 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.444/LCY
Total job time:	35.26 Hours
Total job cost:	<u>\$121,358</u>

Task description: Trapper Mine	<u>Regrade L Pit X-secs:400</u> Permit Action:	<u>PR12</u>	Permit/Job#:	<u>C1981010</u>
PROJECT IDENTIF	ICATION			
$\begin{array}{c c} \underline{\text{Task } \#:} & \underline{\text{L14}} \\ \underline{\text{Date:}} & \underline{3/24/2025} \\ \underline{\text{User:}} & \underline{\text{RAR}} \end{array}$	<u>State:</u> <u>Colorad</u> <u>5</u> <u>County:</u> <u>Moffat</u>	0	Abbreviation: Filename:	<u>None</u> <u>PR12 F</u>
Agency or organization	on name: DRMS			
HOURLY EQUIPME	<u>ENT COST</u>			
Horsepower:850Blade Type:UnAttachment:NAShift Basis:3 p	iversal			
Cost Breakdown:		Utilization %		
<u>Ownership</u> <u>Cost/Hour:</u>	<u>\$496.62</u>	<u>NA</u>		
<u>Operating</u> Cost/Hour:	<u>\$324.90</u>	<u>100</u>		
Ripper own. Cost/Hour:	<u>\$0.00</u>	NA		
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>10</u>		
<u>Operator</u> <u>Cost/Hour:</u>	<u>\$38.84</u>	NA		
Total unit Cost/Hour:	<u>\$860.36</u>			
<u>Cost/Hour:</u> Total Fleet	\$3,441.42			

<u>Initial</u> Volume:	271,815
Swell factor:	<u>1.000</u>

Loose volume: 271,81	<u>15 LCY</u>	
Source of estimated volu	ume: Table A-4.3	
Source of estimated swe factor:	Cat Handbook	
HOURLY PRODUCTIO	<u>NC</u>	
<u>Average push distance:</u> <u>Unadjusted hourly</u> production:	<u>150 feet</u> 2,036.8 LCY/hr	
Materials consistency description:	Compacted fill or en	mbankment 0.9
gradient:	<u>-30 %</u> 7,550 feet	
Material weight:	2,475 lbs/LCY	
Weight description:	User Provided	
Job Condition Correction	Factor Source	
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(S-BY-S)
Visibility:	1.000	(AVG.)
Job efficiency:	0.790	(3 SHIFTS/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.601	(CAT HB)
Altitude:	0.930	(CAT HB)
Material Weight:	0.929	(CAT HB)
Blade type:	<u>1.000</u>	(PAT)
Net correction:	0.8851	
<u>Adjusted unit</u> production:	<u>1,802.77 LCY/hr</u>	
Adjusted fleet production:	7211.08 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	<u>\$0.477/LCY</u>
<u>Total job time:</u>	37.69 Hours
Total job cost:	<u>\$129,721</u>

TRUCK/LOADER TEAM WORK

Task description	Regra	de L PIt (Tru	ck/Excavator)			
Site: Trapper Mine	<u>)</u>	Permit Action	n: PR12	Permi	t/Job#: <u>C</u>	1981010
PROJECT IDEN	TIFICATIO	<u>N</u>				
Task #: L15	S	tate: Co	olorado	Abbre	eviation:	None
		County: <u>M</u>	offat	Filena	ame:	L15
User: RAF	{					
Agency or organ	ization name:	DRMS	8			
HOURLY EQUI	PMENT CO	<u>ST</u> Shift ba	sis: <u>1 per day</u>			
	t Description					
Truck Loader Te	am -Truck:		KOMATSU 830E			
-Loader:			CAT 6090			
Support Equipm	ent -Load Are		Cat D10T - 10SU			
-Dump Area:	Matan Ca		Cat D10T - 10SU			
Road Maintenan -Water Truck:	ce – Motor Gr		CAT 16M Water Tanker, 14	000 Cal		
<u>Cost Breakdown</u>	Truck/Lo	ader Team	Support Equipmer	nt Maintenand	ce Equipme Motor Grader	nt Water Truck
%Utilization- machine:	100	100	25	25	25	50
Ownership cost/hour:	\$209.47	\$302.35	\$257.39	\$257.39	\$179.39	\$130.32
Operating cost/hour:	\$274.17	\$501.45	\$49.23	\$49.23	\$29.91	\$70.88
%Utilization-riper:	NA	0	15	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$0.00
Unit Subtotals:	\$508.88	\$837.67	\$347.11	\$345.21	\$237.06	\$201.20
Number of Units:	3	1	1	1	1	1
Group Subtotals:	Work:	\$2,364.31	Support:	\$692.32	Maint:	\$438.26

Total work team cost/hour: **<u>\$3,494.89</u>**

MATERIAL QUANTITIES

Initial volume:	1,647,275	CCY Swell factor: 1.000
Loose volume:	1,647,275	LCY
Source of estimat	ed volume.	TR124 Appendix A Table A-3.1
Source of estimat		Cat Handbook
Material Purchase	e Cost:	\$0.00
Total Cost:		\$0.00
<u>HOURLY PR</u> Truck Capaci		
	(weight) Basis:	
Material weig		Pounds/LCY
Description:	Decompos	sed rock - 75% Rock, 25% Earth
Rated Payloa	d: 492,200	Pounds
Deviland Come	aitry 140.15	LCV

Matarial maishes	$\frac{11) \text{ Dasis:}}{2,200}$		Down do /I CV		
Material weight:	3,300		Pounds/LCY		
Description:		sed rock - 75	% Rock, 25% Earth		
Rated Payload:	492,200		Pounds		
Payload Capacity:	149.15		LCY		
Truck Bed (volume) E	<u>Basis:</u>				
Struck Volume:	153.00	LCY			
Heaped Volume:	192.00	LCY			
Average Volume:	172.50	LCY			
Adjusted Volume:	149.15	LCY			
		-			
Final Truck Volume	Based on Nu	mber of Log	lar Passas	129.58	LCY
That Truck volume	Dascu oli mu		ICI I asses.	127.50	
Loading Tool Capacit	v				
Loading Tool Capacit	У	Decile			NTA
Loading Tool Capacit	<u>y</u>	Bucke	et Size Class:		NA
Loading Tool Capacit Rated Capacity:	⊻ 58.900		et Size Class: heaped)		NA
• •	-	LCY (I		(100-120%	

Job Condition Corrections: Site Altitude (ft.): 6400 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	

Number of Loading Tool Passes Required 2

passes

Loading Tool Cycle Time:

Excavators and Front Shovels:

Machine Cycle Time v Rating: Selected Value within		ABOVE A			
Track Loaders – Mater	ial Description:				
Cycle Time Elements (n	nin.):				
Load: NA	Maneuver:	NA	Dump:	0.10	0
Wheel and Track Load dump, maneuver):	ers - Unadjusted Bas	sic Loader Cyo	ele Time (loa	d, NA	minutes
Cycle Time Factors			Fa	ctor (min.)	Source
Material:	NA		NA	Α	(Cat HB)
Stockpile:	NA		NA	A	(Cat HB)
Truck Ownership:	NA		NA	A	(Cat HB)
Operation:	NA		NA	A	(Cat HB)
Dump Target:	NA		NA	A	(Cat HB)
	Net Cycle Time A	djustment:	NA	A	minutes
	Adjusted Loader (Cycle Time:	0.4	98	minutes
	Net Load Time pe	r Truck:	0.9	96	minutes
<u>Truck Cycle Time:</u>	0.80 Minu	tes Adjuste	l for site eltit	udo: () 800 Minutes

Truck Exchange Time:	0.80	Minutes	Adjusted for site altitude:	0.800	Minutes
Truck Load Time:	0.996	Minutes	Adjusted for site altitude:	0.996	Minutes
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted for site altitude:	1.200	Minutes

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	1841.00	-8.00	3.00	-5.00	1870	1.139

Haul Time: **1.139** minutes

Return Route:

	Rotuin R	oute.								
	Seg #	Ha	ul Distance	Grade	Roll.	Total	Velocity	Travel		
	C C	(Ft))	(%)	Res (%)	Res (%)	(fpm)	Time		
							×1 /	(min)		
	1	150)2.00	8.00	3.00	11.00	1734	1.269		
				Return Time	e:		1.269	1	ninutes	8
				Total Truck	Cycle Time	:	5.404	1	ninutes	5
	ng Tool u	init	4 220 05		A 1'	. 10 . 1	cc: •	2 502	02	
Produ			4,328.95	LCY/Ho	our Adjus	ted for job e	efficiency:	3,593	.03	LCY/Hour
Truck			1 420 71		A dina	ted for ich		1 104	12	I CV/II and
Produ	iction		1,438.71	LCY/Ho	our Adjus	ted for job e	efficiency:	1,194	.13	LCY/Hour
Optin Truck	nal No. of s:	2	3	Truck(s)	Select	ed Number	of Trucks:	3		Truck(s)
	Adjust	ted h	ourly truck te	eam producti	ion:		3,582.	39	LCY/H	Hour
			ngle truck/lo	-			3,582.		LCY/H	
	5		ultiple truck	1			3,582.		LCY/H	
			F		F					
	JOB TIN	AE A	ND COST							
	Fleet siz	ze:	1	Team(s)	Total jo	ob time:	459.83		Hou	rs
	Unit cos	st:	\$0.976	/LCY	Total jo	ob cost:	\$1,607,03	9	_	

TRUCK/LOADER TEAM WORK

Task description	on: <u>Regra</u>	de Jennings	Pit (Truck/Exc	<u>cavator)</u>		
Site: <u>Trapper M</u>	ine	Permit Action	on: <u>PR12</u>	<u>I</u>	Permit/Job#:	<u>C1981010</u>
PROJECT ID	ENTIFICATI	<u>ON</u>				
Date: $4/2$		ate: <u>Col</u> ounty: <u>Mo</u>	<u>orado</u> ffat	<u>Abbre</u> Filena		<u>lone</u> <u>R12</u>
Agency or org	ganization name	e: DRMS				
HOURLY EQ	UIPMENT CO	DST Shift b	asis: 1 per day			
Equipm	ent Description	<u>l</u>				
Truck Loader	Team -Truck:		OMATSU 830	<u>E</u>		
-Loader:			<u>AT 6090</u>			
	oment -Load An		<u>at D10T - 10SU</u>			
-Dump Area:			<u>at D10T - 10SU</u>	<u>J</u>		
	ance – Motor C		<u>AT 16M</u>			
-Water Truck:	-	<u>w</u>	ater Tanker, 14	<u>,000 Gal.</u>		
Cost Breakdov	vn: Truck/L	oader Team	Support Equip	ment Maint	enance Equip	oment
	<u>Truck</u>	Shovel	Load Area	Dump Area	Motor Grader	Water Truck
<u>%Utilization-</u> machine:	<u>100</u>	<u>100</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>50</u>
Ownership cost/hour:	<u>\$209.47</u>	<u>\$302.35</u>	<u>\$257.39</u>	<u>\$257.39</u>	<u>\$179.39</u>	<u>\$130.32</u>
Operating cost/hour:	<u>\$274.17</u>	<u>\$501.45</u>	<u>\$49.23</u>	<u>\$49.23</u>	<u>\$29.91</u>	<u>\$70.88</u>
<u>%Utilization-</u> riper:	<u>NA</u>	<u>0</u>	<u>15</u>	NA	<u>NA</u>	<u>NA</u>
<u>Ripper own.</u> cost/hour:	<u>NA</u>	<u>\$0.00</u>	<u>\$20.05</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>

<u>\$1.90</u>

<u>\$38.59</u>

\$347.11

Support:

1

<u>\$0.00</u>

<u>\$38.59</u>

\$345.21

\$692.32

1

<u>\$0.00</u>

<u>\$27.76</u>

\$237.06

Maint:

1

\$0.00

<u>\$33.87</u>

\$837.67

\$9,457.24

4

MATERIAL QUANTITIES

NA

12

\$25.24

\$508.88

Work:

Ripper op.

<u>cost/hour:</u> <u>Operator</u>

<u>cost/hour:</u> Unit Subtotals:

Number of Units:

Group Subtotals:

<u>\$0.00</u>

\$0.00

1

\$201.20

\$438.26

Demo Worksheet Cont'd		Та	sk # TTT		Page 319 of 404
Initial volume:	1,227,754	CCY	Swell factor:	1.000	
	1,227,754	\underline{LCY}	<u>5 went fuetor.</u>	1.000	
Source of estimated			Appendix A Tab	<u>ole A-1.1</u>	
Source of estimated		Cat Han	dbook		
Material Purchase C	<u>_OST:</u>	<u>\$0.00</u>			
<u>Total Cost:</u>		<u>\$0.00</u>			
HOURLY PRODUC	CTION				
<u>Truck Capacity:</u>					
Truck Payload (weight	nt) Basis:				
Material weight:	<u>3,300</u>		Pounds/LCY		
Description:			6 Rock, 25% Ea	<u>rth</u>	
Rated Payload:	<u>492,200</u>		Pounds		
Payload Capacity:	<u>149.15</u>	<u>I</u>	L <u>CY</u>		
Truck Bed (volume)	Basis [.]				
Struck Volume:	153.00	LCY			
Heaped Volume:	192.00	LCY			
Average Volume:	172.50	LCY			
Adjusted Volume:	149.15	LCY			
Final Truck Volume	Based on Nur	ber of Loade	er Passes	145.78	LCY
I mul ITUCK VOIUM			<u>11 usses.</u>		
Loading Tool Capaci	t <u>y</u>				
		Bucket	Size Class:		NA
Rated Capacity:	58.900	LCY (he	eaped)		
Bucket Fill Factor:	0.825		rock - avg. blast	ted (75 - 90	0%) 0.825
Adjusted Capacity:	48.593	LCY	<u></u>	<u> </u>	
Job Condition Corr	ections: Site Al	ltitude (ft.): 6	400 feet		
	Truck	Loodon	Source		
Altitude Adj:	<u>Truck</u> 1.000	Loader 1.000	<u>Source</u> (CAT H	B)	
Job Efficiency:	0.830	0.830	(CAT H		
JOU EMCIEILEY.	0.030	0.030		<u>(u</u>	
Net Correction:	<u>0.830</u>	<u>0.830</u>			
Loading Tool Cycle	. Num	ber of Loadi	ng Tool Passes	Required	2 passe
Time:		ll Truck:			<u>3</u>

Excavators and Front Shovels:

Machine Cycle Time vs Rating:	. Job Conditio	<u>AI</u>	BOVE AV	ERAGE	2			
Selected Value within the	his Basic Ratir	ng: <u>A</u> V	VERAGE					
Track Loaders – Materi	al Description	•						
	*							
Cycle Time Elements (m	<u>in.):</u>							
Load: <u>NA</u>	Maneuver:	<u>N</u>	<u>A</u>	Dump:		<u>0.100</u>		
Wheel and Track Loaded dump, maneuver):	ers - Unadjuste	ed Basic Lo	oader Cycl	e Time (<u>(load,</u>	<u>NA</u>	mir	<u>nutes</u>
Cycle Time Factors					Factor (n	nin.)	Source	
Material:	NA				NA		(Cat HB)	_
Stockpile:	NA				NA		(Cat HB)	_
Truck Ownership:	<u>NA</u>				<u>NA</u>		(Cat HB)	
Operation:	<u>NA</u>				NA		(Cat HB)	
Dump Target:	<u>NA</u>				<u>NA</u>		(Cat HB)	
	<u>Net Cycle Ti</u>	ime Adjust	ment:	_	<u>NA</u>		minutes	
	Adjusted Loa	ader Cycle	Time:	_	<u>0.498</u>		minutes	
	Net Load Tir	<u>me per Tru</u>	<u>ck:</u>	_	<u>1.494</u>		minutes	
<u>Truck Cycle Time:</u>								
Truck Exchange Time:	<u>0.80</u>	Minutes	Adjusted	for site	altitude:	<u>0.</u>	800	Minutes
Truck Load Time:	1.494	Minutes	Adjusted	for site	altitude:	1.	494	Minutes
Truck Maneuver and		Minutes	Adjusted				200	Minutes
Dump Time:	1.20	<u>Innuco</u>	<u>r tajusteu</u>	101 5110	<u></u>	<u> </u>		<u>minutes</u>

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

<u>Total</u>

<u>Res (%)</u>

Velocity

<u>(fpm)</u>

<u>Travel</u> <u>Time</u>

Haul Rou	ite:		
<u>Seg #</u>	Haul Distance	Grade	<u>Roll.</u>
	<u>(Ft)</u>	<u>(%)</u>	<u>Res (%)</u>

		<u>(1 t)</u>		<u>(/0)</u>	<u>Ites (70)</u>	<u>Ites (707</u>	<u>(1911)</u>	$\frac{1}{(\min)}$	
	<u>1</u>	<u>3448</u>	<u>3.00</u>	-1.80	<u>3.00</u>	<u>1.20</u>	<u>3503</u>	1.633	
Return Route:				Haul Time:		<u>1.633</u>	minutes		
			l Distance	<u>Grade</u> (%)	<u>Roll.</u> <u>Res (%)</u>	<u>Total</u> <u>Res (%)</u>	<u>Velocity</u> (fpm)	<u>Travel</u> <u>Time</u> (min)	
	<u>1</u>	<u>3448</u>	<u>8.00</u>	<u>1.80</u>	<u>3.00</u>	<u>4.80</u>	<u>3296</u>	<u>1.636</u>	
						<u>minu</u> minu			
Loadi Produ Truck		<u>init</u>	<u>3,812.84</u>	LCY/Hou	u <u>r Adjus</u>	ted for job e	fficiency:	<u>3,164.66</u>	LCY/Hour
Produ		-	<u>1,293.31</u>	LCY/Hou	u <u>r Adjus</u> t	ted for job e	fficiency:	<u>1,073.45</u>	LCY/Hour
<u>Optin</u> Truck	<u>nal No. of</u> <u>s:</u>		<u>3</u>	<u>Truck(s)</u>	<u>Select</u>	ed Number	of Trucks:	<u>3</u>	Truck(s)
Adjusted hourly truck team production:3,220.34LCY/HourAdjusted single truck/loader team production:3,164.66LCY/HourAdjusted multiple truck/loader team production:12,658.62LCY/HourJOB TIME AND COSTICY/HourICY/Hour									

Fleet size:	<u>4</u>	Team(s)	<u>Total job time:</u>	<u>96.99</u>	Hours
<u>Unit cost:</u>	<u>\$0.836</u>	/LCY	<u>Total job cost:</u>	<u>\$1,026,908</u>	-

TRUCK/LOADER TEAM WORK

Task description: Regrade L Pit K Knob (Truck/Excavator) TR135								
Site: Trapper Mi	e: Trapper Mine Permi		on: <u>PR12</u>		Permit/Job#	<u>+: C1981010</u>		
PROJECT IDENTIFICATION								
					eviation: ame:	<u>None</u> <u>C010-</u> L15TR135		
User: <u>RA</u>	<u>AR</u>							
Agency or organization name: DRMS								
HOURLY EQUIPMENT COST Shift basis: 1 per day								
Equipment Description Truck Loader Team -Truck: KOMATSU 830E								
<u>-Loader:</u> Support Equir	ment -Load A		<u>CAT 6090</u> Cat D10T - 10SU					
-Dump Area:	t D10T - 10SU	D10T - 10SU						
Road Maintenance – Motor Grader: <u>CAT 16M</u>								
-Water Truck: Water Tanker, 14,000 Gal.								
Cost Breakdown: Truck/Loader Team Support Equipment Maintenance Equipment								
	Truck	Shovel	Load Area	Dump Area	<u>Motor</u> <u>Grader</u>	Water Truck		
<u>%Utilization-</u> machine:	<u>100</u>	<u>100</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>50</u>		
Ownership cost/hour:	<u>\$209.47</u>	<u>\$302.35</u>	<u>\$257.39</u>	<u>\$257.39</u>	<u>\$179.39</u>	<u>\$130.32</u>		
Operating cost/hour:	<u>\$274.17</u>	<u>\$501.45</u>	<u>\$49.23</u>	<u>\$49.23</u>	<u>\$29.91</u>	<u>\$70.88</u>		
<u>%Utilization-</u> riper:	NA	<u>0</u>	<u>15</u>	NA	<u>NA</u>	NA		
Ripper own. cost/hour:	NA	<u>\$0.00</u>	<u>\$20.05</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>		
Ripper op. cost/hour:	NA	<u>\$0.00</u>	<u>\$1.90</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>		
Operator cost/hour:	<u>\$25.24</u>	<u>\$33.87</u>	<u>\$38.59</u>	<u>\$38.59</u>	<u>\$27.76</u>	<u>\$0.00</u>		
Unit Subtotals:	<u>\$508.88</u>	<u>\$837.67</u>	<u>\$347.11</u>	<u>\$345.21</u>	<u>\$237.06</u>	<u>\$201.20</u>		
Number of Units:	12	4	1	1	1	1		

Total work team cost/hour: \$10,587.82

Work:

\$9,457.24

Support:

\$692.32

Group Subtotals:

\$438.26

Maint:

LCY

MATERIAL QUANTITIES

Initial volume: 6,083,510 Loose volume: 6,083,510	<u>CCY</u> <u>Swell factor:</u> <u>1.000</u> <u>LCY</u>
Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost:	TR135 Appendix A Table A-1.1 Cat Handbook \$0.00 \$0.00

HOURLY PRODUCTION

Truck Capacity:

Truck Capacity:			
Truck Payload (weight) Ba	<u>sis:</u>		
Material weight:	<u>3,300</u>		Pounds/LCY
Description:	Decompose	ed rock - 75%	Rock, 25% Earth
Rated Payload:	492,200		Pounds
Payload Capacity:	<u>149.15</u>		LCY
Truck Bed (volume) Basis:	_		
Struck Volume:	<u>153.00</u>	LCY	
Heaped Volume:	192.00	LCY	
Average Volume:	<u>172.50</u>	LCY	
Adjusted Volume:	<u>149.15</u>	LCY	

Final Truck Volume Based on Number of Loader Passes:	129.58
--	--------

Loading Tool Capacity

		Bucket Size Class:	NA
Rated Capacity:	<u>58.900</u>	LCY (heaped)	
Bucket Fill Factor:	<u>1.100</u>	Other - rock/dirt mixtures	(100-120%) 1.100
Adjusted Capacity:	<u>64.790</u>	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 feet

	Truck	Loader	Source
Altitude Adj:	<u>1.000</u>	<u>1.000</u>	<u>(CAT HB)</u>
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	<u>0.830</u>	<u>0.830</u>	

Loading Tool Cycle Time:	Number of Loading Tool Passes Required to Fill	2	passes
	Truck:	<u></u>	_

Time:

Excavators and Front Shovel	<u>s:</u>							
Machine Cycle Time vs. Jo Selected Value within this I			BOVE AVI /ERAGE	ERAGE				
<u> Track Loaders – Material D</u>	escription:							
Cycle Time Elements (min.):								
Load: <u>NA</u>	Maneuver:	NA	<u>\</u>	Dump:		<u>0.100</u>		
<u>Wheel and Track Loaders -</u> maneuver):	Unadjusted Ba	asic Loader Cy	ycle Time	(load, dun	<u>ıp,</u>	NA		<u>minutes</u>
Cycle Time Factors					Factor (n	nin.)	Source	
Material:	NA				NA		(Cat HB	
Stockpile:	NA				NA		(Cat HB	5)
Truck Ownership:	<u>NA</u>				<u>NA</u>		(Cat HB	5)
Operation:	<u>NA</u>				<u>NA</u>		(Cat HB	5)
Dump Target:	<u>NA</u>				<u>NA</u>		(Cat HB	5)
	Net Cycle Ti	<u>me Adjustmer</u>	<u>nt:</u>		<u>NA</u>		minutes	
	Adjusted Loa	der Cycle Tin	<u>ne:</u>		<u>0.498</u>		minutes	
	Net Load Tin	ne per Truck:			<u>0.996</u>		minutes	
<u>Truck Cycle Time:</u>								
Truck Exchange Time:	<u>0.80</u>	Minutes	<u>Adjustec</u>	l for site al	titude:		<u>0.800</u>	Minut
Truck Load Time:	0.996	Minutes	<u>Adjustec</u>	l for site a	titude:		0.996	Minut
Truck Maneuver and Dump	1.20	Minutes	Adjusted	l for site al	titude:		1.200	Minut

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

Haul Route: Haul Distance Total Res Seg # Grade (%) Roll. Res Velocity Travel Time (%) (%) <u>(fpm)</u> <u>(Ft)</u> (min) -3.15 -0.15 3711.00 3.00 3503 1 1.144

			Haul Time:	<u>1.14</u>	4	minutes
Return Ro	ute:					
Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel
	<u>(Ft)</u>		<u>(%)</u>	<u>(%)</u>	<u>(fpm)</u>	Time
						<u>(min)</u>
1	<u>3711.00</u>	<u>3.15</u>	3.00	<u>6.15</u>	<u>2853</u>	<u>1.901</u>

Return Time:

<u>1.901</u>

Task # TTT

	<u>Total</u>	<u> Truck Cycle Tim</u>	<u>e:</u>	<u>6.041</u>	minutes	
<u>Loading Tool unit</u> <u>Production</u> <u>Truck Unit Production</u>	4,328.95	LCY/Hour	Adjusted for job eff	•	3,593.03	LCY/Hour
<u>Optimal No. of</u> <u>Trucks:</u>	<u>1,287.01</u> <u>3</u>	<u>LCY/Hour</u> <u>Truck(s)</u>	Adjusted for job eff	•	<u>1,068.21</u> <u>3</u>	LCY/Hour Truck(s)
Adjusted sing	ly truck team pro le truck/loader te iple truck/loader		<u>:</u>	<u>3,204.64</u> <u>3,204.64</u> <u>12,818.57</u>	LCY/Ho LCY/Ho LCY/Ho	our
JOB TIME AN	D COST					
Fleet size:	<u>4</u>	Team(s)	<u>Total job time:</u>	<u>474.59</u>	Hours	<u>8</u>
Unit cost:	<u>\$0.826</u>	/LCY	<u>Total job cost:</u>	<u>\$5,024,826</u>		

Task # TTT

REVEGETATION WORK

гарро	er Mine	Permit Action:	PR12	Permit/Job#: C198	1010
<u>ROJEC'</u>	<u> FIDENTIFICAT</u>	<u>FION</u>			
Task #:	L16	State:	Colorado	Abbreviation:	None
Data	4/20/2025	County:	Moffat	Filename:	L16
Date:					-

SEEDING

Seed Mix	Rate – PLS LBS /	Seeds per SQ.	Cost /Acre
	Acre	FT	
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80

Goldeneye, Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

JOB TIME AND COST

No. of Acres:	803.9	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$740,898.36
Reseeding Job Cost:	\$129,657.21
Total Job Cost:	\$870,556
Job Hours:	804.00

REVEGETATION WORK

Task	description:	Seed L Pit divers	ion: Rangeland wit	h Shrubs MR228		
Site: Tr	apper Mine	Permit Act	ion: PR12	Permit/Job#:	C1981010	
<u>PROJ</u>	IECT IDENTIFI	CATION				
Task	t#: L16MR2	28 State:	Colorado	Abbreviat	tion: No	one
Date	: 2/24/202	5 County:	Moffat	Filename	: C0	10-L16MR228
User	: RAR					
Ager	ncy or organizatio	n name:D	RMS			

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31

Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

JOB TIME AND COST

No. of Acres:	2.3	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$2,119.75
Reseeding Job Cost:	\$370.96
Total Job Cost:	\$2,491
Job Hours:	2.30

Task # TTT

BULLDOZER WORK

Trapper Min	e	Permit Act	ion: PR12	2]	Permit/Job#: <u>C198</u>	31010
ROJECT IDE	NTIFIC	ATION				
	24/2025	State: County:	Colorado Moffat		Abbreviation: Filename:	None PR12 F
Jser: RA	AK					
Agency or organ	nization	name: D	ORMS			
	IDMEN	T COST				
OURLY EQU	IPIVIEN	10051				
Basic Machine:	Cat	D11T - 11U				
Iorsepower:	850					
lade Type:	Uni	versal				
ttachment:	NA					
hift Basis:	1 pe	er day				
ata Source:	(CR	RG)				
st Breakdown:						
<u>ist Dieakuowii</u> .				Utilization %		
Ownership Cost	/Hour	\$496.62		NA		
perating Cost/		\$324.90		100		
ipper own. ost/Hour:		\$0.00		NA		
Lipper op. Cost	/Hour:	\$0.00		10		
Deperator Cost/		\$38.59		NA		
otal unit Cost/	Hour	\$860.11				
	11001.	\$1,720.21				
otal Fleet Cost/Hour:						

MATERIAL QUANTITIES

Initial Volume: Swell factor: Loose volume:	94,772 1.150 108,988 LC	Y	
Source of estimat Source of estimat factor:		Map M9 sh.3/3 Cat Handbook	
HOURLY PROD	<u>UCTION</u>		

Average push distance: Unadjusted hourly production:	75 feet 3,584.2 LCY/I	hr	
Materials consistency description:	Partly con	solidated stockpile 1.1	
Average push gradient:	0 %		
Average site altitude:	7,000 feet		
Material weight:	2,475 lbs/LCY		
Weight description:	User Provided		
Job Condition Correction	Factor Source		
Operator Skill:	0.750	(AVG.)	
Material consistency:	1.100	(CAT HB)	
Dozing method:	1.000	(GEN.)	
Visibility:	1.000	(AVG.)	
Job efficiency:	0.830	(1 SHIFT/DAY)	
Spoil pile:	0.900	(SSD-FC)	
Push gradient:	1.000	(CAT HB)	
Altitude:	1.000	(CAT HB)	
Material Weight:	0.929	(CAT HB)	
Blade type:	1.000	(PAT)	
Net correction:	0.5725		
Adjusted unit production:	2,051.95 LCY/hr		
Adjusted fleet production:	4103.9 LCY/hr		

JOB TIME AND COST

Fleet size:2 Dozer(s)

Demo Worksheet Cont'd

T Lait	+ •
Unit	cost:

\$0	419/L	CY	
$\psi 0$	-TI/L	\mathcal{N}	

 Total job time:
 26.56 Hours

 Total job cost:
 \$45,684

Task # TTT

SCRAPER TEAM WORK

	Task description			'it (Scrapper)			
Site:	Trapper Min	e Per	mit Action:	L18PR12	Permit/Job#:	C1981010	_
<u>]</u>	PROJECT IDE	NTIFICATION					
	Task #: L1	8 Sta	te: Co	lorado	Abbreviati	on: None	
	Date: 4/2	20/2025 Co	unty: Mo	offat	Filename:	L18	
	User: RA	AR					
	Agency or orga	nization name:	DRMS				
<u>]</u>	HOURLY EQU	IPMENT COST	TShift basis:	<u>l per day</u>			
-	A A	nt Description					
	-Scraper:			Cat 637G w/push-pul	1		
-	-Dozer:	(T 1 A		NA			
		nent -Load Area:		Cat D10T - 10SU Cat D10T - 10SU			
-	-Dump Area:	nce – Motor Grader		CAT 16M			
	-Water Truck:			Vater Tanker, 2,500	Gal		
-	Cost Breakdowi	• Scraper Wor	I	port Equipment M		pent	
	Sost Dicakuowi	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utiliza	tion-machine:	100	NA	50	50	50	60
Ownersh	ip cost/hour:	\$281.32	NA	\$257.39	\$257.39	\$179.39	\$11.65
Operatin	g cost/hour:	\$319.35	NA	\$98.47	\$98.47	\$59.82	\$13.47
-	tion-ripper:	NA	NA	NA	NA	NA	NA
Ripper o	wn. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Ripper o	p. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Operator	cost/hour:	\$30.90	NA	\$38.59	\$38.59	\$27.76	\$21.12
Unit Sub	totals:	\$631.57	NA	\$394.44	\$394.44	\$266.97	\$46.24
Number	of Units:	8	0	1	1	1	1
Group S	ubtotals:	Work:	\$5,052.5	56 Support:	\$788.88	Maint:	\$313.21
7	Total work team	cost/hour: <u>\$6,154.</u>	65				
Т	MATERIAL QI	TANTITIES					
1							
	Initial volume:	470,247		CY Swell factor	: 1.000		
	Loose volume:	470,247	L	CY			
	Source of estim			-9.1			
	Source of estim			at Handbook			

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight: Material description:	2,550 lbs/LCY Earth - Dry packed	Struck Volume: Heaped Volume:	24.00 34.00	LCY LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	32.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Hard, smooth, stabilized, surfaced, watered, maintained 2.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	2334.00	4.20	2.00	6.20	1477	1.66

Haul Time:

1.66 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
	(11)	(70)	(70)	(70)	(ipiii)	(11111)
1	2334.00	-4.20	2.00	-2.20	2972	0.83

Return Time:

0.83 minutes

Total Scraper team cycle time:

Adjusted for job conditions:

Selected Number of Scrapers:

Adjusted single scraper team (unit) hourly production:

Adjusted multiple scraper team (fleet) hourly production:

4.09	minutes
706.21	LCY/Hour
8	Scraper(s)
2,824.84	LCY/Hour
2,824.84	LCY/Hour

LCY/Hour 850.86

Unit cost: \$2.179 /LCY

0	nit production/honder of Scrapers				
JOB TIME A	ND COST				
Fleet size:	1	Team(s)	Total job time:	166.47	Hours

Total job cost: **\$1,024,555**

Task # TTT

TRUCK/LOADER TEAM WORK

Task description	: Replace	Fopsoil on L	Pit (Truck/Exca	vator)			
Site: Trapper Min	e Po	ermit Action:	PR12	Permit/Jo	b#: <u>C19810</u>	010	
PROJECT IDEN	NTIFICATION						
Task #: L1	9 S	tate: C	olorado	Abb	reviation:	None	
Date: $\frac{4}{1}$ User: RA		ounty: <u>N</u>	loffat	File	name:	L19	
Agency or organ		_DRM	S :: <u>1 per day</u>				
	t Description						
Truck Loader T	eam -Truck:	_	Cat 777F				
-Loader:			Cat 385C L 18'-1" Stick				
11 11	nent -Load Area:	Cat D10T - 10SU					
-Dump Area:	nce – Motor Grad		Cat D10T - 10S CAT 16M	U			
-Water Truck:	ice – Motor Grad	er:	Water Tanker, 2	500 Cal			
-water Truck.			water Taliker, 2	,500 Gal.			
Cost Breakdown	: Truck/Load	er Team Su	pport Equipment	Maintenance E	auipment		
<u>eost Dreakdown</u>	Truck	Excavator				Water Truck	
%Utilization- machine:	100	100	25	25	25	50	
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65	
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23	
%Utilization-riper:	NA	0	15	NA	NA	NA	
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00	
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00	
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$22.07	
Unit Subtotals:	\$377.15	\$386.10	\$347.11	\$345.21	\$237.06	\$44.95	
Number of Units:	4	1	1	1	1	1	
Group Subtotals:	Work:	\$1,894.70	Support:	\$692.32	Maint:	\$282.01	

Total work team cost/hour: **<u>\$2,869.03</u>**

MATERIAL QUANTITIES

Initial volume: Loose volume:	826,774 826,774	CCY Swell factor: 1.000 LCY LCY	
Source of estimated Source of estimated Material Purchase Co Total Cost:	swell factor:	TR124 Appendix A Table A-3.1 Cat Handbook \$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	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: 77.72 LCV
--

Loading Tool Capacity

		Bucket Size Class:	Large
Datad Canadity	7.850	LCY (heaped)	
Rated Capacity:	7.830	LC I (lleapeu)	
Bucket Fill Factor:	1.100	Other - rock/dirt mixtures	(100-120%) 1.100
Adjusted Capacity:	8.635	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 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	

Number of Loading Tool Passes Required to Fill Truck:

passes

9

Loading Tool Cycle Time:

Excavators and Front Shovels:

	•	. Job Condition Rating: his Basic Rating:	ABOVE AVERAG	AVERAGE GE		
Track Loa	ders – Materi	al Description:				
Cycle Time	Elements (m	in.):				
Load:	NA	Maneuver:	NA	Dump:	0.100	
Wheel and maneuver)		ers - Unadjusted Basic Lo	ader Cycle T	ime (load, dump,	NA	minutes
Cycle Tim	e Factors			Factor	r (min.)	Source
Material:		NA		NA		(Cat HB)
Stocknile		ΝA		NΙΛ		(Cot UP)

Task # TTT

Stockpile:	NA	NA	(Cat HB)
Truck Ownership:	NA	NA	(Cat HB)
Operation:	NA	NA	(Cat HB)
Dump Target:	NA	NA	(Cat HB)
	Net Cycle Time Adjustment:	NA	minutes
	Adjusted Loader Cycle Time:	0.302	minutes
	Net Load Time per Truck:	2.516	minutes

Truck Cycle Time:

Truck Exchange Time:	0.80	Minutes	Adjusted for site altitude:	0.800	Minute
Truck Load Time:	2.516	Minutes	Adjusted for site altitude:	2.516	Minute
Truck Maneuver and Dump	1.20	Minutes	Adjusted for site altitude:	1.200	Minute
Time:					

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

Haul Route:

Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel
	(Ft)		(%)	(%)	(fpm)	Time (min)
						(min)
1	5925.00	4.40	3.00	7.40	1160	5.267

Haul Time:

5.267 minutes

Return Route:

Demo Worksheet Cont'd

Task # TTT

Page 339 of 404

	Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time	
-	1	4788	3.00	8.60	3.00	11.60	1628	(min) 3.064	
	Return Time:3.064Total Truck Cycle Time:12.847							minutes minutes	
Loading Tool unitProduction1,406.18LCY/HourAdjusted for job efficiency:1,167.13LCY/Hour								LCY/Hour	
1100n (cuon	362.96	LCY/Hour	_ LCY/Hour Adjusted for job ef			301.25	LCY/Hour
Optimal No. of 4 Truck(s) Selected Trucks:				ed Number of	Trucks:	4	Truck(s)		
Adjusted hourly truck team production:1,205.02LCY/HourAdjusted single truck/loader team production:1,167.13LCY/HourAdjusted multiple truck/loader team production:1,167.13LCY/Hour									
<u>e</u>	JOB TIME AND COST								
	Fleet size	: _	1	Team(s)	Total jol	b time:	708.38	Но	urs
	Unit cost:	: _	\$2.458	/LCY	Total jol	b cost:	\$2,032,367		

Task # TTT

SITE MAINTENANCE

]	Task description:	Site Main	ntenance; Ril	l and Gully	Repair and Pond	Cleani	ng
Site:	Trapper Mine	Per	rmit Action:	PR12	Permit/.	Job#:	C1981010
<u>PROJE</u>	CT IDENTIFICA	<u>FION</u>					
Task #		State:	Colorado		Abbreviation:	None	
Date:	4/30/2025	County:	Moffat		Filename:	LN2	0
User:	RAR						
Agenc	y or organization na	ame:	DRMS				

UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Rill/Gully Repair 32hrs/year for 1st 5 years	32.00	Cat D7R DS Series II LGP	160.00	EA	\$207.78	\$33,244.80
Rill/Gully Repair32hrs/year for 1st 5 years	32.00	Cat 324D L 9'-8" Stick	160.00	EA	\$151.12	\$24,179.20
Rill/Gully Repair 16hrs/year for last 5 years	15.00	Cat D3K XL - 3P	80.00	EA	\$84.69	\$6,775.20
Pond Cleaning 1st Year, 8 Weeks	320.00	Cat 324D L 9'-8" Stick	320.00	EA	\$151.12	\$48,358.40
Pond Cleaning 2nd Year, 3 Weeks	120.00	Cat 324D L 9'-8" Stick	120.00	EA	\$151.12	\$18,134.40
Haul Truck Cleaning 1st Year	320.00	Cat 725	320.00	EA	\$217.29	\$69,532.80
Haul Truck Cleaning 2nd Year	320.00	Cat 725	120.00	EA	\$217.29	\$26,074.80

Job

Hours: 600.00

Total Cost: \$226,299.60

BULLDOZER WORK

Task description	n: Regrade N Pit			
Site: Trapper Min	Permit Actio	n: PR12	Permit/Job	o#: <u>C1981010</u>
PROJECT IDE	NTIFICATION			
Task #:N01Date: $3/24$ User:RAFAgency or orga			Abbreviation: Filename:	None PR12 F
	IPMENT COST			
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D11T - 11U 850 Universal NA 3 per day (CRG)			
Cost Breakdown	:	I It:limetion 0/		
Ownership Cost/Hour:	\$496.62	Utilization % NA		
Operating Cost/Hour:	\$324.90	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	10		
Operator Cost/Hour:	\$38.84	NA		

Total unit	\$860.36	
Cost/Hour:		
Total Fleet	\$1,720.71	
Cost/Hour:		

MATERIAL QUANTITIES

Loose volume:	1,364,789 LCY
Swell factor:	1.000
Volume:	1,364,789
Initial	1 264 790

Source of estimated	Table A-4.5
volume:	
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance	e:	455 feet		
Unadjusted hourly production:		716.6 LCY/hr		_
Materials consistency description:	/	Cons	olidated stock	xpile 1.0
Average push gradient:	-20	%		
Average site altitude:	6,70	0 feet		
Material weight:	2,47	5 lbs/LCY	7	
Weight description:	User	r Provided		
Job Condition Correct	ion Fa	actor S	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:	-	0.790		(3 SHIFTS/DAY)
Spoil pile:	-	1.000		(DOZ-OC)
Push gradient:	-	1.426		(CAT HB)
Altitude:	-	1.000		(CAT HB)
Material Weight:	-	0.929		(CAT HB)
Blade type:	-	1.000		(PAT)
Net correction:	-	0.9419		
Adjusted unit production:	67	4.97 LCY	/hr	
Adjusted fleet		49.94 LCY/hr		

JOB TIME AND COST

Fleet size:	2 Dozer(s)
Unit cost:	\$1.275/LCY

Total job time:	1,011.00 Hours
Total job cost:	\$1,739,638

TRUCK/LOADER TEAM WORK

Task descri	ption: Back	fill and Gra	ding N Pit						
ite: Trapper	Mine	Permit Ac	tion: PR12		Permit/Job#: <u>C1981010</u>				
PROJECT	IDENTIFICATI	<u>ON</u>							
Task #:	N02 S	tate: Co	olorado	Abb	reviation:	None			
Date:	4/19/2025 C	County: M	offat	File	name:	N02			
User:	RAR								
Agency or	organization nam	e: DRM	S						
HOURLY F	EQUIPMENT C	<u>OST</u> Shift	basis: <u>1 per day</u>						
Equi	pment Description	n							
	ler Team -Truck:		KOMATSU 830	Е					
-Loader:			CAT 6090						
Support Eq	uipment -Load A		Cat D10T - 10SU						
-Dump Are			Cat D10T - 10SU						
	tenance – Motor (CAT 16M						
-Water Tru	ck:		Water Tanker, 14	4,000 Gal.					
Cost Break	down: Truck/I	Loader Team	Support Equip	oment Main Dump	ntenance Eq	uipment Water			
	TTUCK	Shover	Loau Alea	Area	Grader	Truck			
% Utilization- nachine:	100	100	25	25	25	50			
Ownership cost/hour:	\$209.47	\$302.35	\$257.39	\$257.39	\$179.39	\$130.32			
Operating cost/hour:	\$274.17	\$501.45	\$49.23	\$49.23	3 \$29.91 NA	\$70.88			
6Utilization- iper:	NA	0	15	NA		NA			
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00			
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00			
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$0.00			
Unit Subtotals:	\$508.88	\$837.67	\$347.11	\$345.21	\$237.06	\$201.20			

Support:

1

\$692.32

1

Total work team cost/hour: \$4,003.77

Work:

4

Number of Units:

Group Subtotals:

\$2,873.19

1

\$438.26

1

Maint:

1

MATERIAL QUANTITIES

	2,519,470 2,519,470	CCY LCY	Swell	factor:	1.000)	
Source of estimated Source of estimated Material Purchase C Total Cost:		Append ndbook	ix A Tabl	le A-3.1	l		
HOURLY PRODUC	CTION						
Truck Capacity: <u>Truck Payload (weigl</u> Material weight: Description: Rated Payload: Payload Capacity:	ht) Basis: 1 User Provid 492,200 492,200.00	ed	Pounds Pounds LCY	/LCY			
Truck Bed (volume) Struck Volume: Heaped Volume: Average Volume: Adjusted Volume: Final Truck Volume	153.00 192.00 172.50 192.00	LCY LCY LCY LCY ber of Load	der Passe	es:	194	1.37	LCY
Loading Tool Capaci	<u>ty</u>	Bucke	et Size C	lass:		Ν	ЛА
Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Corr	Other - LCY		rt mixture	s (100	0-120%) 1	.100	
	Truck	Loader		Source			
Altitude Adj: Job Efficiency:	1.000 0.830	1.000 0.830		(CAT HI (CAT HI			

Job Efficiency:	0.830	0.830	(CAT H
Net Correction:	0.830	0.830	

	<u>Loading</u>	Tool Cycle Tim		Number of Loading Tool Passes Required to Fill Truck:				3		passes	
	Excavato Shovels:	ors and Front									
	Machin Rating:	e Cycle Time vs	. Job Condit	tion A	ABOVE	AVER	AGE				
	Selected	d Value within th	nis Basic Ra	ting: <u>A</u>	AVERA	GE					
	Track L	loaders – Materia	al Descriptio	on:							
	Cycle Tir	me Elements (mi	n.):								
	Load:	NA	Maneuver	:: <u> </u>	NA	Dı	ump:	0.10	00		
		and Track Loade naneuver):	rs - Unadjus	sted Basic I	Loader	Cycle T	ïme (load,	NA	m	inutes	
	Cycle T	Time Factors					Fact	or (min.)	Source		
	Materia		NA				NA	, , , , , , , , , , , , , , , , , ,	(Cat HB)		
	Stockpi	le:	NA				NA		(Cat HB)		
	Truck C	Ownership:	NA		NA				(Cat HB)		
	Operation	on:	NA				NA		(Cat HB)		
	Dump 7	Farget:	NA				NA		(Cat HB)		
			Net Cycle	Time Adju	stment:		NA		minutes		
			Adjusted Loader Cycle Time:				0.49	8	minutes		
			Net Load Time per Truck:				1.49	4	minutes		
	Truck C	ycle Time:									
Tr	uck Exch	ange Time:	0.80	Minutes	Adju	sted for	site altitud	de: ().800	Minutes	
Tr	uck Load	Time:	1.494	Minutes	Adju	sted for	site altitud	de: 1	.494	Minutes	
	uck Mane Imp Time		1.20	Minutes	Adju	sted for	site altitud	de: 1	.200	Minutes	
	Truck Tr	avel (Haul & Re	turn) Time·	Road Cone	lition F	Firm sm	ooth rolli	ng dirt/lt	surfaced		
		maintained 3.0	(ann) mille.		*111011. <u>1</u>	, 511	10000, 1000	<u></u>	Surruccu,		
	<u></u>	<u></u>									
	Haul Rou	ite:									
	Seg #	Haul Distance	Grade	Roll.	To	tal	Velocity	Travel			
		(Ft)	(%)	Res (%) Re	es (%)	(fpm)	Time			
								(min)			
	1	4737.00	-8.00	3.00	-5.	00	1870	2.666			

Haul Time: **2.666** minutes

Return Route:

	Seg #	Hau	Il Distance	Grade	Roll.	Total	Velocity	Travel		
		(Ft)	1	(%)	Res (%)	Res (%)	(fpm)	Time		
					. ,			(min)		
	1	473	7.00	8.00	3.00	11.00	1734	3.135		
				Return Time	e:		3.135	n	ninutes	
				Total Truck	Cycle Time	:	9.295	n	ninutes	
Loadi	ng Tool u	ınit								
Produ	iction		5,083.78	LCY/Ho	ur Adjus	ted for job e	efficiency:	4,219.	.54 LCY/Ho	our
Truck	t Unit									
Produ	iction		1,254.67	LCY/Hour Adjusted for jol		ted for job e	efficiency: 1,04		.38 LCY/Ho	our
Optin	nal No. of	2	4	Truck(s)	Select	Selected Number of		4	Truck(s)	I
Truck	as:									
	Adjus	ted ho	ourly truck te	eam producti	on:		4,165.	52	LCY/Hour	
	Adjus	ted si	ngle truck/lo	ader team pr	oduction:		4,165.	52	LCY/Hour	
	Adjus	ted m	ultiple truck	/loader team	production:		4,165.	52	LCY/Hour	
	JOB TIN	ИЕ А	ND COST							
Fleet size: 1			1	Team(s)	_ Team(s) Total job		b time: 604.84		Hours	
	Unit co	st:	\$0.961	/LCY	Total jo	ob cost:	cost: \$2,421,638		-	

TRUCK/LOADER TEAM WORK

Task description: Backfill and			rading	I Pit					
Site: Trapper M	Site: Trapper Mine Permit		Action:	PR12		Permit/Job	#: <u>C1981010</u>		
PROJECT I	DENTIFIC	ATION							
Date: 4	N02A //19/2025 RAR		<u>Colorad</u> Moffat			previation: name:	None N02A		
Agency or organization name: DRMS HOURLY EQUIPMENT COST Shift basis: 1 per day									
Equipment Description Truck Loader Team -Truck: -Loader:				IATSU 830 6090					
Support Equipment -Load Area: -Dump Area: Road Maintenance –Motor Grader: -Water Truck:				Cat D10T - 10SUCat D10T - 10SUCAT 16MWater Tanker, 14,000 Gal.					
<u>Cost Breakd</u>	own: Truck	uck/Loader Tea Shovel		pport Equip Load Area	ment Mai Dump Area	ntenance Eq Motor Grader	uipment Water Truck		
%Utilization- machine:	100	100		25	25	25	50		
Ownership cost/hour:	\$209.4	7 \$302.3	5 5	\$257.39	\$257.39	\$179.39	\$130.32		
Operating cost/hour:	\$274.1	7 \$501.43	5 5	\$49.23	\$49.23	\$29.91	\$70.88		
%Utilization- riper:	NA	0	-	15	NA	NA	NA		
Ripper own. cost/hour:	NA	\$0.00	\$	\$20.05	\$0.00	\$0.00	\$0.00		
Ripper op. cost/hour:	NA	\$0.00	5	\$1.90	\$0.00	\$0.00	\$0.00		
Operator cost/hour:	\$25.24			\$38.59	\$38.59	\$27.76	\$0.00		
Unit Subtotals: Number of Units	\$508.8 : 3	8 \$837.6 [°] 1	7 5	\$347.11 1	\$345.21 1	\$237.06 1	\$201.20 1		
Group Subtotals:	Work:	\$2,364	.31	Support:	\$692.32	Maint:	\$438.26		

Total work team cost/hour: \$3,494.89

MATERIAL QUANTITIES

Initial volume: Loose volume:	477,772 477,772	CCY LCY	Swell factor:	1.000	
Source of estimat	ted volume:	Appen	dix A Tables A-3	.1	
Source of estimat	ted swell factor:		andbook		
Material Purchas	e Cost:	\$0.00			
Total Cost:		\$0.00			
HOURLY PROD	UCTION				
Truck Capacity:					
Truck Payload (we	•				
Material weight:	3,300	1 1 7	Pounds/LCY	.1	
Description:		sed rock - 75	5% Rock, 25% Ea	irth	
Rated Payload:	492,200		Pounds		
Payload Capacity	149.15		LCY		
Truck Bed (volume	e) Basis:				
Struck Volume:	153.00	LCY			
Heaped Volume:	192.00	LCY			
Average Volume	: 172.50	LCY			
Adjusted Volume	e: 149.15	LCY			
Final Truck Volu	me Based on Nu	mber of Loa	der Passes:	145.78	LCY
Loading Tool Capa	acity_				
		Buck	et Size Class:		NA
Rated Capacity:	58.900		heaped)		1 12 1
Bucket Fill Facto			d rock - avg. blas	ted (75 - 90%)	0.825
Adjusted Capacit		LCY	a rook uvg. blus	(15)0/0)	0.020
rajusica Capacit	.j. <u>10.075</u>				

Job Condition Corrections: Site Altitude (ft.): 6400 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	

Number of Loading Tool Passes Required _______ passes to Fill Truck:

Loading Tool Cycle Time:

Excavators and Front Shovels:

Machine Cycle Time Rating:	vs. Job Condi	tion A	BOVE A	VERAGE	3		
Selected Value within this Basic Rating:			AVERAGE				
Track Loaders – Mate	erial Description	on:					
Cycle Time Elements (min.):						
Load: NA	Maneuve	r: <u>N</u>	JA	_ Dump:	0.1	00	
Wheel and Track Loa dump, maneuver):	ders - Unadju	sted Basic L	Loader Cyc	cle Time	(load, NA	mi	nutes
Cycle Time Factors					Factor (min.)	Source	
Material:	NA				NA	(Cat HB)	
Stockpile:	NA				NA	(Cat HB)	
Truck Ownership:	NA				NA	(Cat HB)	
Operation:	NA				NA	(Cat HB)	
Dump Target:	NA				NA	(Cat HB)	
	Net Cycle	Time Adjus	djustment:		NA	minutes	
	Adjusted I	Loader Cycl	e Time:	-	0.498	minutes	
	Net Load	Гіте per Tr	uck:	-	1.494	minutes	
Truck Cycle Time:							
Truck Exchange Time:	0.80	Minutes	Adjusted	d for site	altitude:	0.800	Minutes
Truck Load Time:	1.494	Minutes	utes Adjusted for site altitude			1.494	Minutes
Truck Maneuver and	1.20	Minutes	õ			1.200	Minutes

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

Haul Route:

Dump Time:

Seg #	Haul Distance	Grade	Roll.	Total	Velocity	Travel
	(Ft)	(%)	Res (%)	Res (%)	(fpm)	Time
						(min)
1	4063.00	-2.00	3.00	1.00	3503	1.751

Haul Time: **1.751** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time
						(min)
1	4063.00	2.00	3.00	5.00	3296	1.884

		Return Time: Fotal Truck Cyc	1.88 cle Time: 7.12		minute minute	
Loading Tool unit Production Truck Unit	3,812.84	_ LCY/Hour	Adjusted for job efficience	y: <u>3</u>	,164.66	LCY/Hour
Production	1,226.91	LCY/Hour	Adjusted for job efficience	y: <u>1</u>	,018.34	LCY/Hour
Optimal No. of Trucks:	3	Truck(s)	Selected Number of Truc	ks: 3		Truck(s)

Adjusted hourly truck team production:	3,055.01	LCY/Hour
Adjusted single truck/loader team production:	3,055.01	LCY/Hour
Adjusted multiple truck/loader team production:	3,055.01	LCY/Hour

JOB TIME AND COST

Fleet size:	1	Team(s)	Total job time:	156.39	Hours
Unit cost:	\$1.144	/LCY	Total job cost:	\$546,565	

BULLDOZER WORK

Task description:		Backfill and				
Site: Trapper	ite: Trapper Mine		Permit Action: PR12		Permit/Job#: <u>C1981010</u>	
PROJECT	IDENTIF	ICATION				
Task #: _ Date: _ User: _ Agency or <u>HOURLY H</u>	U	on name: _DI	Colorado Moffat RMS		Abbreviation: Filename:	None PR12 F
Basic Machine: Horsepowe Blade Type	er: 850	D11T - 11U versal				

Blade Type:UniversalAttachment:NAShift Basis:3 per dayData Source:(CRG)

Cost Breakdown:

Cost Dieakuowii.		
		Utilization %
Ownership Cost/Hour:	\$496.62	NA
Operating Cost/Hour:	\$324.90	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	10
Operator Cost/Hour:	\$38.84	NA
Total unit Cost/Hour:	\$860.36	
Total Fleet Cost/Hour:	\$1,720.71	

MATERIAL QUANTITIES

Initial Volume:	668,037
Swell factor:	1.000
Loose	668,037 LCY
volume:	000,007 201

Source of estimated	Table A-4.5
volume:	
Source of estimated swell	Cat Handbook
factor:	

HOURLY PRODUCTION

Average push distance Unadjusted hourly production:		Seet 3.0 LCY/hr	
Materials consistency description:	/ C	Consolidated sto	ockpile 1.0
Average push gradient:	-20 %		
Average site altitude:	6,700 feet		
Material weight:	2,475 lbs/l	LCY	
Weight description:	User Provi	ided	
Job Condition Correcti	on 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:	0.790)	(3 SHIFTS/DAY)
Spoil pile:	1.000)	(DOZ-OC)
Push gradient:	1.426	5	(CAT HB)
Altitude:	1.000)	(CAT HB)
Material Weight:	0.929)	(CAT HB)
Blade type:	1.000)	(PAT)
Net correction:	0.941	19	
Adjusted unit production:	1,547.54	LCY/hr	
Adjusted fleet production:	3095.08	LCY/hr	

JOB TIME AND COST

Fleet size:	2 Dozer(s)
Unit cost:	\$0.556/LCY

Total job time:	215.84 Hours
Total job cost:	\$371,395

SCRAPER TEAM WORK

Site:	Trapper	Mine	Permit	Action:	PR12	Pe	ermit/Job#	: <u>C1981010</u>
Ē	PROJECT	IDENTIFIC	ATION					
	Task #:	N13	State:	Colorad	0	Abbrev	viation:	None
	Date:	4/30/2025	County:	Moffat		Filenar	ne:	N13
	User:	RAR	_					
	Agency or	organization	name: DF	RMS				
Ī	HOURLY	EQUIPMEN'	<u>r</u> COSTSh	ift basis:	1 per day			
	Equi	pment Descri	ption					
_	-Scraper:			Cat 63	37G w/push-p	oull		
_	-Dozer:			NA				
Support Equipment -Load Area:				Cat D	10T - 10SU			
_	-Dump Area: Cat D10T - 10SU							
		ntenance – Mo	tor Grader:	CAT				
_	-Water Tru	ıck:		Water	Tanker, 2,50	0 Gal.		
(Cost Break	down: Sc	raper Work T	eam Sur	oport Equipm	ent Mainte	nance Equ	ipment
		Scrape	er Doze	er	Load Area	Dump	Motor	Water
		-				Area	Grader	Truck
Jtiliza	tion-machin	ne: 100	NA		50	50	50	60
	ip cost/hou	r: \$281	32 NA		\$257.39	\$257.39	\$179.3	\$9 \$11.65
vnersh		¢210	35 NA		\$98.47	\$98.47	\$59.82	\$13.47
	g cost/hour	: \$319.	JJ INA		$\psi / 0. \tau /$	+		
eratin	g cost/hour tion-ripper:		NA NA		NA	NA	NA	NA
eratin Jtiliza	•	NA					NA \$0.00	NA \$0.00
erating Jtiliza oper o	tion-ripper:	NA our: NA	NA		NA	NA		
erating Jtiliza oper o oper o	tion-ripper: wn. cost/ho	NA our: NA	NA NA NA		NA \$0.00	NA \$0.00	\$0.00	\$0.00 \$0.00
perating Utiliza oper ov oper op perator	tion-ripper: wn. cost/ho p. cost/hour	NA our: NA r: NA	NANANA0NA		NA \$0.00 \$0.00	NA \$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00 \$21.12
berating Utiliza oper o oper o oper o oerator hit Sub	tion-ripper: wn. cost/ho p. cost/hour cost/hour:	NA our: NA r: NA \$30.9	NANANA0NA		NA \$0.00 \$0.00 \$38.59	NA \$0.00 \$0.00 \$38.59	\$0.00 \$0.00 \$27.76	\$0.00 \$0.00 \$21.12

MATERIAL QUANTITIES

Initial volume:	304,436	CCY	Swell factor:	1.000
Loose volume:	304,436	LCY		

Source of estimated volume: Source of estimated swell factor:

A-10.2		
Cat Handbook		

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight: Material description:	2,550 lbs/LCY Earth - Dry packed	_ Struck Volume: Heaped Volume:	24.00 34.00	LCY LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY
Payload Capacity:	32.00 LCY	Adjusted Capacity:	29.00	LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel 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	2000.00	-4.50	3.00	-1.50	2972	0.72

Haul Time:

0.72 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2000.00	4.50	3.00	7.50	1931	1.12

Return Time: 1.12 minutes

Total Scraper team cycle time:	3.44	minutes
Adjusted for job conditions:	839.65	LCY/Hour
Selected Number of Scrapers:	8	Scraper(s)
Adjusted single scraper team (unit) hourly production:	3,358.60	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	3,358.60	LCY/Hour
I CV/Hour		

	unit productior mber of Scrape	hour:	011.63 LC 1/H0	u	
JOB TIME	AND COST				
Fleet size:	1	Team(s)	Total job time:	90.64	Hours
Unit cost:	\$1.833	/LCY	Total job cost:	\$557,880	

SCRAPER TEAM WORK

Task description: Replace Topsoil on N Pit (Scraper)									
Site: Trapper Mine	P	ermit Act	tion:	PR12	Pern	nit/Job#:	C1981010		
PROJECT IDENTIFICATION									
Task #:N14Date: $4/20/2$ User:RAR	2025 State: Coun		olorado offat)	Abbrevia Filename		one		
Agency or organ	ization name:	DRMS	5						
HOURLY EQUI	PMENT CO	STShift b	oasis:	1 per day					
Equipment	Description								
-Scraper:			Cat 637G w/push-pull						
-Dozer:			NA						
Support Equipment -Load Area:			Cat D10T - 10SU						
-Dump Area:			Cat D10T - 10SU						
Road Maintenance – Motor Grader:			CAT 16M						
-Water Truck:		V	Water	Tanker, 2,500) Gal.				
Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment									
	Scraper	Dozer		Load Area	Dump	Motor	Water		
	_				Area	Grader	Truck		
%Utilization-machine:	100	NA		50	50	50	60		
Ownership cost/hour:	\$281.32	NA		\$257.39	\$257.39	\$179.39	\$11.65		
Operating cost/hour:	\$319.35	NA		\$98.47	\$98.47	\$59.82	\$13.47		
%Utilization-ripper:	NA	NA		NA	NA	NA	NA		

\$0.00

\$0.00

\$38.59

1

\$394.44

Support:

\$0.00

\$0.00

\$38.59

\$394.44

\$788.88

1

Total work team cost/hour: <u>\$6,154.65</u>

8

NA

NA

\$30.90

\$631.57

Work:

NA

NA

NA

NA

\$5,052.56

0

Ripper own. cost/hour:

Ripper op. cost/hour:

Operator cost/hour:

Unit Subtotals:

Number of Units:

Group Subtotals:

\$0.00

\$0.00

\$27.76

\$266.97

Maint:

1

\$0.00

\$0.00

\$21.12

\$46.24

\$313.21

1

MATERIAL QUANTITIES

Initial volume: Loose volume:	329,830 329,830	CCY LCY	Swell factor:	1.000	
Source of estimate Source of estimate		A-9.1 Cat Har	ndbook		

HOURLY PRODUCTION

Sc	raper	Bowl	(volume)) Basis:	
	*				

Material weight:	1,600 lbs/LCY	Struck Volume:	24.00	LCY
Material	Top Soil	Heaped Volume:	34.00	LCY
description:				
Rated Payload:	81,600 pounds	Average	29.00	LCY
		Volume:		
Payload	51.00 LCY	Adjusted	29.00	LCY
Capacity:		Capacity:		

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	<u>0.60</u> Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance	Grade	Roll. Res	Total Res	Velocity	Travel Time
	(Ft)	(%)	(%)	(%)	(fpm)	(min)
1	2667.00	8.00	3.00	11.00	786	3.41

Haul Time: **3.41**

3.41 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2667.00	-8.00	3.00	-5.00	2972	0.94
			Retur	n Time:	0.94	minutes
Adjus Select Adjus	Scraper team cycle ted for job condition ed Number of Scrap ted single scraper te ted multiple scraper	ns: pers: eam (unit) l	• 1		5.95 485.45 8 1,941.78 1,941.78	minutes LCY/Hour Scraper(s) LCY/Hour LCY/Hour
Unadjusted unit production/hour: 584.87 LCY/Hour Optimal Number of Scrapers per push dozer:						
JOB TIN	ME AND COST					
Fleet siz	ze: <u>1</u>	Team(s)	Total jo	b time:	169.86	Hours
Unit co	st: \$3.170	/LCY	Total jo	b cost:	\$1,045,426	

Task # TTT

TRUCK/LOADER TEAM WORK

Task descr	iption: Rep	ace Topsoil or	n N Pit (Truck	/Excavator)		
Site: Trapper	Mine	Permit Acti	on: PR12		Permit/Job	#: <u>C1981010</u>
PROJECT	IDENTIFICAT	ION				
Task #:			orado		reviation:	None
Date: User:	4/20/2025 0 RAR	County: <u>Mo</u>	ffat	File	name:	C010-N14A
Agency or	organization nar	ne: DRMS				
HOURLY	EQUIPMENT C	C <mark>OST</mark> Shift b	oasis: <u>1 per day</u>			
	ipment Descriptio					
-Loader:	der Team -Truck	-	at 777F at 385C L 18'-	1" Stick		
	quipment -Load A		at D10T - 10SU			
-Dump Ar			$\frac{at D101 - 1050}{at D10T - 1050}$			
	ntenance – Motor		AT 16M	-		
-Water Tru			ater Tanker, 2,	500 Gal.		
<u>Cost Break</u>	down: Truck/	Loader Team Excavator	Support Equip	oment Main Dump Area	ntenance Eq Motor Grader	Water Truck
%Utilization- nachine:	100	100	25	25	25	50
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23
%Utilization- iper:	NA	0	15	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$0.00
Unit Subtotals:		\$386.10	\$347.11	\$345.21	\$237.06	
Number of Uni		1	1	1	1	1
Group Subtotal	s: Work:	\$1,517.55	Support:	\$692.32	Maint:	\$259.94

Total work team cost/hour: \$2,469.81

Support:

MATERIAL QUANTITIES

	135,503 135,503	CCY LCY	Swell factor:	1.000	-				
Source of estimated	l volume:		dix A Tables A-1	0.8					
Source of estimated	swell factor:	Cat Ha	ndbook						
Material Purchase (Cost:	\$0.00	\$0.00						
Total Cost:		\$0.00							
HOURLY PRODU	CTION								
Truck Capacity:									
Truck Payload (weig	ht) 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							
Final Truck Volume	e Based on Nur	nber of Load	der Passes:	77.72	LCY				
Loading Tool Capaci	ty								
		Bucke	et Size Class:		Large				
Rated Capacity:	7.850	LCY (heaped)						
Bucket Fill Factor:	0.825	· · · · ·	d rock - avg. blast	ted (75 - 90%	0) 0.825				
Adjusted Capacity:	6.476	LCY	U	X	, 				
Job Condition Corr	ections: Site A	ltitude (ft.):	<u>6400</u> feet						
	Truck	Loader	Source						
Altitude Adj:	1.000	1.000	(CAT H	(B)					
Job Efficiency:	0.830	0.830	(CAT H	,					
Net Correction:	0.830	0.830							

Loading Tool Cycle Time:	Number of Loading Tool Passes Required	10	passes
	to Fill Truck:	12	

|--|

Machine Cycle Time vs Rating:	. Job Conditi	on A	BOVE A	VERAG	E			
Selected Value within the	his Basic Rat	ing: A	VERAGE	1				
Track Loaders – Materi								
Cycle Time Elements (m	in.):							
Load: NA	Maneuver:	N	IA	Dump		0.100)	
Wheel and Track Loade dump, maneuver):	ers - Unadjust	ed Basic L	loader Cyc	ele Time	e (load,	NA	mi	nutes
Cycle Time Factors					Factor (mi	n.)	Source	
Material:	NA				NA		(Cat HB)	
Stockpile:	NA				NA	NA (Cat I		
Truck Ownership:	NA				NA		(Cat HB)	_
Operation:	NA				NA		(Cat HB)	_
Dump Target:	NA				NA		(Cat HB)	_
	Net Cycle T	ime Adjus	stment:		NA		minutes	
	Adjusted Lo	bader Cycle	e Time:		0.302		minutes	
	Net Load Ti	•			3.422		minutes	
<u>Truck Cycle Time:</u>								
Truck Exchange Time:	0.80	Minutes	Adjusted	l for site	e altitude:	0	.800	Minutes
Truck Load Time:	3.422	Minutes	•			3	.422	Minutes
Truck Maneuver and	1.20	Minutes	5			1	.200	Minutes
Dump Time:			5					-
Truck Travel (Haul & Re	eturn) Time: F	Road Cond	ition: Firn	n, smoot	h, rolling, di	rt/lt.	surfaced.	
watered, maintained 3.0	¢	-		<u> </u>	<u>_</u>			
Haul Route:								
Seg # Haul Distance	Grade	Roll	Total	V	alocity Tr	avel		

Seg #	Haul Distance	Grade	Roll.	Total	Velocity	Travel
	(Ft)	(%)	Res (%)	Res (%)	(fpm)	Time
						(min)
1	4114.00	7.00	3.00	10.00	795	5.237

Haul Time:

5.237 minutes

Return Route:									
Seg #	Haul Distance	Grade	Roll.	Total	Velocity	Travel			
	(Ft)	(%)	Res (%)	Res (%)	(fpm)	Time			
						(min)			
1	4114.00	-7.00	3.00	-4.00	3450	1.229			

1.229 minutes

		eturn Time: otal Truck Cyc	cle Time:	11.888		minutes	
Loading Tool unit Production Truck Unit Production	<u>1,104.43</u> <u>392.24</u>	LCY/Hour LCY/Hour	Adjusted for job e Adjusted for job e	•	916.0 325.5		LCY/Hour LCY/Hour
Optimal No. of Trucks:	3	Truck(s)	Selected Number	of Trucks:	3		Truck(s)
Adjusted si	ourly truck tear ngle truck/load ultiple truck/lo <u>ND COST</u>	ler team produ		976.67 916.68 916.68		LCY/H LCY/H LCY/H	lour
Fleet size:	1	Team(s)	Total job time:	147.82		Hour	S
Unit cost:	\$2.694	/LCY	Total job cost:	\$365,087			

-Water Truck:

SCRAPER TEAM WORK

Task description:	Replace Topso	il in I Pit		
Site: Trapper Mine	Permit .	Action: PR12	Permit/Job	o#: <u>C1981010</u>
PROJECT IDENTIF	TICATION			
Task #: N15	State:	Colorado	Abbreviation:	None
Date: 4/20/2025	5 County:	Moffat	Filename:	N15
User: RAR				
Agency or organizati	ENT COSTShi	MS ft basis: <u>1 per day</u>		
-Scraper:		Cat 637G w/push-pull		
-Dozer:		NA		
Support Equipment -	Load Area:	Cat D10T - 10SU		
-Dump Area:		Cat D10T - 10SU		
Road Maintenance –	Motor Grader:	CAT 16M		

<u>Cost Breakdown</u>: Scraper Work Team Support Equipment Maintenance Equipment

Water Tanker, 2,500 Gal.

	Scraper	Dozer	Load Area	Dump	Motor	Water
				Area	Grader	Truck
%Utilization-machine:	100	NA	50	50	50	60
Ownership cost/hour:	\$281.32	NA	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$319.35	NA	\$98.47	\$98.47	\$59.82	\$13.47
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	\$38.59	\$38.59	\$27.76	\$21.12
Unit Subtotals:	\$631.57	NA	\$394.44	\$394.44	\$266.97	\$46.24
Number of Units:	8	0	1	1	1	1
Group Subtotals:	Work:	\$5,052.56	Support:	\$788.88	Maint:	\$313.21

Total work team cost/hour: <u>\$6,154.65</u>

Swell factor:

MATERIAL QUANTITIES

 Initial volume:
 56,983

 Loose volume:
 56,983

Source of estimated volume:

PR10 Tables A-9.1, A-10.4and TALPACS Summary (TMI)

1.000

Source of estimated swell factor: HOURLY PRODUCTION Summary (TMI) Cat Handbook

Scraper Bowl (volume) Basis:

Material weight:	1,600 lbs/LCY	Struck Volume:	24.00	LCY
Material	Top Soil	Heaped Volume:	34.00	LCY
description:				
Rated Payload:	81,600 pounds	Average	29.00	LCY
		Volume:		
Payload	51.00 LCY	Adjusted	29.00	LCY
Capacity:		Capacity:		

CCY

LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	0.60 Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel 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	958.00	2.70	3.00	5.70	1477	0.70

Haul Time: **0.70** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	958.00	-2.70	3.00	0.30	2965	0.43
			Retur	n Time:	0.43	minutes
Total	Scraper team cycle	time:			2.73	minutes
Adjus	ted for job condition	ns:			1,058.02	LCY/Hour
Select	ed Number of Scrap	pers:			8	Scraper(s)
Adjus	ted single scraper te	am (unit)	hourly produ	ction:	4,232.09	LCY/Hour
Adjus	ted multiple scraper	team (flee	et) hourly pro	oduction:	4,232.09	LCY/Hour
	sted unit production l Number of Scrape ozer:		1,274.73 I	LCY/Hour		
IOB TIN	ME AND COST					
Fleet si	ze: 1	Team(s)	Total jo	b time:	13.46	Hours

Unit cost:	\$1.454	/LCY	Total job cost:	\$82,869	

Task # TTT

TRUCK/LOADER TEAM WORK

Task description: Replace Topsoil on J Pit (Truck/Excavator)								
Site: Trapper M	Лine	_ Permit Actio	on: PR12		Permit/Job	#: <u>C1981010</u>		
PROJECT II	DENTIFICATI	<u>ON</u>						
Date: 4		tate: <u>Colo</u> ounty: <u>Mof</u>	orado fat		reviation: name:	None N16		
	rganization nam		asis: <u>1 per day</u>					
Truck Loade -Loader: Support Equ -Dump Area	enance –Motor C k:	Ca Ca rea: Ca Ca Grader: CA	at 777F at 385C L 18'- at D10T - 10SU at D10T - 10SU AT 16M ater Tanker, 2, Support Equip	J J 500 Gal.	ntenance Eq	uipment		
	Truck	Excavator	Load Area	Dump Area	Motor Grader	Water Truck		
%Utilization- machine:	100	100	25	25	25	50		
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65		
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23		
% Utilization- riper:	NA	0	15	NA	NA	NA		
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00		
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00		
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$0.00		
Unit Subtotals: Number of Units:	\$377.15 3	\$386.10 1	\$347.11 1	\$345.21 1	\$237.06 1	\$22.88 1		
Group Subtotals:	Work:	\$1,517.55	Support:	\$692.32	Maint:	\$259.94		

Total work team cost/hour: \$2,469.81

MATERIAL QUANTITIES

	94,623 94,623	CCY LCY	Swell factor:	1.000	
Source of estimated Source of estimated Material Purchase (Total Cost:	l swell factor:		dix A Tables A-1 ndbook	.0.5A	
HOURLY PRODU	CTION				
<u>Truck Capacity:</u> <u>Truck Payload (weig</u> Material weight: Description: Rated Payload: Payload Capacity:	ht) Basis: 1,600 Top Soil 200,000 125.00		Pounds/LCY Pounds LCY		
<u>Truck Bed (volume)</u> Struck Volume: Heaped Volume: Average Volume: Adjusted Volume: Final Truck Volume	60.60 78.80 69.70 78.80	LCY LCY LCY LCY LCY	der Passes:	77.72	LCY
Loading Tool Capaci	ty				_
		Bucke	et Size Class:		Large
Rated Capacity: Bucket Fill Factor: Adjusted Capacity:	7.850 0.825 6.476	LCY (I Blasted LCY	neaped) l rock - avg. blas	ted (75 - 90%)	0.825
Job Condition Corr	ections: Site A	ltitude (ft.):	<u>6400</u> feet		
Altitude Adj: Job Efficiency:	Truck 1.000 0.830	Loader 1.000 0.830	Source (CAT H (CAT H		
Net Correction:	0.830	0.830		,	
Loading Tool Cycle	Time: Num	ber of Load	ling Tool Passes	Required 1	2 p

to Fill Truck:

passes

Excavators and Front S	hovels:						
Machine Cycle Time Rating:	vs. Job Conditi	ion A	BOVE A	VERAGE			
Selected Value within	this Basic Rat	s Basic Rating: AVERAGE					
Track Loaders – Mate	rial Descriptio	n:					
Cycle Time Elements (min.):						
Load: NA	Maneuver	: <u>N</u>	JA	Dump:	0.10	00	
Wheel and Track Load dump, maneuver):	ders - Unadjus	ted Basic I	Loader Cy	cle Time (load, NA	mi	nutes
Cycle Time Factors					Factor (min.)	Source	
Material:	NA				NA	(Cat HB)	
Stockpile:	NA				NA	(Cat HB)	
Truck Ownership:	NA				NA	(Cat HB)	
Operation:	NA				NA	(Cat HB)	
Dump Target:	NA				NA	(Cat HB)	
	Net Cycle 7	Fime Adjus	stment:		NA	minutes	
	Adjusted L	oader Cycl	e Time:	_	0.302	minutes	
	Net Load T	ime per Tr	uck:	_	3.422	minutes	
<u>Truck Cycle Time:</u>							
Truck Cycle Time: ruck Exchange Time: ruck Load Time:	0.80	Minutes	U	ed for site a	_	0.800	Minute

Truck Maneuver and	1.20	Minutes	Adjusted for site altitude:	1.200	Minutes
Dump Time:		_			_

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

Haul Rou	ite:					
Seg #	Haul Distance	Grade	Roll.	Total	Velocity	Travel
-	(Ft)	(%)	Res (%)	Res (%)	(fpm)	Time
						(min)
1	7866.00	-3.30	3.00	-0.30	3503	2.364

Haul Time: 2.	364

Seg #	Haul Distance	Grade	Roll.	Total	Velocity	Travel
	(Ft)	(%)	Res (%)	Res (%)	(fpm)	Time
						(min)
1	7866.00	3.30	3.00	6.30	2853	3.080

Return Time:
Total Truck Cycle Time:

Return Route:

3.080	minutes
10.866	minutes

minutes

Loading Tool unit Production	1,104.43	_ LCY/Hour	Adjusted for job efficiency:	916.68	_ LCY/Hour
Truck Unit Production	429.13	_ LCY/Hour	Adjusted for job efficiency:	356.18	_ LCY/Hour
Optimal No. of Trucks:	3	Truck(s)	Selected Number of Trucks:	3	Truck(s)

Adjusted hourly truck team production:	1,068.53	LCY/Hour
Adjusted single truck/loader team production:	916.68	LCY/Hour
Adjusted multiple truck/loader team production:	916.68	LCY/Hour

Fleet size:	1	Team(s)	Total job time:	103.22	Hours
Unit cost:	\$2.694	/LCY	Total job cost:	\$254,944	

SCRAPER TEAM WORK

Task desete: Trapp	1	Replace Topsoil in J P Permit Action:	it (Scraper) PR12	Permit/Job	
le. <u>Trapp</u>	er Mine		FR12		#. <u>C1981010</u>
PROJEC'	T IDENTIF	<u>ICATION</u>			
Task #:	N16A	State: Colorad	lo	Abbreviation:	None
Date:	4/20/2025	County: Moffat		Filename:	C010-N16A
User:	RAR				
	or organizatio	on name: DRMS			

Equipment Description	
-Scraper:	Cat 637G w/push-pull
-Dozer:	NA
Support Equipment -Load Area:	Cat D10T - 10SU
-Dump Area:	Cat D10T - 10SU
Road Maintenance – Motor Grader:	CAT 16M
-Water Truck:	Water Tanker, 2,500 Gal.

Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment

	Scraper	Dozer	Load Area	Dump	Motor	Water
				Area	Grader	Truck
%Utilization-machine:	100	NA	50	50	50	60
Ownership cost/hour:	\$281.32	NA	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$319.35	NA	\$98.47	\$98.47	\$59.82	\$13.47
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	\$38.59	\$38.59	\$27.76	\$21.12
Unit Subtotals:	\$631.57	NA	\$394.44	\$394.44	\$266.97	\$46.24
Number of Units:	8	0	1	1	1	1
Group Subtotals:	Work:	\$5,052.56	Support:	\$788.88	Maint:	\$313.21

Total work team cost/hour: <u>\$6,154.65</u>

MATERIAL QUANTITIES

 Initial volume:
 11,260

 Loose volume:
 11,260

Swell factor: 1.000

Source of estimated volume:

PR10 Tables A-9.1, A-10.4and TALPACS Summary (TMI) Cat Handbook

Source of estimated swell factor: HOURLY PRODUCTION

<u>ODUCTION</u>

Scraper Bowl (volume) Basis:

Material weight:	1,600 lbs/LCY	Struck Volume:	24.00	LCY
Material	Top Soil	Heaped Volume:	34.00	LCY
description:				
Rated Payload:	81,600 pounds	Average	29.00	LCY
		Volume:		
Payload	51.00 LCY	Adjusted	29.00	LCY
Capacity:		Capacity:		

CCY

LCY

Cycle Time:

Scraper Loading Time:	<u>1.00</u> Minutes
Maneuver and Spread Time:	0.60 Minutes

Job Condition Correction: Site Altitude: 6400 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel 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	2938.00	-1.50	3.00	1.50	2939	1.18

Haul Time: **1.18** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2938.00	1.50	3.00	4.50	2910	1.19
			Return	n Time:	1.19	minutes
Total Scraper team cycle time: 3.97 minutesAdjusted for job conditions:727.56LCY/HourSelected Number of Scrapers:8Scraper(s)Adjusted single scraper team (unit) hourly production:2,910.23LCY/HourAdjusted multiple scraper team (fleet) hourly production:2,910.23LCY/Hour						
Unadjusted unit production/hour: 876.57 LCY/Hour Optimal Number of Scrapers per push dozer:						
JOR III	ME AND COST					
Fleet siz	ze: <u>1</u>	Team(s)	Total jo	b time:	3.87	Hours
Unit co	st: <u>\$2.115</u>	/LCY	Total jo	b cost:	\$23,813	

Task # TTT

TRUCK/LOADER TEAM WORK

Task description:Replace Topsoil on J Pit A91-8 to J Pit TR134									
Site: Trapper Mine Permit Action: PR12					Permit/Job	#: <u>C1981010</u>			
PROJECT I	IDENTIFICATI	<u>ON</u>							
Task #:	Task #: N16ATR State: Colorado Abbreviation: None								
		ounty: Mo			name:	N16A TR134			
User:	RAR								
Agency or o	organization nam	e: DRMS							
HOURLY E	QUIPMENT CO	OST Shift b	oasis: <u>1 per day</u>						
Equir	oment Description	ı							
	ler Team -Truck:		at 777F						
-Loader:		С	at 385C L 18'-	1" Stick					
Support Eq	uipment -Load A	rea: C	at D10T - 10SU	J					
· · · · · ·	-Dump Area:			Cat D10T - 10SU					
	tenance –Motor (AT 16M						
-Water True	ck:	W	/ater Tanker, 2,	500 Gal.					
<u>Cost Breakd</u>	lown: Truck/I	Loader Team	Support Equip	oment Main	ntenance Ec	quipment			
	Truck	Excavator	Load Area	Dump Area	Motor Grader	Water Truck			
% Utilization- machine:	100	100	25	25	25	50			
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65			
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23			
%Utilization- riper:	NA	0	15	NA	NA	NA			
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00			
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00			
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$0.00			
Unit Subtotals:	\$377.15	\$386.10	\$347.11	\$345.21	\$237.06	5 \$22.88			

Total work team cost/hour: <u>\$2,469.81</u>

Work:

1

\$1,517.55

1

Support:

1

\$692.32

3

Number of Units:

Group Subtotals:

1

\$259.94

1

Maint:

MATERIAL QUANTITIES

Initial volume: Loose volume:	21,038 21,038	CCY LCY	Swell factor:	1.000
Source of estimate Source of estimate Material Purchase Total Cost:	ed swell factor:		lix A Tables A-1 ndbook	0.5A

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

Final Truck Volume Based on Number of Loader Passes: 77.72 LCY

Loading Tool Capacity

		Bucket Size Class:	Large
Rated Capacity:	7.850	LCY (heaped)	
Bucket Fill Factor:	0.825	Blasted rock - avg. blasted	(75 - 90%) 0.825
Adjusted Capacity:	6.476	LCY	

Job Condition Corrections: Site Altitude (ft.): 6400 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	

Number of Loading Tool Passes Required to Fill Truck:

passes

12

Loading Tool Cycle Time:

Excavators and Front Shovels:

Machine Cycle Time Rating:	vs. Job Conditio	on A	BOVE AV	/ERAGI	Ξ			
Selected Value within	this Basic Rati	ng: A	VERAGE					
Track Loaders – Mate	rial Description	:						
Cycle Time Elements (min.):							
Load: NA	Maneuver:	N	A	Dump	: _(0.100		
Wheel and Track Load dump, maneuver):	ders - Unadjuste	ed Basic L	oader Cyc	le Time	(load,	NA	miı	nutes
Cycle Time Factors					Factor (mi	n.)	Source	
Material:	NA				NA		(Cat HB)	
Stockpile:	NA				NA		(Cat HB)	
Truck Ownership:	NA				NA		(Cat HB)	
Operation:	NA				NA		(Cat HB)	
Dump Target:	NA				NA		(Cat HB)	
	Net Cycle Ti	ime Adjus	tment:		NA	·	minutes	
	Adjusted Lo	ader Cycle	e Time:		0.302		minutes	
	Net Load Tin	me per Tri	uck:		3.422		minutes	
<u>Truck Cycle Time:</u>								
Truck Exchange Time:	0.80	Minutes	Adjusted	for site	altitude:	0.8	800	Minutes
Truck Load Time:	3.422	Minutes	Adjusted	for site	altitude:	3.4	422	Minutes
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted	for site	altitude:	1.2	200	Minutes

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

Haul Route:

Return Route

Seg #	Haul Distance	Grade	Roll.	Total	Velocity	Travel
	(Ft)	(%)	Res (%)	Res (%)	(fpm)	Time
						(min)
1	7749.00	-2.60	3.00	0.40	3503	2.639

Haul Time:

2.639

minutes

Rotuin R	Return Route.								
Seg #	Haul Distance	Grade	Roll.	Total	Velocity	Travel			
	(Ft)	(%)	Res (%)	Res (%)	(fpm)	Time			
						(min)			
1	7749.00	2.60	3.00	5.60	2853	2.981			

Unit cost:

\$2.694 /LCY

		Return Time: Fotal Truck Cyc	2.981 11.042		minutes minutes		
Loading Tool unit Production Truck Unit	1,104.43	_ LCY/Hour	Adjusted for job e	efficiency:	916	.68 LCY/Hour	
Production	422.29	LCY/Hour	Adjusted for job e	efficiency:	350	.50 LCY/Hour	
Optimal No. of Trucks:	3	Truck(s)	Selected Number	of Trucks:	3	Truck(s)	
Adjusted hourly truck team production: Adjusted single truck/loader team production: Adjusted multiple truck/loader team production:					0	LCY/Hour LCY/Hour LCY/Hour	
JOB TIME AND COST							
Fleet size:	1	_ Team(s)	Total job time:	22.95		Hours	

Total job cost:

\$56,683

Task # TTT

TRUCK/LOADER TEAM WORK

Task description:Replace Topsoil on J Pit ASH-1 to J Pit TR134										
Site: Trapper M	ine	Permit A	Actio	n: <u>PR12</u>		_ Permit/Job	#: <u>C1981010</u>			
PROJECT IDENTIFICATION										
			Color			breviation:	None			
	Date:2/25/2025County:MoffatFilename:N16AA TR13User:RAR									
Agency or organization name: DRMS										
HOURLY EQ	UIPMENT C	OST Sh	ift ba	sis: <u>1 per day</u>						
	ent Description Team -Truck:	n	Ca	t 777F						
-Loader:	Team - Truck:			t 777F t 385C L 18'-	1" Stick					
	pment -Load A	regi		t D10T - 10SU						
-Dump Area:	pinein -Load A	10a.		Cat D101 - 1050						
*	nance – Motor (Grader:		T 16M)					
-Water Truck		Jiudei.		ater Tanker, 2,	500 Gal					
	•									
Cost Breakdo	wn: Truck/I	Loader Tea	um l	Support Equip	ment Ma	intenance Ec	quipment			
	Truck	Excava	tor	Load Area	Dump	Motor	Water			
					Area	Grader	Truck			
%Utilization- machine:	100	100		25	25	25	50			
Ownership cost/hour:	\$199.47	\$220.92	2	\$257.39	\$257.39	\$179.39	\$11.65			
Operating cost/hour:	\$152.44	\$131.31	1	\$49.23	\$49.23	\$29.91	\$11.23			
%Utilization- riper:	NA	0		15	NA	NA	NA			
Ripper own. cost/hour:	NA	\$0.00		\$20.05	\$0.00	\$0.00	\$0.00			
Ripper op. cost/hour:	NA	\$0.00		\$1.90	\$0.00	\$0.00	\$0.00			
Operator cost/hour:	\$25.24	\$33.87		\$38.59	\$38.59	\$27.76	\$0.00			
Unit Subtotals:	\$377.15	\$386.10)	\$347.11	\$345.21	\$237.06	5 \$22.88			
Number of Units:	3	1		1	1	1	1			
Group Subtotals:	Work:	\$1,517.	55	Support:	\$692.32	Maint:	\$259.94			

Total work team cost/hour: <u>\$2,469.81</u>

MATERIAL QUANTITIES

Initial volume: Loose volume:	34,913 34,913	CCY LCY	Swell factor:	1.000	
Source of estimate Source of estimate Material Purchase Total Cost:	ed swell factor:	Append Cat Hat \$0.00 \$0.00	lix A Tables A-1 ndbook	0.5A	

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

Final Truck Volume Based on Number of Loader Passes: 77.72 LCY

Loading Tool Capacity

		Bucket Size Class: Large
Rated Capacity:	7.850	LCY (heaped)
Bucket Fill Factor:	0.825	Blasted rock - avg. blasted (75 - 90%) 0.825
Adjusted Capacity:	6.476	LCY

Job Condition Corrections: Site Altitude (ft.): 6400 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	

2025 February

Page 381 of 404

Loading Tool Cycle Time	e: Number of Loading Tool Passes Required to Fill Truck:			ed to 12	2	passes
Excavators and Front Show	vels:					_
Machine Cycle Time vs. Rating:	Job Condition	ABOVE A	VERAGE			
Selected Value within the	s Basic Rating:	AVERAG	Ξ			
Track Loaders – Materia	Description:					
Cycle Time Elements (mir	ı.):					
Load: NA	Maneuver:	NA	Dump:	0.10	0	
Wheel and Track Loader maneuver):	s - Unadjusted Basic I	Loader Cycle	Time (load, d	ump, NA	mi	nutes
Cycle Time Factors				actor (min.)	Source	
Material:	NA			IA	(Cat HB)	
Stockpile:	NA			IA IA	(Cat HB)	
Truck Ownership:	NA				(Cat HB)	
Operation: Dump Target:	NA NA			IA IA	(Cat HB) (Cat HB)	
Dump Target.	Net Cycle Time Adj	ustment		IA IA	minutes	
	Adjusted Loader Cy			.302	minutes	
	Net Load Time per			.422	minutes	
Truck Cycle Time:						
Fruck Exchange Time:	0.80 Minu	tes Adjust	ed for site alti	tude:	0.800	Minutes
Fruck Load Time:	3.422 Minu	tes Adjust	ed for site alti	tude:	3.422	Minutes
Гruck Maneuver and Dump Гime:	1.20 Minu	tes Adjust	ed for site alti	tude:	1.200	Minutes

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

Haul Rou	te:								
Seg #	Hau	l Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	-	
	(Ft)			(%)	(%)	(fpm)	Time		
							(min)		
1	7908	8.00	-3.50	3.00	-0.50	3503	2.376		
				Haul Tin	ne:	2.376	min	utes	
Return Ro	1	1 D'atawa	C and $L_{\alpha}(0/1)$	D - 11 D	T = 4 = 1	Vala - itaa	T1		
Seg #		l Distance	Grade (%)	Roll. Res (0)	Total $\mathbf{D}_{ac}(0(\mathbf{x}))$	Velocity	Travel	-	
	(Ft)			(%)	Res (%)	(fpm)	Time		
1	7908	2 00	3.50	3.00	6.50	2853	(min) 3.115		
1	7900	5.00	5.50	3.00	0.30	2833	5.115		
		F	Return Time:			3.115	m	inutes	
			otal Truck Cy	cle Time:		10.913		inutes	
			•						
Loading Tool un	nit								
Production		1,104.43	LCY/Hou	ır Adjust	ted for job ef	ficiency:	916.6	58	LCY/Hour
Truck Unit Production		427.28	LCY/Hou	ır Adjust	ted for job ef	ficiency:	354.6	54	LCY/Hour
Optimal No. of Trucks:		3	Truck(s)	Select	ed Number o	f Trucks:	3		Truck(s)
		•	m production:			1,063.9		LCY/H	
5		0	der team produ bader team pro			<u>916.68</u> 916.68		LCY/H	
Aujusi	eu mu			Juuction.		910.00			Ioui
JOB TIN	<u>IE AN</u>	ID COST							
Fleet siz	ze:	1	Team(s)	Total jo	b time:	38.09		Hou	rs
Unit cos	st:	\$2.694	/LCY	Total jo	b cost:	\$94,066			

Task description:	Seed L Pit, K Nob: >6700 ftRangeland with Shrubs TR135				
Site: <u>Trapper Mine</u>	Permit Action: PR12	<u>Permit/Job#:</u> <u>C1981010</u>			
PROJECT IDENTIF	ICATION				
Task #: N16TR13 Date: 2/25/202 User: RAR		Abbreviation:NoneFilename:C010-N16TR135			
Agency or organization	on name: <u>DRMS</u>				

Seed Mix	Rate – PLS LBS / Acre	<u>Seeds</u> per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	<u>0.40</u>	<u>0.50</u>	<u>\$39.81</u>
Beardless Wheatgrass - Whitmar	<u>0.31</u>	<u>1.01</u>	<u>\$4.29</u>
Bitterbrush, Antelope	<u>4.40</u>	<u>1.35</u>	<u>\$248.66</u>
Mountain Brome - Bromar	<u>0.72</u>	<u>1.16</u>	<u>\$4.33</u>
<u>Great Basin Wildrye - Magnar</u>	<u>0.92</u>	<u>3.74</u>	<u>\$10.75</u>
Kentucky Bluegrass - Ginger	<u>0.06</u>	<u>2.96</u>	<u>\$0.25</u>
Alfalfa - Ladak (inoculated)	<u>0.10</u>	<u>0.48</u>	<u>\$0.40</u>
Chokecherry	3.00	0.21	<u>\$148.37</u>
Burnett, Small (or Little) - Delar	0.40	0.51	<u>\$1.78</u>
Sheep Fescue - Covar	<u>0.15</u>	2.34	<u>\$0.92</u>
Milk Vetch, Cicer - Lutana	<u>0.30</u>	<u>1.00</u>	<u>\$2.94</u>
Slender Wheatgrass - San Luis	<u>0.28</u>	<u>1.02</u>	<u>\$1.69</u>
Streambank Wheatgrass - Sodar	<u>0.26</u>	<u>0.85</u>	<u>\$2.16</u>
Thickspike Wheatgrass - Critana	<u>0.28</u>	<u>0.99</u>	<u>\$2.28</u>
Western Wheatgrass - Arriba	<u>0.38</u>	<u>0.96</u>	<u>\$3.43</u>
Rabbitbrush, Rubber	<u>0.26</u>	<u>3.87</u>	<u>\$21.68</u>
Needlegrass, Green - Lodorm	<u>0.24</u>	<u>1.00</u>	<u>\$2.07</u>
Rose, Wood's	<u>0.96</u>	<u>0.00</u>	<u>\$51.24</u>
Sagebrush, Mountain or Big	<u>0.07</u>	<u>3.70</u>	<u>\$5.79</u>
Flax, Lewis Blue	<u>0.30</u>	<u>1.99</u>	<u>\$12.69</u>
Red Top	0.02	2.29	<u>\$0.21</u>
Sagebrush, Silver	<u>0.10</u>	<u>1.94</u>	<u>\$6.81</u>
Saltbush, Four Wing	<u>0.62</u>	<u>0.85</u>	<u>\$12.32</u>
Serviceberry	<u>0.29</u>	<u>0.53</u>	<u>\$31.62</u>
Snowberry, Mountain	<u>0.58</u>	<u>1.00</u>	<u>\$34.25</u>
Penstemon, Rocky Mountain	<u>0.14</u>	<u>2.19</u>	<u>\$8.60</u>

Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	<u>\$10.31</u>
Aster, Pacific	0.02	0.35	<u>\$2.80</u>
Goldeneye - Showy	0.08	0.92	<u>\$9.13</u>
Totals Seed Mix	<u>15.79</u>	<u>44.87</u>	<u>\$684.99</u>

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	<u>\$236.64</u>

No. of Acres:	<u>4.9</u>	Cost /Acre:	<u>\$921.63</u>
Estimated Failure Rate:	17.5%	Cost /Acre*:	<u>\$921.63</u>
*Selected Replanting Work Items:	<u>SEEDING</u>		

Initial Job Cost:	<u>\$4,515.99</u>
Reseeding Job Cost:	<u>\$790.30</u>
Total Job Cost:	<u>\$5,306</u>
Job Hours:	3.50

TRUCK/LOADER TEAM WORK

Task description	: Replac	e Topsoil on I/.	J Pit			
Site: Trapper Mine	2	Permit Action:	PR12	Permi	t/Job#: <u>C1</u>	981010
PROJECT IDEN	TIFICATIO	<u>N</u>				
Task #:	S	tate: Colo	orado	Abbre	eviation:	None
		ounty: Mof	fat	Filena	ime:	N17
User: RAI	<u> </u>					
Agency or organ	ization name:	DRMS				
HOURLY EQUI	PMENT COS	ST Shift basis	: <u>1 per day</u>			
	t Description					
Truck Loader Te	eam -Truck:		ıt 777F			
-Loader:			ut 385C L 18'-1			
Support Equipm	ent -Load Are		t D10T - 10SU			
-Dump Area:			tt D10T - 10SU			
Road Maintenan -Water Truck:	ice – Motor Gr		AT 16M ater Tanker, 2,5	200 C al		
<u>Cost Breakdown</u>	Truck/Lo	ader Team Su	pport Equipmen	nt Maintenand	ce Equipmen Motor Grader	t Water Truck
%Utilization-	100	100	25	25		
machine:	100	100	25	25	25	50
Ownership cost/hour:	\$199.47	\$220.92	\$257.39	\$257.39	\$179.39	\$11.65
Operating cost/hour:	\$152.44	\$131.31	\$49.23	\$49.23	\$29.91	\$11.23
%Utilization-riper:	NA	0	15	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$20.05	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$1.90	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$25.24	\$33.87	\$38.59	\$38.59	\$27.76	\$0.00
Unit Subtotals:	\$377.15	\$386.10	\$347.11	\$345.21	\$237.06	\$22.88
Number of Units:	2	1	1	1	1	1
Group Subtotals:	Work:	\$1,140.40	Support:	\$692.32	Maint:	\$259.94

Total work team cost/hour: **<u>\$2,092.66</u>**

MATERIAL QUANTITIES

Initial volume: Loose volume:	49,788 49,788	CCY LCY	Swell factor:	1.000		
Source of estimated	l volume:	Appen	dix A Tables A-10	0.6		
Source of estimated	swell factor:		andbook			
Material Purchase (Cost:	\$0.00				
Total Cost:		\$0.00				_
HOURLY PRODU	<u>CTION</u>					
Truck Capacity:						
Truck Payload (weig	<u>ht) Basis:</u>					
Material weight:	1,600		Pounds/LCY			
Description:	Top Soil					_
Rated Payload:	200,000		Pounds			
Payload Capacity:	125.00		LCY			
— 1. —						
Truck Bed (volume)						
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 Numl	per of Loader	Passes:	77.72	LCY	
Loading Tool Capaci	ty					
- - -		Buck	et Size Class:		Large	
Rated Capacity:	7.850		heaped)			
Bucket Fill Factor:	0.825		d rock - avg. blast	ed (75 - 90%)	0.825	
Adjusted Capacity:	<u>6.476</u>	LCY	a look avg. blask	cu (15)070)	0.025	
najustea Capacity.						
Job Condition Corr	ections: Site Alt	itude (ft.): <u>64</u>	<u>00</u> feet			
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT H			
Job Efficiency:	0.830	0.830	(CAT H	/		
Net Correction:	0.830	0.830				
Leeding Teel Ceel	Time			De maine 14		
Loading Tool Cycle		umber of Loa ll Truck:	ding Tool Passes	kequired to	12	pass

Excavators	and Front Shovels:	
LACAVATORS	and From Shovers.	

Machine Cycle Time vs. Job Condition Rating: Selected Value within this Basic Rating:			BOVE AVE VERAGE	ERAGE				
Track Loaders – Material	Description:							
Cycle Time Elements (min	.):							
Load: NA	Maneuver:	NA	4	Dump:		0.100		
Wheel and Track Loaders maneuver):	s - Unadjusted H	Basic Loade	er Cycle Tii	ne (load	, dump,	NA	r	ninutes
Cycle Time Factors					Factor (n	nin.)	Source	
Material:	NA				NA	/	(Cat HB))
Stockpile:	NA				NA		(Cat HB))
Truck Ownership:	NA				NA		(Cat HB))
Operation:	NA				NA		(Cat HB))
Dump Target:	NA				NA		(Cat HB))
	Net Cycle Tin	ne Adjustm	ent:		NA		minutes	
	Adjusted Load	der Cycle T	Time:		0.302		minutes	
	Net Load Tim	e per Truck	k:	-	3.422		minutes	
<u>Truck Cycle Time:</u>								
Truck Exchange Time:	0.80	Minutes	Adjusted	for site a	ltitude:	().800	Minutes
Truck Load Time:	3.422	Minutes	Adjusted	for site a	ltitude:		3.422	Minutes
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted			1	1.200	Minutes

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

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time
						(min)
1	3851.00	-4.00	3.00	-1.00	3503	1.180

Haul Time: **1.180** minutes

Seg #	Haul Distance	Grade (%)	Roll. Res	Total	Velocity	Travel	
	(Ft)		(%)	Res (%)	(fpm)	Time	
						(min)	
1	3851.00	4.00	3.00	7.00	2398	1.809	
		Return Time:			1.809	mi	nutes
		Total Truck Cy	cle Time:		8.411		nutes
ading Tool un							
oduction	1,104.43	LCY/Hou	ır Adjust	ed for job ef	fficiency:	916.68	B LCY/Hour
uck Unit	554.29		A 1° (10 1 1	cc	100.1	
oduction	554.38	LCY/Hou	ir Adjust	ed for job ef	fficiency:	460.14	LCY/Hour
otimal No. of	2	Truck(s)	Selecte	ed Number o	of Trucks:	2	Truck(s)
ucks:						. <u></u>	
Adjuste	ed hourly truck te	am production:			920.27]	LCY/Hour
•	ed single truck/lo	-			916.68]	LCY/Hour
	ed multiple truck	-			916.68]	LCY/Hour
JOB TIM	E AND COST						
Fleet size	e: <u>1</u>	Team(s)	Total jo	b time:	54.31		Hours
Unit cost: \$2.283 /LCY Total job cost: \$113,660							

Task description:		Seed N Pit Rangeland w/o shrubs (<6700 ft.)				
ite:	Trapper	Mine	Permit A	Action: PR12	Permit/Job#:	C1981010
PE	ROJECT	IDENTIFI	<u>CATION</u>			
-	F 1 //	N110	State:	Colorado	Abbreviation:	None
Т	Гask #:	N18	State.	Colorado	1 looi e vitation.	
	Task #: Date:	4/20/2025		Moffat	Filename:	C010-N18

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	44.1	Cost /Acre:	\$360.87
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$15,914.37
Reseeding Job Cost:	\$2,785.01
Total Job Cost:	\$18,699
Job Hours:	44.00

Task description:		Seed N Pit: >6700 ftRangeland with Shrubs					
ite:	Trapper	Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
<u>PR</u>	ROJECT	<u>IDENTIFI</u>	CATION				
Т	`ask #:	N18A	State:	Colora	ado	Abbreviation:	None
D	Date:	4/20/2025	County:	Moffa	t	Filename:	C010-N18A
	Jser:	RAR					

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Bitterbrush, Antelope	4.40	1.35	\$248.66
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Chokecherry	3.00	0.21	\$148.37
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Rabbitbrush, Rubber	0.26	3.87	\$21.68
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Rose, Wood's	0.96	0.00	\$51.24
Sagebrush, Mountain or Big	0.07	3.70	\$5.79
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Sagebrush, Silver	0.10	1.94	\$6.81
Saltbush, Four Wing	0.62	0.85	\$12.32
Serviceberry	0.29	0.53	\$31.62
Snowberry, Mountain	0.58	1.00	\$34.25
Penstemon, Rocky Mountain	0.14	2.19	\$8.60

Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	15.79	44.87	\$684.99

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	244.4	Cost /Acre:	\$921.63
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$921.63
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$225,246.37
Reseeding Job Cost:	\$39,418.12
Total Job Cost:	\$264,664
Job Hours:	244.00

Task des	cription:	Seed J Pit with	out shrubs (Range C)		
e: Trapp	er Mine	Permit A	Action: PR12	Permit/Job#:	C1981010
PROJEC	T IDENTIFI	CATION			
Task #:	N19	State:	Colorado	Abbreviation:	None
	4/20/2025	County:	Moffat	Filename:	N19
Date:	4/20/2025	county.	11101140	i nonunio.	

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	65.8	Cost /Acre:	\$360.87
Estimated Failure Rate:	17.5%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$23,745.25
Reseeding Job Cost:	\$4,155.42
Total Job Cost:	\$27,901
Job Hours:	66.00

Task description:	Seed J Pit without shrubs (Range C) TR135				
Site: <u>Trapper Mine</u>	Permit Action: PR12	<u>Permit/Job#:</u> <u>C1981010</u>			
PROJECT IDENTIF	ICATION				
Task #: N19TR1: Date: 2/25/202 User: RAR		Abbreviation:NoneFilename:N19 TR134			
Agency or organization	on name: DRMS				

Seed Mix	<u>Rate –</u> <u>PLS</u> <u>LBS /</u> Acre	<u>Seeds</u> per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	<u>1.16</u>	<u>\$4.33</u>
Great Basin Wildrye - Magnar	0.92	<u>3.74</u>	<u>\$10.75</u>
Kentucky Bluegrass - Ginger	<u>0.06</u>	<u>2.96</u>	<u>\$0.25</u>
Alfalfa - Ladak (inoculated)	<u>0.10</u>	<u>0.48</u>	<u>\$0.40</u>
Burnett, Small (or Little) - Delar	<u>0.40</u>	0.51	<u>\$1.78</u>
Sheep Fescue - Covar	<u>0.15</u>	<u>2.34</u>	<u>\$0.92</u>
Milk Vetch, Cicer - Lutana	<u>0.30</u>	<u>1.00</u>	<u>\$2.94</u>
Slender Wheatgrass - San Luis	<u>0.28</u>	<u>1.02</u>	<u>\$1.69</u>
Streambank Wheatgrass - Sodar	<u>0.26</u>	<u>0.85</u>	<u>\$2.16</u>
Thickspike Wheatgrass - Critana	<u>0.28</u>	<u>0.99</u>	<u>\$2.28</u>
Western Wheatgrass - Arriba	<u>0.38</u>	<u>0.96</u>	<u>\$3.43</u>
Needlegrass, Green - Lodorm	<u>0.24</u>	<u>1.00</u>	<u>\$2.07</u>
Flax, Lewis Blue	<u>0.30</u>	<u>1.99</u>	<u>\$12.69</u>
Red Top	<u>0.02</u>	<u>2.29</u>	<u>\$0.21</u>
Penstemon, Rocky Mountain	<u>0.14</u>	<u>2.19</u>	<u>\$8.60</u>
Yarrow, Western	<u>0.07</u>	<u>4.26</u>	<u>\$3.38</u>
Globemallow, Munro	<u>0.08</u>	<u>0.91</u>	<u>\$10.31</u>
Aster, Pacific	<u>0.02</u>	<u>0.35</u>	<u>\$2.80</u>
<u>Goldeneye - Showy</u>	<u>0.08</u>	<u>0.92</u>	<u>\$9.13</u>
Totals Seed Mix	<u>5.51</u>	<u>31.41</u>	<u>\$124.23</u>

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	<u>\$236.64</u>

No. of Acres:	<u>34.7</u>	Cost /Acre:	<u>\$360.87</u>
Estimated Failure Rate:	<u>17.5%</u>	Cost /Acre*:	<u>\$360.87</u>
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	<u>\$12,522.19</u>
Reseeding Job Cost:	\$2,191.38
Total Job Cost:	\$14,714
Job Hours:	<u>66.00</u>

Task de	scription:	Seed I Pit witho	out Shru	ubs		
Site: Trap	per Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
PROJE	CT IDENTIF	ICATION				
Task #:	N20	State:	Color	ado	Abbreviation:	None
Date:	4/20/2025	5 County:	Moffa	at	Filename:	N20
Dute.						

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	35.3	Cost /Acre:	\$360.87	
Estimated Failure Rate:	17%	Cost /Acre*:	\$360.87	
*Selected Replanting Work Items:	TILLING, SEEDING			

Initial Job Cost:	\$12,738.71
Reseeding Job Cost:	\$2,165.58
Total Job Cost:	\$14,904
Job Hours:	35.00

Task des	cription:	Seed I/J Pits no	shrubs (Ra	nge C)		
: Trapp	er Mine	Permit A	Action: PR	12	Permit/Job#:	C1981010
<u>PROJEC</u>	<u>T IDENTIFI</u>	CATION				
Task #:	N21	State:	Colorado		Abbreviation:	None
		Constant	Moffat		Filename:	N21
Date:	4/20/2025	6 County:	Monat		Filename.	1121

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye, Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	30.9	Cost /Acre:	\$360.87
Estimated Failure Rate:	17%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$11,150.88
Reseeding Job Cost:	\$1,895.65
Total Job Cost:	\$13,047
Job Hours:	31.00

Task des	cription:	Seed J Pits no s	hrubs (Range C) MR229		
: Trapp	er Mine	Permit A	ction: PR12	Permit/Job#:	C1981010
PROJEC	<u>r identifi</u>	ICATION			
Task #:	N21AMR	State:	Colorado	Abbreviation:	None
Date:	2/24/2025	5 County:	Moffat	Filename:	MR229
	RAR				

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	12.3	Cost /Acre:	\$360.87
Estimated Failure Rate:	17%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEEDING		

Initial Job Cost:	\$4,438.70
Reseeding Job Cost:	\$754.58
Total Job Cost:	\$5,193
Job Hours:	31.00

Task desc	ription:	Seed C Pit No S	Shrubs			
Site: Trappe	er Mine	Permit A	ction:	PR12	Permit/Job#:	C1981010
PROJEC	<u>[] IDENTIFI</u>	CATION				
Task #:	N22	State:	Color	ado	Abbreviation:	None
Date:	4/20/2025	County:	Moffa	at	Filename:	N22
User:	RAR					

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arrowleaf Balsamroot	0.40	0.50	\$39.81
Beardless Wheatgrass - Whitmar	0.31	1.01	\$4.29
Mountain Brome - Bromar	0.72	1.16	\$4.33
Great Basin Wildrye - Magnar	0.92	3.74	\$10.75
Kentucky Bluegrass - Ginger	0.06	2.96	\$0.25
Alfalfa - Ladak (inoculated)	0.10	0.48	\$0.40
Burnett, Small (or Little) - Delar	0.40	0.51	\$1.78
Sheep Fescue - Covar	0.15	2.34	\$0.92
Milk Vetch, Cicer - Lutana	0.30	1.00	\$2.94
Slender Wheatgrass - San Luis	0.28	1.02	\$1.69
Streambank Wheatgrass - Sodar	0.26	0.85	\$2.16
Thickspike Wheatgrass - Critana	0.28	0.99	\$2.28
Western Wheatgrass - Arriba	0.38	0.96	\$3.43
Needlegrass, Green - Lodorm	0.24	1.00	\$2.07
Flax, Lewis Blue	0.30	1.99	\$12.69
Red Top	0.02	2.29	\$0.21
Penstemon, Rocky Mountain	0.14	2.19	\$8.60
Yarrow, Western	0.07	4.26	\$3.38
Globemallow, Munro	0.08	0.91	\$10.31
Aster, Pacific	0.02	0.35	\$2.80
Goldeneye - Showy	0.08	0.92	\$9.13
Totals Seed Mix	5.51	31.41	\$124.23

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

No. of Acres:	188.7	Cost /Acre:	\$360.87
Estimated Failure Rate:	17%	Cost /Acre*:	\$360.87
*Selected Replanting Work Items:	TILLING, SEE	DING	

Initial Job Cost:	\$68,096.17
Reseeding Job Cost:	\$11,576.35
Total Job Cost:	\$79,673
Job Hours:	189.00