

Zuber - DNR, Rob <rob.zuber@state.co.us>

Cost estimate for Bowie #1

1 message

Zuber - DNR, Rob <rob.zuber@state.co.us> To: Basil Bear <basilbear@wolverinefuels.com>, Tamme Bishop <tammekb@gmail.com> Tue, May 30, 2023 at 2:13 PM

Hello, Basil and Tamme -

Please see the attached file with a cover letter and the reclamation cost estimate (RCE) related to RN-08 for the Bowie No. 1 Mine.

Let me know if you have questions or comments.

Rob

Rob Zuber, P.E. **Environmental Protection Specialist** Active Mines Regulatory Program



COLORADO Division of Reclamation, **Mining and Safety** Department of Natural Resources

I am working remotely and can be reached by cell at 720.601.2276.

Physical Address: 1313 Sherman Street, Room 215 Denver, CO 80203 Mailing Address: Division of Reclamation, Mining and Safety, Room 215 1001 East 62nd Avenue Denver, CO 80216 rob.zuber@state.co.us | http://drms.colorado.gov

C1981038_RN8_DRMS_RCE_and_letter.pdf 2870K



May 30, 2023

Basil Bear Bowie Resources, LLC P.O. Box 1488 Paonia, CO 81428

RE: Bowie No. 1 Mine, DRMS File No. C-1981-038 Reclamation Cost Estimate (RCE) related to renewal (RN-08)

Dear Mr. Bear:

Please find enclosed my update of the RCE for the Bowie No. 1 Mine. The updated liability is \$1,729,667, approximately \$90,000 more than the RCE from October 2020 (for MT-08). The increase in overall costs stems from increases in the unit costs over time in our cost estimating software, CIRCES. Some unit costs actually decreased, most notably for bulldozer tasks. Reductions in the costs for tasks 130, 130A, and 131were incorporated; these stem from recent bond releases, SL-07 and SL-08.

The active corporate surety for this site is greater than this new RCE; it is \$2,768,916. Therefore, no additional surety will be needed, per this estimate. As a reminder, the required surety is significantly larger than the RCE because of Rule 3.03.1(2).

If you have any questions or comments, please do not hesitate to contact me at <u>Rob.Zuber@state.co.us</u> or 720.601.2276.

Sincerely,

Phot D. Zh

Robert D. Zuber, P.E. Environmental Protection Specialist

Enclosure: CIRCES cost summary and updated tasks

Copied via e-mail: Tamme Bishop, J. E. Stover & Associates, Inc.



COST SUMMARY WORK

Task description: Co		Cost Summary	t Summary for RN-08					
Site: Bowie No. 1 Mine		Pe	ermit Action:	RN8	Permit/Jol	o#: <u>C1981038</u>		
Pl	ROJECT	IDENTIFIC	CATION					
	Task #:	000	State:	Colorado		Abbreviation:	None	
	Date:	5/29/2023	County:	Delta		Filename:	C038-000	
	User:	RDZ						

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Torl		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
017	Backfill Orchard Valley West Mine Bench	DOZER	4	5.92	\$9,367
019	Regrade Drill Pads from MR-124 and 125 and TR-	DOZER	4	3.54	\$5,604
	38, 49 and 50		ļ		
041	Rip Roads	RIPPER	4	0.17	\$277
049	Regrade OVM Light Access Road	EXCAVATE	1	4.36	\$808
052	Regrade Old Waste Disposal Road	EXCAVATE	1	8.32	\$1,544
054	Finish Grade Lower Waste Disposal Road	GRADER	1	0.06	\$14
059	Regrade Light Use Roads from MR-125 and TR- 38, 49 and 50	DOZER	4	18.82	\$29,789
064	Finish Grade Upper Waste Disposal Road	GRADER] 1	0.17	\$40
065	Finish Grade Crusher and Screening Road	GRADER	1	0.06	\$14
079	Establish Irrigation Ditch at Storage	EXCAVATE] 1	1.70	\$315
093	Backfill and Regrade Coal Stockpile Pond	DOZER	4	0.19	\$296
095	Backfill and Regrade Pond W-1	DOZER	4	0.52	\$796
096	Backfill and Regrade Pond W-2	DOZER	4	0.52	\$796
102	Replace topsoil fm stockpile to OVWM resdisturbance area	DOZER	4	9.75	\$15,003
104	Replace Topsoil from Stockpile to OVWM Vent Shaft Access	DOZER	4	2.85	\$4,378
110	Replace Topsoil from Stockpile to Drill Pads	DOZER	4	1.42	\$2,191
111	Replace Topsoil from Stockpile Light-Use Roads to Drill Pads	DOZER	4	4.38	\$6,739
112	Replace Topsoil from Stockpile to Pond W-1	DOZER	4	0.29	\$441
113	Replace Topsoil from Stockpile to Pond W-2	DOZER	4	0.29	\$441
125	Plug and Seal all Boreholes	BOREHOLE	1	177.00	\$132,696
130	Reseed OVM - No Phase II Release	REVEGE	1	119.00	\$8,720
130A	Reseed OVM - Phase II Release Areas (ROM & 58.4 ac from OVM)	REVEGE	1	11.00	\$280,090
131	Reseed OVWM - Phase II Released	REVEGE	1	26.00	\$3,827
131A	Reseed OVWM - NoPhase II Release	REVEGE	1	9.00	\$21,799
137	East Mine Crushing and Screening Level	DEMOLISH	1	40.00	\$4,138
146	Mobilize/Demobilize Equipment for Initial	MOBILIZE	1	10.28	\$44,998
	Reclamation		ļ		
147	Mobilize/Demobilize Equipment for Pond Cleaning	MOBILIZE	1	10.28	\$2,879
148	Mobilize/Demobilize Equipment for Pond Removal	MOBILIZE	1	10.28	\$4,020
149	Mobilize/Demobilize Equipment for Site Maintenance	MOBILIZE	1	10.28	\$17,552

158	YEARLY SITE MNTNC	SITEMAINT	1	0.00	\$98,346
		ENANCE			
201	Seal Loadout Wells	BOREHOLE	1	177.00	\$7,318
202	Demolish and Remove all Structures at Train	DEMOLISH	1	175.00	\$412,200
	Loadout				
204	Haul Footprint of Loadout Stockpiles to Refuse	TRUCK1	1	4.37	\$9,275
	Area				
205	Rip Coal Storage/Loadout Area	RIPPER	4	0.63	\$1,007
206	Excavation/Grading at Storage Area and Loadout	DOZER	4	34.33	\$54,351
207	Grade Railroad Spur	DOZER	4	50.43	\$79,828
208	Finish Grade Railroad Spur	GRADER	1	16.26	\$3,623
209	Replace Topsoil from Stockpile to Truck Dump	DOZER	4	0.59	\$942
	Station				
210	Reseed Train Loadout and Coal Stockpile Areas	REVEGE	1	80.00	\$74,356
211	Remove Coal Stockpile Pond	DOZER	4	0.19	\$304
212	Remove Train Loadout Pond	DOZER	4	1.58	\$2,502
		SUBTO	TALS:	1026.83	\$1,343,624
		<u></u>			

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$27,141
Performance bond:	1.05	Total =	\$14,108
Job superintendent:	513.41	Total =	\$38,572
Profit:	10.00	Total =	\$134,362
		TOTAL O & P =	\$214,184
		CONTRACT AMOUNT (direct + $O \& P$) =	\$1,557,808

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	6.00	Total =	\$93,468
Reclamation management and/or administration:	5.00		\$77,890
CONTINGENCY:	0.00	Total =	\$0
		TOTAL INDIRECT COST =	\$386,043

		ard Valley Wes			
Bowie No. 1 Mine	P	Permit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIE	<u>FICATION</u>				
Task #: 017 Date: $5/29/2023$	State County	-		Abbreviation: Filename:	None C038-017
User: <u>RDZ</u>	anization name:	DRMS			
		DIGNS			
HOURLY EQUIPM					
Basic Machine: Ca Horsepower: 57	at D10T - 10SU 74				
1	emi-Universal				
• • •	shank ripper				
Shift Basis: 1	per day				
Data Source: (C	CRG)				
Cost Breakdown:					
		[Utilization %		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94 \$22.74	100 NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour:		\$22.74 \$11.11	<u>NA</u> 100		
Operator Cost/Hour:		\$41.30	NA		
		¢.1100	1471		
Fotal unit Cost/Hour: Fotal Fleet Cost/Hour:	\$395.76 \$1,583.05				
Fotal Fleet Cost/Hour: MATERIAL QUAN	\$1,583.05				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,82 Swell factor: 1.10	\$1,583.05 TITIES 23 65				
Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.10 Loose volume: 3,23	\$1,583.05 TITIES 23 65 89 LCY				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,82 Swell factor: 1.16 Loose volume: 3,23 Source of estimated volu	\$1,583.05 TITIES 23 65 89 LCY ume:	ling 3.5 acres, 0	0.50' depth		
Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.10 Loose volume: 3,23	\$1,583.05 TITIES 23 65 89 LCY ume:	ling 3.5 acres, 0	0.50' depth		
Fotal Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.10 Loose volume: 3,24 Source of estimated volu Source of estimated swell	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad ell factor: Cat Ha	U I	0.50' depth		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,82 Swell factor: 1.10 Loose volume: 3,28 Source of estimated volu 300 Source of estimated swe 300 HOURLY PRODUC 300	\$1,583.05 TITIES 23 65 89 LCY ume: Regrac ell factor: Cat Ha TION	U I			
Fotal Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.16 Loose volume: 3,24 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance:	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad Cat Ha CTION 400 feet	ndbook	0.50' depth		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,82 Swell factor: 1.10 Loose volume: 3,28 Source of estimated volu 300 Source of estimated swe 300 HOURLY PRODUC 300	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad 01 factor: Cat Ha CTION 400 feet	ndbook	0.50' depth		
Fotal Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.16 Loose volume: 3,24 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance:	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad Cat Ha Cat Ha CTION uction: 400 feet 497.3 LC	ndbook			
Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.16 Loose volume: 3,23 Source of estimated volu 3000000000000000000000000000000000000	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad Cat Ha Cat Ha CTION uction: 400 feet 497.3 LC	ndbook			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,82 Swell factor: 1.10 Loose volume: 3,23 Source of estimated volu 3,24 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produce Materials consistency de Average push gradient: Source destinated such	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad 21 factor: Cat Ha 22 Cat Ha 23 Cat Ha 24 Cat Ha 25 Cat Ha 26 Cat Ha 27 Cat Ha 27 Cat Ha 28 Cat Ha 29 Cat Ha 29 Cat Ha 20 feet 400 feet 497.3 LC escription: Com 10 %	ndbook			
Total Fleet Cost/Hour: MATERIAL QUANY Initial Volume: 2,82 Swell factor: 1.10 Loose volume: 3,23 Source of estimated volu 3,24 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad ell factor: Cat Ha CTION uction: 400 feet uction: 497.3 LC escription: Com 10 % 7,300 feet	TY/hr	mbankment 0.9		
Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.16 Loose volume: 3,23 Source of estimated volu 3,24 Source of estimated volu 3,24 Source of estimated swell 4 HOURLY PRODUC 4 Average push distance: 1 Unadjusted hourly produ 4 Average push gradient: 4 Average site altitude: 4 Material weight: 4	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad ell factor: Cat Ha CTION uction: 400 feet uction: 497.3 LC escription: Com 10 % 7,300 feet 2,900 lbs/LCY Decomposed ro	TY/hr	mbankment 0.9		
Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 2,82 Swell factor: 1.16 Loose volume: 3,23 Source of estimated volu 3,24 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly product Materials consistency details Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad 21 factor: Cat Ha 27 Cat Ha 27 Cat Ha 28 CTION 400 feet 400 feet 497.3 LC escription: Com 10 % 7,300 feet 2,900 lbs/LCY Decomposed ro n Factor r Skill:	CY/hr pacted fill or en ck - 50% Rock, 0.750			
Total Fleet Cost/Hour: MATERIAL QUANY Initial Volume: 2,87 Swell factor: 1.16 Loose volume: 3,28 Source of estimated volu 3,28 Source of estimated swell 3,28 HOURLY PRODUC Average push distance: Unadjusted hourly product Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consis 1000000000000000000000000000000000000	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad 21 factor: Cat Ha 2TION uction: 400 feet 400 feet uction: 497.3 LC escription: Com 10 % 7,300 feet 2,900 lbs/LCY Decomposed ro n Factor r Skill: stency:	Description CY/hr upacted fill or en upacted			
Total Fleet Cost/Hour: MATERIAL QUANY Initial Volume: 2,8% Swell factor: 1.10 Loose volume: 3,23 Source of estimated volu 3,24 Source of estimated swell 3,24 HOURLY PRODUC Average push distance: Unadjusted hourly produce Materials consistency defined Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consis Dozing mode	\$1,583.05 TITIES 23 65 89 LCY ume: Regrad 21 factor: Cat Ha 2TION uction: 400 feet 400 feet uction: 497.3 LC escription: Com 10 % 7,300 feet 2,900 lbs/LCY Decomposed ro n Factor r Skill: stency:	CY/hr pacted fill or en ck - 50% Rock, 0.750			

Task # 017

Job efficience	y: 0.830	(1 SHIFT/DAY)
Spoil pi	e: 0.800	(FND-RF)
Push gradier	nt: 0.786	(CAT HB)
Altitud	e: 1.000	(CAT HB)
Material Weigl	nt: 0.793	(CAT HB)
Blade typ	e: 1.000	(PAT)
Net correction	n: 0.2794	
Adjusted unit production:	138.95 LCY/hr	
Adjusted fleet production:	555.8 LCY/hr	
-		

Fleet size:	4 Dozer(s)
Unit cost:	\$2.848/LCY

Total job time:	5.92 Hours
Total job cost:	\$9,367

Task description:	Regrade Drill Pa		C-124 and 125 and 1 K-	20, 12 una 20	
Bowie No. 1 Mine	Per	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIFI	CATION				
Task #: 019	State:	Colorado		Abbreviation:	None
Date: $5/29/2023$	County:	Delta		Filename:	C038-019
User: RDZ	County.	Della		Thename.	0038-019
Agency or organ	nization name: DI	RMS			
HOURLY EQUIPME	NT COST				
	D10T - 10SU				
Horsepower: 574					
• 1	ni-Universal				
	nank ripper				
Shift Basis: 1 pe	er day				
Data Source: (CR	RG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
TOPPOLOWIL COSTINUL.		\$11.11			
Ripper op. Cost/Hour:		Φ11.11	100		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$395.76 \$1,583.05	\$41.30	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$1,583.05 ITIES				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume:8,700	\$1,583.05 <u>ITIES</u> 0				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>8,700</u> Swell factor: <u>1.250</u>	\$1,583.05 ITIES 0 0				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>8,700</u> Swell factor: <u>1.250</u>	\$1,583.05 <u>ITIES</u> 0				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>8,700</u> Swell factor: <u>1.250</u>	\$1,583.05 ITIES 0 0 75 LCY	\$41.30			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 8,700 Swell factor: 1.250 Loose volume: 10,8°	\$1,583.05 ITIES 0 0 75 LCY ne:	\$41.30			
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Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 8,700 Swell factor: 1.250 Loose volume: 10,8' Source of estimated volur Source of estimated swell HOURLY PRODUCT	\$1,583.05 <u>ITIES</u> 0 0 75 LCY ne: Division factor: Cat Hanc <u>CION</u> <u>50 feet</u>	\$41.30			
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Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 8,700 Swell factor: 1.250 Loose volume: 10,8° Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$1,583.05 ITIES 0 0 0 0 0 0 0 0 0 0 0 75 LCY ne: Division factor: Cat Hand CION cription: 2,748.7 LC cription: Compa 10 % 7,850 feet 2,900 lbs/LCY User Provided Factor 0	\$41.30 \$41.30 State Stimate Stimate Stimate State St			
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Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 8,700 Swell factor: 1.250 Loose volume: 10,8° Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$1,583.05ITIES0 $\overline{}$ 0 $\overline{}$ 75 LCY $\overline{}$ ne:Divisionfactor:Cat HandCION $\overline{}$ cription: $\underline{}$ $\underline{}$ $\underline{}$ $\underline{}$ $\underline{}$ cription:Compa $\underline{}$ <td>\$41.30 \$41.30 State Stimate Stimate Stimate State St</td> <td></td> <td></td> <td></td>	\$41.30 \$41.30 State Stimate Stimate Stimate State St			

Task # 019

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.2794	
Adjusted unit production: 76	57.99 LCY/hr	
Adjusted fleet production: 3	071.96 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.515/LCY

Total job time:	3.54 Hours
Total job cost:	\$5,604

BULLDOZER RIPPING WORK

	Task description:	Rip Roads			
Site:	Bowie No. 1 Mi	ine Permit Action	: RN8	Permit/Job	#: <u>C1981038</u>
	PROJECT IDE	NTIFICATION			
	Task #: 041	State: Colorado	D	Abbreviation	
	Date: 5/29 User: RDZ	/2023 County: Delta		Filename	: <u>C038-041</u>
		or organization name: DRMS			
		IPMENT COST			
	Basic M Ripper Atta			Horsepower: Shift Basis:	574 I per day
	Ripper / Rus			Data Source:	(CRG)
	Cost Breakdown:				
				Utilization %	
		Ownership Cost/Hour:	\$153.67 \$166.94	<u>NA</u> 100	
	Rinner	Operating Cost/Hour:	\$22.74	 NA	
		er Operating Cost/Hour:	\$11.11	100	
	r r	Operator Cost/Hour:	\$41.30	NA	
		Total Unit Cost/Hour:	\$395.76		
		Total Fleet Cost/Hour: \$1,	583.05		
	MATERIAL Q		elected estimating r	nothod: Aroa	
			elected estimating i	nethod: Area	
	Alternate Methods			D CI I	
nic: rea:	NA 0.55	Bank Volume: acres Rip Depth (ft):		BCY Volume: 1,775	NA BCY o
ica.				volume. <u>1,775</u>	DC10
		Source of estimated quantity: <u>Map</u>	8-1		
	HOURLY PRO	DUCTION			
	Seismic:				
		Seismic Velocity:	NA	feet/second	
	Area:				
		Average Ripping Depth:	2.87	feet/pass	
		Average Ripping Width: Average Ripping Length:	<u>8.67</u> 200.00	feet/pass feet/pass	
		Average Ripping Length. Average Dozer Speed:	88.00	feet/minute	
		Average Maneuver Time:	0.25	minutes/pass	
		Production per unit area:	0.947	acres/hour	
	Job Condition Cor	rection Factors			
	Una	djusted Hourly Unit Production:	0.947	Acres/hr	
		Site Altitude:	7,000	feet	
		Altitude Adj:	1.00	(CAT HB)	
		Job Efficiency:	0.83	(1 shift/day)	
		Net Correction:	0.83	multiplier	
		Adjusted Hourly Unit Production	n: 0.79	Acres/hr	
		Adjusted Hourly Fleet Production	n: 3.14	Acres/hr	
	JOB TIME AN	D COST			
	Fleet size:	4 Grader(s)	Total job time:	0.17	Hours

HYDRAULIC EXCAVATOR WORK

Bowie No. 1 Mine		J 111 L	ight Access	Koau			
		Perr	nit Action:	RN8	Pe	ermit/Job#:	C1981038
PROJECT IDENTIF	ICATION						
Task #: 049 Date: 5/29/2023 User: RDZ		State:	Colorado Delta			eviation: Filename:	None C038-049
Agency or orga	inization name	: <u>DR</u>	MS				
HOURLY EQUIPME	ENT COST						
Basic Machine: Attachment 1:	Cat 336D L ROPS Cab	10'-6"	Stick	W	lorsepower: eight (MT): Shift Basis: Data Source:	2 1 p	268 29.30 ber day CRG)
Cost Breakdown:							
Ownership Cost/ Operating Cost/ Operator Cost/	Hour:	\$83.5 \$64.5 \$37.3	5	Utilization % NA 100 NA			
Total Unit Cost/		\$185.4					
Total Fleet Cost	/Hour:	\$185.	40				
Loose volume: 1	977 1 ,299		CCY LCY	Swell factor	: 1.330		
	of estimated v stimated swell		Map 8-7 Cat Hand	book			
HOURLY PRODUC	TION						
Excavator Cycle Time (le	oad bucket, sv	ving loa	ded, dump b	ucket, swing empty	<u>y):</u>		
			Basic Job C	ondition Description			
Load Bucket Capacity	Secondary	Job Co	ndition with	in Basic Description Cycle Time Valu		GE	minutes
Load Bucket Capacity							
				1	Bucket Size (lass: M	edium
Rated Capacity Bucket Fill Factor	or: 0.85	50			Bucket Size (5) 0.850	Class: <u>M</u>	edium
Bucket Fill Factor Adjusted Capacity	y: 0.85	50		aped) gh clay (80% - 90%	5) 0.850		edium
Bucket Fill Factor	y: 0.85	50	Hard, tou LCY	aped) gh clay (80% - 90%			edium
Bucket Fill Factor Adjusted Capacity	y: 0.85	50	Hard, tou	aped) gh clay (80% - 90% Site A <u>3)</u> y)	5) 0.850		edium
Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: Una A	r: 0.85 y: 1.9 <u>n Factors</u> <u>1.00</u> 0.83	50 2 1y Unit 1 ly Unit 1	Hard, tou LCY Source (CAT HI (1 shift/da multiplier Production: Production:	aped) gh clay (80% - 90% Site A <u>3)</u> y)	5) 0.850		edium
Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: Una A	r: 0.85 y: 1.9 <u>n Factors</u> <u>1.00</u> 0.83 0.83 adjusted Hour Adjusted Hourl	50 2 1y Unit 1 ly Unit 1	Hard, tou LCY Source (CAT HI (1 shift/da multiplier Production: Production:	aped) gh clay (80% - 90% Site A 3) y) 359.07 298.02	5) 0.850 ltitude: <u>7000</u> LCY/Hour LCY/Hour		edium
Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: Una A JOB TIME AND CO	r: 0.85 y: 1.9 <u>n Factors</u> <u>1.00</u> 0.83 0.83 adjusted Hour Adjusted Hour Adjusted Hourl	50 2 1y Unit 1 ly Unit 1	Hard, tou LCY Source (CAT HI (1 shift/da multiplier Production: Production: Production:	aped) gh clay (80% - 90% Site A 3) y) 359.07 298.02	5) 0.850 ltitude: <u>7000</u> LCY/Hour LCY/Hour	feet	edium

HYDRAULIC EXCAVATOR WORK

		ste Disposal	Koad			
Bowie No. 1 Mine	Perr	nit Action:	RN8	P	ermit/Job#:	C1981038
PROJECT IDENTIFI	CATION					
Task #: 052 Date: 5/29/2023 User: RDZ	County:	Colorado Delta			reviation: Filename:	None C038-052
Agency or organ	nization name: DR	MS				
HOURLY EQUIPME	NT COST					
	Cat 336D L 10'-6" ROPS Cab	Stick		Horsepower: Weight (MT): Shift Basis: Data Source:	29 1 p	268 9.30 er day (RG)
Cost Breakdown:				Data Source.	(C	.KU)
Ownership Cost/H Operating Cost/H Operator Cost/H Total Unit Cost/H	Hour: \$64.5 Hour: \$37.3	55 32	Utilization % NA 100 NA			
Total Fleet Cost/I	Hour: \$185.	.40				
Loose volume: 2, Source o	866 482 of estimated volume:	CCY LCY <u>Map 8-1</u>	Swell fact	tor: <u>1.330</u>		
Source of est	timated swell factor:	Cat Hand	book			
	innated swen factor.	Cat Halla	UUUK			
HOURLY PRODUCT	<u>FION</u>					
	<u>FION</u>			<u>oty):</u>		
HOURLY PRODUCT	TION ad bucket, swing load	ded, dump b Basic Job Co	ucket, swing empondition Descrip	tion: AVER		
HOURLY PRODUCT Excavator Cycle Time (lo	TION bad bucket, swing load	ded, dump b Basic Job Co	ucket, swing empondition Descrip	tion: AVER		minutes
HOURLY PRODUCT	TION ad bucket, swing load	ded, dump b Basic Job Co	ucket, swing empondition Description Description Basic Description	tion: AVER	AGE	minutes
HOURLY PRODUCT Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity: Bucket Fill Factor:	TION ad bucket, swing load Secondary Job Co : 2.26 : 0.850	ded, dump b Basic Job Co ndition with _ LCY (hea Hard, tou	ucket, swing em ondition Descrip in Basic Descrip Cycle Time Va	tion: AVERA tion: AVERA alue: 0.321 Bucket Size (AGE	
HOURLY PRODUCT Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity:	EION bad bucket, swing load Secondary Job Co : 2.26 : 0.850 : 1.92	ded, dump b Basic Job Co ndition with _ LCY (hea	ucket, swing emp ondition Descript in Basic Descript Cycle Time Va (ped) gh clay (80% - 9	tion: AVERAtion: AVERAtion: AVERAtion: 0.321 Bucket Size (0.000) 0.850	AGE Class: <u>Me</u>	
HOURLY PRODUCT Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity: Bucket Fill Factor:	EION bad bucket, swing load Secondary Job Co : 2.26 : 0.850 : 1.92	ded, dump b Basic Job Co ndition with _ LCY (hea Hard, tou	ucket, swing emp ondition Descript in Basic Descript Cycle Time Va (ped) gh clay (80% - 9	tion: AVERA tion: AVERA alue: 0.321 Bucket Size (AGE Class: <u>Me</u>	
HOURLY PRODUCT Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity:	FION bad bucket, swing load Secondary Job Co : 2.26 : 0.850 : 1.92	ded, dump b Basic Job Co ndition with _ LCY (hea Hard, tou _ LCY	ucket, swing emp ondition Descript in Basic Descript Cycle Time Va ped) gh clay (80% - 9 Site	tion: AVERAtion: AVERAtion: AVERAtion: 0.321 Bucket Size (0.000) 0.850	AGE Class: <u>Me</u>	
HOURLY PRODUCT Excavator Cycle Time (lo Load Bucket Capacity Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Altitude Adj: Job Efficiency: Net Correction:	CION bad bucket, swing load Secondary Job Co : 2.26 : 0.850 : 1.92 Factors 1.00 0.83 0.83	ded, dump b Basic Job Co ndition with _ LCY (hea Hard, tou _ LCY Source (CAT HE (1 shift/da multiplier Production: Production:	ucket, swing emp ondition Descript in Basic Descript Cycle Time Va ped) gh clay (80% - 9 Site	tion: AVERAtion: AVERAtion: AVERAtion: 0.321 Bucket Size (0.000) 0.850	AGE Class: <u>Me</u>	
HOURLY PRODUCT Excavator Cycle Time (lo Load Bucket Capacity Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Altitude Adj: Job Efficiency: Net Correction:	CION pad bucket, swing load Secondary Job Co : 2.26 : 0.850 : 1.92 Factors 1.00 0.83 0.83 0.83 djusted Hourly Unit I djusted Hourly Unit I djusted Hourly Fleet I	ded, dump b Basic Job Co ndition with _ LCY (hea Hard, tou _ LCY Source (CAT HE (1 shift/da multiplier Production: Production:	ucket, swing emp ondition Descrip in Basic Descrip Cycle Time Va ped) gh clay (80% - 9 Site 3) y) <u>359.07</u> 298.02	tion: <u>AVER</u> tion: <u>AVER</u> alue: <u>0.321</u> Bucket Size (<u>0%)</u> 0.850 Altitude: <u>7000</u> <u>LCY/Hour</u> <u>LCY/Hour</u>	AGE Class: <u>Me</u>	
HOURLY PRODUCT Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: Unad Ad	CION bad bucket, swing load Secondary Job Co : 2.26 : 0.850 : 1.92 Factors 1.00 0.83 0.83 djusted Hourly Unit I djusted Hourly Unit I djusted Hourly Fleet I ST	ded, dump b Basic Job Co Indition with LCY (hea Hard, tou LCY Source (CAT HE (1 shift/da multiplier Production: Production: Production:	ucket, swing emp ondition Descrip in Basic Descrip Cycle Time Va ped) gh clay (80% - 9 Site 3) y) <u>359.07</u> 298.02	tion: <u>AVER</u> tion: <u>AVER</u> alue: <u>0.321</u> Bucket Size (<u>0%)</u> 0.850 Altitude: <u>7000</u> <u>LCY/Hour</u> <u>LCY/Hour</u>	AGE Class: <u>Me</u>	

MOTOR GRADER WORK

Task description:	Finish Grade Lower Wa	aste Disposal Road			
Bowie No. 1 Mine	Permit Act	ion: <u>RN8</u>	Pe	ermit/Job#:	C1981038
PROJECT IDENTI	FICATION				
Task #: 054	State: Color	ado	Abbi	eviation:	None
Date: $5/29/202$				Filename:	C038-054
User: RDZ		·			0000 001
	ganization name: DRMS				
HOURLY EQUIPM	IENT COST				
Basic Machi	ne: CAT 14M		Horsepower:	2	259
Ripper Attachme			Shift Basis:		er day
rr · · · · ·			Data Source:		(RG)
Cost Breakdown:				X	,
			Utilization %		
	nership Cost/Hour:	\$114.80	NA		
	erating Cost/Hour:	\$79.39	100		
	nership Cost/Hour:	\$0.00	NA		
	perating Cost/Hour:	\$0.00	ΝΤΑ		
	perator Cost/Hour:	\$28.56	NA		
10	tal Unit Cost/Hour:	\$222.75			
Tot	al Fleet Cost/Hour:	\$222.75			
MATERIAL QUAN Total Are		10			acres
Sou	rce of estimated acreage:	lap 8-1			
HOURLY PRODU	<u>CTION</u>				
	Average Grader Speed:	1.50	mph		
	Selected Application:		grading (0-2.5 mp	oh) - 1.5	
	Selected Blade Angle:	30	degrees		
W: 4	Effective Blade Length: _ h of blade overlap per pass:	12.10	feet feet		
	g or ripping width per pass:	10.10	feet		
	ed Hourly Unit Production:	1.8364	acres/ho	our	
Job Condition Correcti			ite Altitude: 7000		
		ource			
Altitude Adj:		T HB)			
Job Efficiency:	0.85 (1sh/	d, mod.)			
Net Correction:	0.8500 mult	iplier			
	Adjusted Hourly Unit Produc	tion: 1.5609	acres/Hour		
	Adjusted Hourly Fleet Produc		acres/Hour		
JOB TIME AND C	<u>OST</u>				
Fleet size:	1 Grader(s)	Total job time	e:0.06)	Hours
Unit cost: \$1	42.71 per acre	Total job cos	t: \$14		

Task description:	Regrade Light U	se Roaus II (Jiii WIK-125 and TK-56,	49 and 30	
Bowie No. 1 Mine	Peri	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIF	TICATION				
Task #: 059	State:	Colorado		Abbreviation:	None
Date: $5/29/2023$	County:	Delta		Filename:	C038-059
User: RDZ	County.				0000 000
Agency or orga	nization name: DR	RMS			
HOURLY EQUIPME	ENT COST				
	tt D10T - 10SU				
Horsepower: 574					
• •	mi-Universal				
	shank ripper				
	per day RG)				
Cost Breakdown:		1			
Ownership Cost/Hour:		\$153.67	<u>Utilization %</u> NA		
Operating Cost/Hour:		\$155.67 \$166.94	100		
Ripper own. Cost/Hour:		\$100.94	NA		
Ripper op. Cost/Hour:		\$11.11	100		
Operator Cost/Hour:		\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$395.76 \$1,583.05				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANI Initial Volume:18,2	\$1,583.05 FITIES 280				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>18,2</u> Swell factor: <u>1.25</u>	\$1,583.05 FITIES 280				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>18,2</u> Swell factor: <u>1.25</u>	\$1,583.05 FITIES 280 50 350 LCY Ime:Map 8-1;		me 1, page 53		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu	\$1,583.05 FITIES 280 50 850 LCY Ime: Map 8-1; Il factor: Cat Hand		me 1, page 53		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance:	\$1,583.05 <u>FITIES</u> 280 50 350 LCY ume: <u>Map 8-1;</u> 11 factor: <u>Cat Hand</u> <u>TION</u> <u>200 feet</u>	book	 me 1, page 53		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ	\$1,583.05 FITIES 280 50 350 LCY ume: Map 8-1; 11 factor: Cat Hand TION action: 200 feet 946.0 LCY/	book /hr			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency destance:	\$1,583.05 FITIES 280 50 350 LCY ume: Map 8-1; Il factor: Cat Hand TION action: 200 feet 946.0 LCY/ escription: Compa	book /hr	 me 1, page 53		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ	\$1,583.05 FITIES 280 50 350 LCY ume: Map 8-1; 11 factor: Cat Hand TION action: 200 feet 946.0 LCY/	book /hr			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency dest Average push gradient:	\$1,583.05 <u>FITIES</u> 280 50 350 LCY Ime: <u>Map 8-1;</u> 11 factor: <u>Cat Hand</u> <u>TION</u> 1200 feet 1ction: <u>200 feet</u> 946.0 LCY/ scription: <u>Compa</u> <u>5 %</u>	book /hr			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude:	\$1,583.05 FITIES 280 50 850 LCY ame: Map 8-1; Il factor: Cat Hand TION action: 946.0 LCY/ escription: Compa 5 % 7,850 feet	book /hr			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,583.05 FITIES 280 50 350 LCY ume: Map 8-1; Il factor: Cat Hand TION action: 946.0 LCY/ escription: Compa 5 % 7,850 feet 2,900 lbs/LCY User Provided n Factor	/hr /hr 	mbankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator	\$1,583.05 FITIES 280 50 350 LCY ume: Map 8-1; Il factor: Cat Hand TION action: 200 feet action: 946.0 LCY/ escription: Compa 5 % 7,850 feet 2,900 lbs/LCY User Provided n Factor Skill: 0.	/hr /hr 	nbankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$1,583.05 FITTES 280 50 350 LCY ume: Map 8-1; Il factor: Cat Hand TION action: 200 feet 946.0 LCY/ sscription: Compa 5 % 7,850 feet 2,900 lbs/LCY User Provided n Factor Skill: 0. tency: 0.	/hr /hr 			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 18,2 Swell factor: 1.25 Loose volume: 22,8 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consist Dozing me	\$1,583.05 FITIES 28050350 LCYume:Map 8-1;Il factor:Cat Hand TION action: 200 feetaction: 946.0 LCY/escription:Compa 5% 7,850 feet2,900 lbs/LCYUser Providedm FactorSkill:0.tency:0.ethod:1.	/hr /hr 	nbankment 0.9		

Task # 059

Job efficienc	y: 0.830	(1 SHIFT/DAY)
Spoil pil	e: 0.800	(FND-RF)
Push gradier	nt: 0.903	(CAT HB)
Altitud	e: 1.000	(CAT HB)
Material Weigh	nt: 0.793	(CAT HB)
Blade typ	e: 1.000	(PAT)
Net correctio	n: 0.3209	
Adjusted unit production:	303.57 LCY/hr	
Adjusted fleet production:	1214.28 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$1.304/LCY

Total job time:	18.82 Hours
Total job cost:	\$29,789

MOTOR GRADER WORK

ask description:						
Bowie No. 1 Mine	Pe	ermit Action:	RN8]	Permit/Job#:	C1981038
PROJECT IDENTI	FICATION					
Task #: 064	State:	Colorado		Ab	breviation:	None
Date: 5/29/2023		-			Filename:	C038-064
User: RDZ						0000 001
Agency or orga	anization name: D	ORMS				
HOURLY EQUIPM	ENT COST					
Basic Machir	ne: CAT 14M			Horsepower:		259
Ripper Attachmen	nt:			Shift Basis:	1 p	oer day
				Data Source:	(0	CRG)
Cost Breakdown:						
			* • • • • • • •	Utilization %		
	ership Cost/Hour:		\$114.80	NA		
	erating Cost/Hour:		\$79.39	100		
	ership Cost/Hour:		\$0.00	NA	_	
	erating Cost/Hour:		\$0.00	NT A		
-	berator Cost/Hour:		\$28.56	NA		
Tota	al Unit Cost/Hour:		\$222.75			
		\$ 222	75			
MATERIAL QUAN		\$222	./5			acres
MATERIAL QUAN Total Area	TITIES a to be graded or ripp	ped: 0.28				acres
MATERIAL QUAN Total Area Sour	TITIES a to be graded or ripp rce of estimated acrea	ped: 0.28				acres
MATERIAL QUAN Total Area	TITIES a to be graded or ripp ce of estimated acrea	ped: <u>0.28</u> age: <u>Map8-1</u>				acres
MATERIAL QUAN Total Area Sour	TITIES a to be graded or ripp ce of estimated acrea CTION Average Grader S	bed: <u>0.28</u> age: <u>Map8-1</u> Speed:	1.50	mph		acres
MATERIAL QUAN Total Area Sour	TITIES a to be graded or ripp ce of estimated acrea CTION Average Grader S Selected Applic	bed: 0.28 age: Map8-1 Speed: cation:	1.50 Finish	grading (0-2.5 r		acres
MATERIAL QUAN Total Area Sour	TITIES a to be graded or ripp ce of estimated acrea CTION Average Grader S Selected Applic Selected Blade A	bed: <u>0.28</u> age: <u>Map8-1</u> Speed: Station: Angle:	1.50 Finish 30	grading (0-2.5 r degree		acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La	bed: 0.28 age: Map8-1 Speed: cation: Angle: ength:	1.50 Finish 30 12.10	grading (0-2.5 r degree feet		acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La	bed: 0.28 age: Map8-1 Speed:	1.50 Finish 30 12.10 2.00	grading (0-2.5 r degree feet feet		acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading	TITIES a to be graded or ripp ce of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade Lo of blade overlap per g or ripping width per	bed: 0.28 age: Map8-1 Speed:	1.50 Finish 30 12.10 2.00 10.10	grading (0-2.5 r degree feet feet feet feet	s	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per ed Hourly Unit Produ	bed: 0.28 age: Map8-1 Speed:	1.50 Finish 30 12.10 2.00 10.10 1.8364	grading (0-2.5 r degree feet feet feet feet acres/h	nour	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per ed Hourly Unit Produ	bed: 0.28 age: Map8-1 Speed: Cation: Angle: r pass: r pass: ction:	1.50 Finish 30 12.10 2.00 10.10 1.8364	grading (0-2.5 r degree feet feet feet feet	nour	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correctio	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per ed Hourly Unit Produ	bed: 0.28 age: Map8-1 Speed: Cation: Angle: r pass: r pass: Iction: Source	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si	grading (0-2.5 r degree feet feet feet acres/h	nour	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correctio Altitude Adj:	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per ed Hourly Unit Produ <u>n Factors</u>	bed: 0.28 age: Map8-1 Speed: age: Speed: angle: angle: angth: r pass: r pass: ction: Source (CAT HB	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si	grading (0-2.5 r degree feet feet feet acres/h	nour	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correctio	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per ed Hourly Unit Produ n Factors 1.00 0.85	bed: 0.28 age: Map8-1 Speed: cation: ength: r pass: r pass: ction: Source (CAT HB (1sh/d, mod	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si	grading (0-2.5 r degree feet feet feet acres/h	nour	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per d Hourly Unit Produ n Factors 1.00 0.85 0.8500	bed: 0.28 age: Map8-1 Speed: Angle: ength: r pass: r pass: r ction: Source (CAT HB (1sh/d, mod multiplier	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si)	grading (0-2.5 r degree feet feet feet acres/h ite Altitude: <u>710</u>	our 0 feet	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correctio Altitude Adj: Job Efficiency: Net Correction:	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per ed Hourly Unit Produ <u>n Factors</u> 1.00 0.85 0.8500 Adjusted Hourly Uni	bed: 0.28 age: Map8-1 Speed: cation: ength: r pass: r pass: r totion: Source (CAT HB (1sh/d, mod multiplier it Production:	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si) 1.) 1.5609	grading (0-2.5 r degree feet feet feet acres/h ite Altitude: 710	rs nour <u>0</u> feet r	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correctio Altitude Adj: Job Efficiency: Net Correction:	TITIES a to be graded or ripp ree of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per d Hourly Unit Produ n Factors 1.00 0.85 0.8500	bed: 0.28 age: Map8-1 Speed: cation: ength: r pass: r pass: r totion: Source (CAT HB (1sh/d, mod multiplier it Production:	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si)	grading (0-2.5 r degree feet feet feet acres/h ite Altitude: <u>710</u>	rs nour <u>0</u> feet r	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	TITIES a to be graded or ripp ce of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per g or ripping width per ed Hourly Unit Produ <u>n Factors</u> <u>1.00</u> 0.85 0.8500 Adjusted Hourly Unit Adjusted Hourly Flee	bed: 0.28 age: Map8-1 Speed: cation: ength: r pass: r pass: r totion: Source (CAT HB (1sh/d, mod multiplier it Production:	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si) 1.) 1.5609	grading (0-2.5 r degree feet feet feet acres/h ite Altitude: 710	rs nour <u>0</u> feet r	acres
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correction Altitude Adj: Job Efficiency: Net Correction: AltiCorrection	TITIES a to be graded or ripp ce of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per or ripping width per ed Hourly Unit Produ <u>n Factors</u> <u>1.00</u> 0.85 0.8500 Adjusted Hourly Unit Adjusted Hourly Flee	bed: 0.28 age: Map8-1 Speed: cation: angle: ength: r pass: r pass: r pass: ction: Source (CAT HB (1sh/d, mod multiplier it Production: et Production:	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si) 1.) 1.5609 1.5609	grading (0-2.5 r degree feet feet feet acres/h ite Altitude: 710 acres/Hou	nour <u>0</u> feet r	
MATERIAL QUAN Total Area Sour HOURLY PRODUC Width Net grading Unadjuste ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	TITIES a to be graded or ripp ce of estimated acrea CTION Average Grader S Selected Applic Selected Blade A Effective Blade La of blade overlap per gor ripping width per ed Hourly Unit Produ <u>n Factors</u> <u>1.00</u> 0.85 0.8500 Adjusted Hourly Unit Adjusted Hourly Flee DST	bed: 0.28 age: Map8-1 Speed: cation: angle: ength: r pass: r pass: r pass: ction: Source (CAT HB (1sh/d, mod multiplier it Production: et Production:	1.50 Finish 30 12.10 2.00 10.10 1.8364 Si) 1.) 1.5609	grading (0-2.5 r degree feet feet feet acres/h ite Altitude: 710 acres/Hou	nour <u>0</u> feet r	Acres

MOTOR GRADER WORK

Task description:	Finish Grade Cr	usher and Sc	reening Koau			
Bowie No. 1 Mine	Per	mit Action:	RN8	F	ermit/Job#:	C1981038
PROJECT IDENTI	FICATION					
Task #: 065	State:	Colorado		Abt	previation:	None
Date: 5/29/2023		Delta			Filename:	C038-065
User: RDZ						
	· .: DI					
Agency or org	ganization name: DI	RMS				
HOURLY EQUIPM	IENT COST					
Basic Machin	ne: CAT 14M			Horsepower:		259
Ripper Attachme	ent:			Shift Basis:	1 p	er day
				Data Source:	((CRG)
Tost Drest down						
Cost Breakdown:				Utilization %		
Ow	nership Cost/Hour:		\$114.80	NA		
	erating Cost/Hour:		\$79.39	100	_	
1	nership Cost/Hour:		\$0.00	NA	_	
	perating Cost/Hour:		\$0.00	11/1	-	
	perator Cost/Hour:		\$28.56	NA	_	
	tal Unit Cost/Hour:		\$222.75	-	_	
	al Fleet Cost/Hour:	\$222	.75			
MATERIAL QUAN						acres
MATERIAL QUAN Total Are	TITIES	ed: 0.10				acres
MATERIAL QUAN Total Are Sou	TITIES ea to be graded or rippe rce of estimated acreas	ed: 0.10				acres
MATERIAL QUAN Total Are	TITIES ea to be graded or rippe rce of estimated acreas CTION	ed: <u>0.10</u> ge: <u>Map8-1</u>				acres
MATERIAL QUAN Total Are Sou	TITIES ea to be graded or rippe rce of estimated acreas CTION Average Grader Sj	ed: <u>0.10</u> ge: <u>Map8-1</u> peed:	1.50	mph	nph) - 1.5	acres
MATERIAL QUAN Total Are Sou	TITIES ea to be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica	ed: <u>0.10</u> ge: <u>Map8-1</u> peed: ation:	1.50 Finish ;	grading (0-2.5 m		acres
MATERIAL QUAN Total Are Sou	TITIES ea to be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A	ed: 0.10 ge: Map8-1 peed: ngle:	1.50 Finish ; 30	grading (0-2.5 m degrees		acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC	Example TITIES Tree of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A Effective Blade Le	ed: <u>0.10</u> ge: <u>Map8-1</u> peed: ation: ngle: ngth:	1.50 Finish ; 30 12.10	grading (0-2.5 m degrees feet		acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC	TITIES ea to be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A	ed:0.10 ge:Map8-1 peed: ngle: ngth: pass:	1.50 Finish ; 30	grading (0-2.5 m degrees		acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Widtl Net grading	Example 2 for the second secon	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass:	1.50 Finish 30 12.10 2.00	grading (0-2.5 m degrees feet feet	5	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Widtl Net grading	Exactly be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A Effective Blade Les h of blade overlap per g or ripping width per ed Hourly Unit Produc	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass:	1.50 Finish 30 12.10 2.00 10.10 1.8364	grading (0-2.5 m degrees feet feet feet feet	our	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Widtl Net grading Unadjust	Exactly be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A Effective Blade Les h of blade overlap per g or ripping width per ed Hourly Unit Produc	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass:	1.50 Finish 30 12.10 2.00 10.10 1.8364	grading (0-2.5 m degrees feet feet feet feet acres/h	our	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Widtl Net grading Unadjust ob Condition Correction Altitude Adj:	Exactly be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A Effective Blade Le h of blade overlap per g or ripping width per ed Hourly Unit Product on Factors 1.00	ed: 0.10 ge: Map8-1 peed: ngle: pass: pass: ction:	1.50 Finish 3 30 12.10 2.00 10.10 1.8364 Sit	grading (0-2.5 m degrees feet feet feet feet acres/h	our	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Widtl Net grading Unadjuste	ea to be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A Effective Blade Le h of blade overlap per g or ripping width per ed Hourly Unit Producton En Factors	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass: ction:	1.50 Finish ; 30 12.10 2.00 10.10 1.8364 Sin	grading (0-2.5 m degrees feet feet feet feet acres/h	our	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Widtl Net grading Unadjust ob Condition Correction Altitude Adj:	Exactly be graded or rippe rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A Effective Blade Le h of blade overlap per g or ripping width per ed Hourly Unit Product on Factors 1.00	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass: ction: Source (CAT HB	1.50 Finish ; 30 12.10 2.00 10.10 1.8364 Sin	grading (0-2.5 m degrees feet feet feet feet acres/h	our	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Width Net grading Unadjuste Ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	Example 2 CTITIES Example 2 The second seco	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass: ction: Source (CAT HB (1sh/d, moo multiplier	1.50 Finish ; 30 12.10 2.00 10.10 1.8364 Sin)	grading (0-2.5 m degrees feet feet feet acres/h te Altitude: <u>7000</u>	s our <u>)</u> feet	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Width Net grading Unadjust Ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	VTITIES ea to be graded or rippedict rce of estimated acrease CTION Average Grader Sp Selected Application Selected Blade A Effective Blade Leth h of blade overlap per g or ripping width per ed Hourly Unit Product on Factors 1.00 0.85 0.8500	ed: <u>0.10</u> ge: <u>Map8-1</u> peed: ngle: ngth: pass: pass: tion: Source (CAT HB (1sh/d, mod multiplier Production:	1.50 Finish ; 30 12.10 2.00 10.10 1.8364 Sin) 1.) 1.5609	grading (0-2.5 m degrees feet feet feet acres/h te Altitude: 7000	our <u>)</u> feet	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Width Net grading Unadjust Ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	Example 2 CTITIES Example 2 The second seco	ed: <u>0.10</u> ge: <u>Map8-1</u> peed: ngle: ngth: pass: pass: tion: Source (CAT HB (1sh/d, mod multiplier Production:	1.50 Finish ; 30 12.10 2.00 10.10 1.8364 Sin)	grading (0-2.5 m degrees feet feet feet acres/h te Altitude: <u>7000</u>	our <u>)</u> feet	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Width Net grading Unadjust ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	VTITIES ea to be graded or ripped rce of estimated acreas CTION Average Grader Sp Selected Applicat Selected Blade A Effective Blade Lee h of blade overlap per g or ripping width per ed Hourly Unit Product on Factors 1.00 0.85 0.8500	ed: <u>0.10</u> ge: <u>Map8-1</u> peed: ngle: ngth: pass: pass: tion: Source (CAT HB (1sh/d, mod multiplier Production:	1.50 Finish ; 30 12.10 2.00 10.10 1.8364 Sin) 1.) 1.5609	grading (0-2.5 m degrees feet feet feet acres/h te Altitude: 7000	our <u>)</u> feet	acres
MATERIAL QUAN Total Are Sou HOURLY PRODUC Width Net grading Unadjuste ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	VTITIES ea to be graded or ripped rce of estimated acreas CTION Average Grader Sp Selected Applica Selected Blade A Effective Blade Le h of blade overlap per g or ripping width per ed Hourly Unit Product on Factors 1.00 0.85 0.8500	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass: ction: Source (CAT HB (1sh/d, mod multiplier Production: Production:	1.50 Finish 3 30 12.10 2.00 10.10 1.8364 Sin) 1.) 1.5609 1.5609	grading (0-2.5 m degrees feet feet feet acres/h te Altitude: 7000	our <u>)</u> feet	
MATERIAL QUAN Total Are Sou HOURLY PRODUC Width Net grading Unadjust ob Condition Correction Altitude Adj: Job Efficiency: Net Correction:	VTITIES ea to be graded or ripped rce of estimated acreas CTION Average Grader Sp Selected Applicat Selected Blade A Effective Blade Lee h of blade overlap per g or ripping width per ed Hourly Unit Product on Factors 1.00 0.85 0.8500	ed: 0.10 ge: Map8-1 peed: ngle: ngth: pass: pass: ction: Source (CAT HB (1sh/d, mod multiplier Production: Production:	1.50 Finish ; 30 12.10 2.00 10.10 1.8364 Sin) 1.) 1.5609	grading (0-2.5 m degrees feet feet feet acres/h te Altitude: 7000	our <u>)</u> feet	acres

HYDRAULIC EXCAVATOR WORK

			Storage			
Bowie No. 1 Mine	Per	mit Action:	RN8	Pe	rmit/Job#:	C1981038
PROJECT IDENTIF	ICATION					
Task #: 079 Date: 5/29/2023 User: RDZ	State: County:	Colorado Delta			eviation: ilename:	None C038-079
Agency or organ	nization name:	RMS				
HOURLY EQUIPME	ENT COST					
Basic Machine: Attachment 1:	Cat 336D L 10'-6" ROPS Cab	Stick	We	orsepower: Eight (MT): Shift Basis: ata Source:	2 1 p	268 9.30 er day CRG)
Cost Breakdown:		1				
Ownership Cost/F Operating Cost/F Operator Cost/F	Hour: \$64.	55	Utilization % NA 100 NA			
Total Unit Cost/H	Hour: \$185.	.40	_			
Total Fleet Cost/	Hour: \$185	5.40				
Loose volume: 3 Source of	75 66 of estimated volume:	1	Swell factor: erator Estimate	1.330		
Source of es	timated swell factor:	Cat Hand	book			
HOURLY PRODUCT Excavator Cycle Time (lo		aded. dump b	ucket, swing empty)):		
HOURLY PRODUCT		*	ucket, swing empty) ondition Descriptior		Ξ	
	oad bucket, swing loa	Basic Job C	ondition Description in Basic Description	n: <u>SEVERI</u> n: <u>SEVERI</u>		
	oad bucket, swing loa	Basic Job C	ondition Description	n: <u>SEVERI</u> n: <u>SEVERI</u>		minutes
Excavator Cycle Time (lo Load Bucket Capacity	oad bucket, swing loa Secondary Job Co	Basic Job C ondition with	ondition Description in Basic Description Cycle Time Value E	n: <u>SEVERI</u> n: <u>SEVERI</u>	3	minutes
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity	oad bucket, swing loa Secondary Job Co 7:2.26	Basic Job C ondition with LCY (hea	ondition Description in Basic Description Cycle Time Value E aped)	n: <u>SEVERI</u> n: <u>SEVERI</u> e: <u>0.445</u> Bucket Size C	3	
Excavator Cycle Time (lo Load Bucket Capacity	Secondary Job Co Secondary Job Co 7: 2.26 r: 0.850	Basic Job C ondition with LCY (hea	ondition Description in Basic Description Cycle Time Value E	n: <u>SEVERI</u> n: <u>SEVERI</u> e: <u>0.445</u> Bucket Size C	3	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92	Basic Job C ondition with LCY (hea Hard, tou	ondition Description in Basic Description Cycle Time Value E aped) gh clay (80% - 90%	n: <u>SEVERI</u> n: <u>SEVERI</u> e: <u>0.445</u> Bucket Size C	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 Factors 1.192	Basic Job C ondition with LCY (hea Hard, tou LCY Source	ondition Description in Basic Description Cycle Time Value E aped) gh clay (80% - 90% Site Al	n: SEVERI n: SEVERI e: 0.445 Bucket Size C) 0.850	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj:	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 1 1.00	Basic Job C ondition with LCY (hea LCY Source CAT HE	ondition Description in Basic Description Cycle Time Value E aped) gh clay (80% - 90% Site Al	n: SEVERI n: SEVERI e: 0.445 Bucket Size C) 0.850	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 Factors 1.192	Basic Job C ondition with LCY (hea Hard, tou LCY Source	ondition Description in Basic Description Cycle Time Value ped) gh clay (80% - 90% Site Al	n: SEVERI n: SEVERI e: 0.445 Bucket Size C) 0.850	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj: Job Efficiency:	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 1 Factors 1.00 0.83 0.83	Basic Job C ondition with LCY (hea Hard, tou LCY Source (CAT HE (1 shift/da multiplier	ondition Description in Basic Description Cycle Time Value E aped) gh clay (80% - 90% Site Al 3) y)	n: <u>SEVERI</u> n: <u>SEVERI</u> e: <u>0.445</u> Bucket Size C) 0.850	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: Una A	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 1 Factors 0.83 0.83 0.83 adjusted Hourly Unit unit unit unit	Basic Job C ondition with LCY (hea Hard, tou LCY Source (CAT HE (1 shift/da multiplier Production: Production:	ondition Description in Basic Description Cycle Time Value ped) gh clay (80% - 90% Site Al	n: SEVERI n: SEVERI e: 0.445 Bucket Size C) 0.850	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: Una A	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 1 Factors 1.00 0.83 0.83 0.83 0.83	Basic Job C ondition with LCY (hea Hard, tou LCY Source (CAT HE (1 shift/da multiplier Production: Production:	ondition Description in Basic Description Cycle Time Value ped) gh clay (80% - 90% Site Al 3) y)	n: <u>SEVERI</u> n: <u>SEVERI</u> e: <u>0.445</u> Bucket Size C) 0.850 Ititude: <u>7000</u>	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: Una A	Dad bucket, swing loa Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 1 Factors 1.00 0.83 0.83 0.83 0.83 adjusted Hourly Unit Unit djusted Hourly Unit Unit djusted Hourly Unit Unit	Basic Job C ondition with LCY (hea Hard, tou LCY Source (CAT HE (1 shift/da multiplier Production: Production:	ondition Description in Basic Description Cycle Time Value ped) gh clay (80% - 90% Site Al 3) y) 259.01 214.98	n: <u>SEVERI</u> n: <u>SEVERI</u> e: <u>0.445</u> Bucket Size C <u>) 0.850</u> Ititude: <u>7000</u> LCY/Hour LCY/Hour	E	
Excavator Cycle Time (lo Load Bucket Capacity Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction Iob Efficiency: Net Correction: Una A	Dad bucket, swing loa Secondary Job Co Secondary Job Co 7: 2.26 7: 0.850 7: 1.92 1 Factors 1.00 0.83 0.83 oljusted Hourly Unit National Hourly Unit djusted Hourly Unit ST	Basic Job C ondition with LCY (hea Hard, tou LCY Source (CAT HE (1 shift/da multiplier Production: Production: Production:	ondition Description in Basic Description Cycle Time Value ped) gh clay (80% - 90% Site Al 3) y) 259.01 214.98	n: <u>SEVERI</u> n: <u>SEVERI</u> e: <u>0.445</u> Bucket Size C <u>) 0.850</u> Ititude: <u>7000</u> LCY/Hour LCY/Hour	E	

	Task description:Backfill			l and Regrade Coal Stockpile Pond				
Bowie No. 1 Mine		Peri	mit Action:	RN8	Permit/Job#:	C1981038		
PROJECT IDI	ENTIFICATI	<u>ON</u>						
Task #: 093		State:	Colorado		Abbreviation:	None		
	9/2023	County:	Delta		Filename:	C038-093		
User: RD		e o unity i				0000 070		
Agency	or organization	name: DR	RMS					
HOURLY EQU	JIPMENT CO	<u> 0ST</u>						
Basic Machine		- 10SU						
Horsepower								
Blade Type								
Attachment Shift Basis		per						
Data Source								
Cost Breakdown:			1	TTTT				
Ownershir Cost	/Hour:		\$152 CT	Utilization %				
Ownership Cost Operating Cost			\$153.67 \$166.94	<u>NA</u> 100				
Ripper own. Cost			\$166.94 \$22.74	NA				
Ripper op. Cost			\$22.74	0				
Operator Cost			\$41.30	NA				
Initial Volume: Swell factor:	565 1.330							
	1.330							
Swell factor:	1.330 751 LCY ed volume:			me 1, page 33				
Swell factor: Loose volume: Source of estimat	1.330 751 LCY ed volume: ed swell factor:			me 1, page 33				
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRO Average push dis	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance:	Cat Hand	book	me 1, page 33				
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PR(Average push dis Unadjusted hourly	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production:	Cat Hand 50 feet 2,748.7 LC	book Y/hr					
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRO Average push dis	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production:	Cat Hand 50 feet 2,748.7 LC	book Y/hr	me 1, page 33				
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PR(Average push dis Unadjusted hourly	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production: ency description dient: 0 %	Cat Hand 50 feet 2,748.7 LC n: Compa	book Y/hr					
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRC Average push dis Unadjusted hourly Materials consiste Average push gra	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production: ency description dient: 0 % ide: 7,200	Cat Hand 50 feet 2,748.7 LC n: Compa	book Y/hr					
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRO Average push dis Unadjusted hourl Materials consiste Average push gra Average site altitu	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production: ency description dient: 0 % 7,200 2,900	Cat Hand 50 feet 2,748.7 LC a: <u>Compa</u> 0 feet	book Y/hr 	mbankment 0.9				
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRO Average push dis Unadjusted hourly Materials consiste Average push gra Average push gra Average site altitu Material weight: Weight description	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production: ency description dient: 0 % 1.330 2,900 m: Deco rrection Factor	Cat Hand 50 feet 2,748.7 LC a: Compa 0 feet 0 lbs/LCY mposed rock	book Y/hr cted fill or en - 50% Rock,					
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRO Average push dis Unadjusted hourly Materials consiste Average push gra Average site altitu Material weight: Weight description <u>Job Condition Co</u> O	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production: ency description dient: 0 % 1,2900 on: Deco prection Factor perator Skill:	Cat Hand 50 feet 2,748.7 LC a: Compa 0 feet 0 lbs/LCY mposed rock 0.	book Y/hr cted fill or ef 50% Rock, 750					
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRO Average push dis Unadjusted hourly Materials consiste Average push gra Average push gra Average site altitu Material weight: Weight descriptic <u>Job Condition Co</u> O Material	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production: ency description dient: 0 % 1.2,900 m: Deco rrection Factor perator Skill: consistency:	Cat Hand 50 feet 2,748.7 LC a: Compa 0 feet 0 lbs/LCY mposed rock 0. 0. 0. 0.	book Y/hr cted fill or ei - 50% Rock, 750 900					
Swell factor: Loose volume: Source of estimat Source of estimat HOURLY PRO Average push dis Unadjusted hourly Materials consiste Average push gra Average push gra Average site altitu Material weight: Weight descriptic <u>Job Condition Co</u> O Material	1.330 751 LCY ed volume: ed swell factor: DDUCTION tance: y production: ency description dient: 0 % 1,2900 on: Deco prection Factor perator Skill:	Cat Hand 50 feet 2,748.7 LC a: Compa 0 feet 0 lbs/LCY mposed rock 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	book Y/hr cted fill or ef 50% Rock, 750					

Task # 093

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3554	
Adjusted unit production: 97	76.89 LCY/hr	
Adjusted fleet production: 39	907.56 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.394/LCY
Total job time:	0 10 Hours

I otal job time:	0.19 Hours
Total job cost:	\$296

Page 1 of 2

Task description:	Backfill and Reg	grade i ond v	1 -		
Bowie No. 1 Mine	Per	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTI	FICATION				
Task #: 095	State:	Colorado		Abbreviation:	None
Date: $5/29/2023$		Delta		Filename:	C038-095
User: RDZ					0000 070
		OMC			
Agency or orga	anization name: DI	RMS			
HOURLY EQUIPM	ENT COST				
Basic Machine: Ca	at D10T - 10SU				
Horsepower: 57					
7 1	emi-Universal				
	shank ripper				
	per day				
Data Source: (C	CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
Ripper op. Cost/Hour:		\$0.00	0		
			NT A		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$384.65 \$1,538.61	\$41.30	NA		
Total unit Cost/Hour:	\$384.65 \$1,538.61 TITIES	\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>1,2</u> Swell factor: <u>1.1</u>	\$384.65 \$1,538.61 TITIES 00 65		NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3	\$384.65 \$1,538.61 TITIES 00 65 98 LCY				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volume 100	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume:Operator	Estimate			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume:Operator	Estimate			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swell	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator Cat Hand	Estimate	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator cat Hand CTION	Estimate	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance:	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator Cat Hand TION 75 feet	Estimate Ibook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe HOURLY PRODUCE	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator Cat Hand CTION 75 feet	Estimate Ibook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance:	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator 98 LCY Ume: Cat Hand CTION 2,105.3 LC	Estimate lbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volto Source of estimated sweet HOURLY PRODUC Average push distance: Unadjusted hourly product	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator 98 LCY ume: Cat Hand CTION 2,105.3 LC	Estimate lbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produce Materials consistency de Average push gradient:	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator 01 factor: Cat Hand 2TION auction: 75 feet 2,105.3 LC escription: Compa 5 %	Estimate lbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly product Materials consistency de Average push gradient: Average site altitude:	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator Cat Hand CTION uction: 75 feet 2,105.3 LC escription: Compa 5 % 7,100 feet	 Estimate lbook Y/hr acted fill or en			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1.1 Loose volume: 1.3 Source of estimated volu Source of estimated volu Source of estimated sweet HOURLY PRODUCE Average push distance: Unadjusted hourly product Materials consistency de Average site altitude: Material weight: Weight description:	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator 01 factor: Cat Hand 21 factor: 2,105.3 LC escription: Compa 5 % 7,100 feet 2,900 lbs/LCY Decomposed rock	 Estimate lbook Y/hr acted fill or en	 mbankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly product Materials consistency de Average site altitude: Material weight:	\$384.65 \$1,538.61 TITIES 00 65 98 LCY ume: Operator 01 factor: Cat Hand CTION uction: 75 feet 2,105.3 LC escription: Compa 5 % 7,100 feet 2,900 lbs/LCY Decomposed rock n Factor 00	 Estimate lbook Y/hr acted fill or en			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produce Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	$\begin{array}{c c} \$384.65 \\ \hline \$1,538.61 \\ \hline \\ \hline TITIES \\ 00 \\ 65 \\ \hline 98 LCY \\ \hline ume: Operator \\ \hline 98 LCY \\ \hline ume: Cat Hand \\ \hline \\ \hline 98 LCY \\ \hline \\ ution: Cat Hand \\ \hline \\ \hline \\ \hline \\ 2,105.3 LC \\ \hline \\ $	 Estimate lbook Y/hr acted fill or en - 50% Rock, .750 .900			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,2 Swell factor: 1.1 Loose volume: 1,3 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly product Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing m	$\begin{array}{c c} \$384.65 \\ \hline \$1,538.61 \\ \hline \\ \hline TITIES \\ 00 \\ 65 \\ \hline 98 LCY \\ \hline ume: Operator \\ Cat Hand \\ \hline \\ \hline 98 LCY \\ \hline \\ ume: Operator \\ Cat Hand \\ \hline \\ $	Estimate Ibook Y/hr acted fill or en 			

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3209	
Adjusted unit production: 67	75.59 LCY/hr	
Adjusted fleet production: $\overline{27}$	702.36 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.569/LCY
Total ich time	0 52 Hours

Hours
6

Page 1 of 2

Task description:	Backfill and	Regrade Pond V	V-2		
Bowie No. 1 Mine		Permit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIF	TICATION				
Task #: 096 Date: 5/29/2023 User: RDZ		ate: Colorado nty: Delta		Abbreviation: Filename:	None C038-096
Agency or orga	anization name:	DRMS			<u> </u>
HOURLY EQUIPMI	ENT COST				
	ut D10T - 10SU				
Horsepower: 57	4 mi-Universal		_		
71			_		
	shank ripper		_		
1	per day RG)		_		
	NU)				
Cost Breakdown:					
0 11 7 77			<u>Utilization %</u>		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74 \$0.00	NA		
Ripper op. Cost/Hour:			0		
		\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$384.65 \$1,538.61				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>1,20</u> Swell factor: <u>1.16</u>	\$1,538.61 FITIES 00 65				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>1,20</u> Swell factor: <u>1.16</u>	\$1,538.61 FITIES 00				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>1,20</u> Swell factor: <u>1.16</u>	\$1,538.61 FITIES 00 65 98 LCY Ime:Ope	rator Estimate Handbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,20 Swell factor: 1,39 Loose volume: 1,39 Source of estimated volu	\$1,538.61 FITIES 00 55 98 LCY ume: Ope Il factor: Cat	rator Estimate			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.10 Loose volume: 1,39 Source of estimated volu Source of estimated swel	\$1,538.61 FITIES 00 55 98 LCY 100 11 factor: Ope Cat TION 75 feet	rator Estimate Handbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.10 Loose volume: 1,39 Source of estimated volu Source of estimated swel HOURLY PRODUC	\$1,538.61 FITIES 00 65 98 LCY Ime: Ope Il factor: Cat TION 10 10 10 10 10 10 10 10 10 10 10 10 10	rator Estimate Handbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.10 Loose volume: 1,39 Source of estimated volu Source of estimated swel HOURLY PRODUCC Average push distance: Unadjusted hourly produce 100	\$1,538.61 FITIES 00 65 98 LCY Ime: Ope Il factor: Cat TION 10 10 10 10 10 10 10 10 10 10 10 10 10	rator Estimate Handbook t 3 LCY/hr			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.10 Loose volume: 1,39 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient:	\$1,538.61 FITIES 00 55 98 LCY 100 11 factor: Ope Cat TION 75 feet 12,105.2 escription: Cat 5 %	rator Estimate Handbook t 3 LCY/hr ompacted fill or er			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.10 Loose volume: 1,39 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$1,538.61 FITIES 00 65 98 LCY ume: Ope 11 factor: Cat TION action: 2,105 escription: Cat 5 % 7,100 feet 2,900 lbs/LC	rator Estimate Handbook t 3 LCY/hr ompacted fill or er	 nbankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.10 Loose volume: 1,39 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description:	\$1,538.61 ITTIES 00 55 98 LCY ume: Ope 11 factor: Cat TION action: 2,105 escription: Cat 5 % 7,100 feet 2,900 lbs/LC Decomposed	rator Estimate Handbook 3 LCY/hr ompacted fill or en	 nbankment 0.9 50% Earth		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.16 Loose volume: 1,39 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight:	\$1,538.61 ITTIES 00 55 98 LCY ume: Ope 11 factor: Cat TION action: 2,105.3 escription: Cat 5 % 7,100 feet 2,900 lbs/LC Decomposed n Factor Factor	rator Estimate Handbook 3 LCY/hr ompacted fill or en	 nbankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.10 Loose volume: 1,39 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,538.61 ITTIES 00 55 98 LCY ume: Ope 11 factor: Cat TION action: 2,105.3 escription: Cat 5 % 7,100 feet 2,900 lbs/LC Decomposed n Factor Skill:	rator Estimate Handbook 3 LCY/hr ompacted fill or en Y Y			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,20 Swell factor: 1.16 Loose volume: 1,39 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing ma	\$1,538.61 FITIES 00 55 98 LCY ume: Ope 11 factor: Cat TION action: 2,105.1 escription: Cat 5 % 7,100 feet 2,900 lbs/LC Decomposed n Factor Skill: tency:	rator Estimate Handbook 3 LCY/hr ompacted fill or en Y Y rock - 50% Rock, 0.750			

Task # 096

Job efficience	ey:	0.830	(1 SHIFT/DAY)
Spoil pi	le:	0.800	(FND-RF)
Push gradier	nt:	0.903	(CAT HB)
Altitud	le:	1.000	(CAT HB)
Material Weight	nt:	0.793	(CAT HB)
Blade typ	be:	1.000	(PAT)
Net correction	on: 0.32	209	
Adjusted unit production:	675.59 I	LCY/hr	
Adjusted fleet production:	2702.36	LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.569/LCY
Total ich time	0 52 Hours

I otal job time:	0.52 Hours
Total job cost:	\$796

Task description:	Replace topson n	II Stockpile	to OVWM resdisturba	ice ai ca	
Bowie No. 1 Mine	Perr	nit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIF	ICATION				
Task #: 102	State:	Colorado		Abbreviation:	None
Date: $5/29/2023$	County:	Delta		Filename:	C038-102
User: RDZ		20114			0000 102
Agency or organ	nization name: DR	MS			
HOURLY EQUIPME	ENT COST				
	t D10T - 10SU				
Horsepower: 574	+ ni-Universal				
• 1	hank ripper				
	er day RG)				
	XU)				
Cost Breakdown:		1			
a ()			<u>Utilization %</u>		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$384.65 \$1,538.61				
Total Fleet Cost/Hour:	\$1,538.61 <u>TITIES</u> 5				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00	\$1,538.61 <u>TITIES</u> 5				
Total Fleet Cost/Hour:MATERIAL QUANTInitial Volume:4,23Swell factor:1.00Loose volume:4,23	\$1,538.61 TTIES 5 0 5 LCY				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volume	\$1,538.61 TTIES 5 0 5 LCY me:	 9" replacem	ent depth		
Total Fleet Cost/Hour:MATERIAL QUANTInitial Volume:4,23Swell factor:1.00Loose volume:4,23	\$1,538.61 TTIES 5 0 5 LCY me:		ent depth		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum 5000000000000000000000000000000000000	\$1,538.61 <u>TTIES</u> 5 0 5 LCY me: <u>35 ac @</u> 1 factor: <u>Cat Hand</u>		ent depth		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volu 4,23 Source of estimated swell 4,23 HOURLY PRODUCT 4,23	\$1,538.61 <u>TTIES</u> 5 0 5 LCY me: <u>35 ac @</u> 1 factor: <u>Cat Handl</u> <u>FION</u>		ent depth		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,538.61 <u>TTIES</u> 5 0 5 LCY me: <u>35 ac @</u> 1 factor: <u>Cat Handl</u> <u>FION</u> <u>350 feet</u>	book	ent depth		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum 4,23 Source of estimated volum 5000000000000000000000000000000000000	\$1,538.61 <u>TTIES</u> 5 0 5 LCY me: <u>35 ac @</u> 1 factor: <u>Cat Handl</u> <u>FION</u> <u>350 feet</u>	book	ent depth		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,538.61 TTIES 5 0 5 LCY me: 35 ac @ 1 factor: Cat Handl FION action: 350 feet 556.8 LCY/	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient:	\$1,538.61 TTIES 5 0 5 LCY me: 35 ac @ 1 factor: Cat Handle FION ction: 350 feet 556.8 LCY/ scription: Loose s 30 %	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	\$1,538.61 TTIES 5 0 5 LCY me: 35 ac @ 1 factor: Cat Handle FION ascription: 350 feet scription: Loose s	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volu 4,23 Source of estimated volu 50 Source of estimated swell 4,23 HOURLY PRODUCT 4,23 Average push distance: 100 Unadjusted hourly product 4,23 Materials consistency des 4,23 Average push gradient: 100	\$1,538.61 TTIES 5 0 5 LCY me: 35 ac @ 1 factor: Cat Handle FION ction: 350 feet 556.8 LCY/ scription: Loose s 30 %	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude:	\$1,538.61 TTIES 5 0 5 LCY me: 35 ac @ 1 factor: Cat Handl FION action: 350 feet ction: 556.8 LCY// scription: Loose s 30 % 7,200 feet	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Average push distance: Average push gradient: Average site altitude: Material weight:	\$1,538.61 TTIES 5 0 5 LCY me: 35 ac @ 1 factor: Cat Handl FION action: 350 feet ction: 556.8 LCY// scription: Loose s 30 % 7,200 feet 2,100 lbs/LCY Earth - Loam	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description:	\$1,538.61 TTIES 5 0 5 LCY me: 35 ac @ 1 factor: Cat Handl ITION ction: 350 feet ction: 556.8 LCY// scription: Loose s 30 % 7,200 feet 2,100 lbs/LCY Earth - Loam Factor Factor	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,538.61TTIES505 LCYme: $35 ac @$ 1 factor: $Cat HandleTIONction:350 feetscription:Loose s30 \%7,200 feet2,100 lbs/LCYEarth - LoamFactorSkill:0.7$	hr tockpile 1.2			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,23 Swell factor: 1.00 Loose volume: 4,23 Source of estimated volum 4,23 Source of estimated volum 4,23 Source of estimated volum 500 Materials consistence: 100 Materials consistency dest Average push distance: Materials consistency dest Average site altitude: Material weight: Weight description: Job Condition Correction Operator	\$1,538.61TTIES505LCYme: 35 ac @1 factor: Cat HandleI factor: Cat HandleEION 350 feetction: 350 feetction: 556.8 LCY/scription:Loose s 30% $7,200$ feet $2,100$ lbs/LCYEarth - LoamFactorSkill: 0.7 ency: 1.7	hr tockpile 1.2			

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.298	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.1950	
Adjusted unit production: 1	08.58 LCY/hr	
Adjusted fleet production: 4	34.32 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$3.543/LCY

Total job time:	9.75 Hours
Total job cost:	\$15,003

Task description:	Replace Topsoil	n om Stockp		art Access	
Bowie No. 1 Mine	Per	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIF	FICATION				
Task #: 104	State:	Colorado		Abbreviation:	None
Date: $5/29/2023$		Delta		Filename:	C038-104
User: RDZ	County.	Denu		<u>-</u>	0000 101
		RMS			
Agency or orga	anization name: DR				
HOURLY EQUIPM	<u>ENT COST</u>				
Basic Machine: Ca	at D10T - 10SU				
Horsepower: 57-					
	emi-Universal				
	shank ripper				
	per day				
Data Source: (C	CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN	\$384.65 \$1,538.61	\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,30 Swell factor: 1.11	\$384.65 \$1,538.61 TITIES 00 15	\$41.30 	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,30 Swell factor: 1.11	\$384.65 \$1,538.61 TITIES 00	\$41.30 	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,30 Swell factor: 1.11	\$384.65 \$1,538.61 TITIES 00 15 80 LCY				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume:Permit Vol	 olume 1, Pag			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu Source of estimated swel	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo Cat Hand	 olume 1, Pag			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo Cat Hand	 olume 1, Pag			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu Source of estimated swel	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo Cat Hand	 olume 1, Pag			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu Source of estimated swell HOURLY PRODUCC	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo Cat Hand CTION 250 feet	olume 1, Pag			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu Source of estimated swel HOURLY PRODUCC Average push distance:	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo 11 factor: Cat Hand 250 feet uction: 754.3 LCY/	olume 1, Pag	e 64		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu 3,68 Source of estimated swel 3,68 HOURLY PRODUCC Average push distance: Unadjusted hourly produ Materials consistency de	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Volume	olume 1, Pag book	e 64		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu 3,68 Source of estimated swell Source HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency de Average push gradient: State	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo ull factor: Cat Hand Cat Hand TION action: 250 feet action: 754.3 LCY/ escription: Consol 10 %	olume 1, Pag book	e 64		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu 3,68 Source of estimated swel 3,68 HOURLY PRODUCC Average push distance: Unadjusted hourly produ Materials consistency de	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Volume	olume 1, Pag book	e 64		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu 3,68 Source of estimated swell Source HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency de Average push gradient: State	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo ull factor: Cat Hand Cat Hand TION action: 250 feet action: 754.3 LCY/ escription: Consol 10 %	olume 1, Pag book	e 64		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu 3,68 Source of estimated swell Source HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vo cat Hand Consol 10 % 7,100 feet	olume 1, Pag book	e 64		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,66 Source of estimated volu 3,66 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Iob Condition Correction	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vol 11 factor: Cat Hand 250 feet uction: 250 feet action: 754.3 LCY/ escription: Consol 10 % 7,100 feet 2,100 lbs/LCY Earth - Loam n Factor Note	 olume 1, Pag lbook /hr idated stockp	e 64 		
Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,66 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator	$\begin{array}{c c} \$384.65 \\ \hline \$1,538.61 \\ \hline \hline \textbf{TITIES} \\ 00 \\ 15 \\ \textbf{80 LCY} \\ \textbf{Ime: Permit Volume: Cat Hand} \\ \hline \textbf{80 LCY} \\ \textbf{Ime: Cat Hand} \\ \hline \textbf{710N} \\ \textbf{actor: Cat Hand} \\ \hline \textbf{754.3 LCY/} \\ \textbf{escription: Consol} \\ \hline 10 \% \\ \hline 7,100 \text{ feet} \\ \hline 2,100 \text{ lbs/LCY} \\ \hline \textbf{Earth - Loam} \\ \hline \textbf{n Factor} \\ \hline \textbf{Skill: 0.} \\ \end{array}$	 olume 1, Pag lbook /hr idated stockp 	e 64 		
Total unit Cost/Hour: Total Fleet Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consist Operator	$\begin{array}{c c} \$384.65 \\ \$1,538.61 \\ \hline \hline \\ \hline $		e 64 		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,30 Swell factor: 1.11 Loose volume: 3,68 Source of estimated volu 3,68 Source of estimated swell Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction Operator Material consist Dozing material	\$384.65 \$1,538.61 TITIES 00 15 80 LCY ume: Permit Vol 11 factor: Cat Hand 250 feet uction: 250 feet uction: 754.3 LCY/ escription: Consol 10 % 7,100 feet 2,100 lbs/LCY Earth - Loam n Factor Skill: 0. stency: 1. ethod: 1.	 olume 1, Pag lbook /hr idated stockp 	e 64 		

Task # 104

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4286	
Adjusted unit production: 32	23.29 LCY/hr	
Adjusted fleet production: 12	293.16 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$1.190/LCY

Total job time:	2.85 Hours
Total job cost:	\$4,378

Task description:	Replace Topsoil	from Stockp	oile to Dri	ll Pads		
Bowie No. 1 Mine	Peri	nit Action:	RN8		Permit/Job#:	C1981038
PROJECT IDENTIF	ICATION					
Task #: 110 Date: 5/29/2023 User: RDZ	State: County:	Colorado Delta			Abbreviation: Filename:	None C038-110
Agency or organ	nization name: DR	MS				
HOURLY EQUIPME	ENT COST					
	t D10T - 10SU					
Horsepower: 574 Blade Type: Ser	+ ni-Universal					
	hank ripper					
	er day					
1	RG)					
	XU)					
Cost Breakdown:						
			<u>U</u> 1	<u>tilization %</u>		
Ownership Cost/Hour:		\$153.67		NA		
Operating Cost/Hour:		\$166.94		100		
Dimmon or Cart/II		\$22.74		NA		
Ripper own. Cost/Hour:		\$0.00		0		
Ripper op. Cost/Hour:		¢ 11 20		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$384.65 \$1,538.61	\$41.30		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$1,538.61 <u>TITIES</u>	\$41.30		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume:5,45	\$1,538.61 <u>TITIES</u> 5			NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23	\$1,538.61 <u>S</u> 5 0			NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71	\$1,538.61 <u>TITIES</u> 5 0 0 LCY			NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volume	\$1,538.61 <u>S</u> 5 0 0 LCY me:Division []	 Estimate		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71	\$1,538.61 <u>S</u> 5 0 0 LCY me:Division []	 Estimate		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated swell	\$1,538.61 <u>FITIES</u> 5 0 0 LCY me: <u>Division</u> 1 factor: <u>CAT Han</u>	 Estimate		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated swell HOURLY PRODUCT	\$1,538.61 TITIES 5 0 0 LCY me: Division 1 1 factor: CAT Han FION	 Estimate		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated swell	\$1,538.61 <u>CITIES</u> 5 0 0 LCY me: Division 1 1 factor: CAT Han <u>FION</u> 50 feet	Estimate dbook		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,538.61 CITIES 5 0 0 LCY me: Division I 1 factor: CAT Han FION 50 feet ction: 2,748.7 LC	Estimate dbook	 			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient:	\$1,538.61 CITIES 5 0 0 LCY me: Division I 1 factor: CAT Han FION 50 feet ction: 2,748.7 LC	Estimate dbook	 			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volue Source of estimated volue Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude:	\$1,538.61 STITIES 5 0 0 LCY me: Division I 1 factor: CAT Han FION ction: 50 feet 2,748.7 LC scription: Consoli 10 %	Estimate dbook	 			
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Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>5,45</u> Swell factor: <u>1.23</u> Loose volume: <u>6,71</u> Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description:	\$1,538.61 STITIES 5 0 0 LCY me: Division I 1 factor: CAT Han FION ction: 50 feet ction: 2,748.7 LC scription: Consoli 10 % 7,310 feet 2,100 lbs/LCY Earth - Loam	Estimate dbook				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,538.61 STITIES 5 0 0 LCY me: Division I 1 factor: CAT Han FION ction: 50 feet 2,748.7 LCY scription: Consoli 10 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor	 Estimate dbook Y/hr idated stockp	 	Source		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	\$1,538.61 CITIES 5 0 0 LCY me: Division I 1 factor: CAT Han FION ction: 50 feet 2,748.7 LC scription: Consoli 10 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0.	Estimate dbook	 	Source (AVG.)		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 5,45 Swell factor: 1.23 Loose volume: 6,71 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	\$1,538.61 CITIES 5 0 0 LCY me: Division I 1 factor: CAT Han FION ction: 50 feet 2,748.7 LC scription: Consoli 10 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0. ency: 1.	 Estimate dbook Y/hr idated stockp 750	 	Source		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4286	
Adjusted unit production: 1,	178.09 LCY/hr	
Adjusted fleet production: 47	12.36 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.327/LCY

Total job time:	1.42 Hours
Total job cost:	\$2,191

Task # 111

Page 1 of 2

Task description:	Replace Topsoil f				
Bowie No. 1 Mine	Perr	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIF	ICATION				
Task #: 111	State:	Colorado		Abbreviation:	None
Date: $5/29/2023$	County:	Delta		Filename:	C038-111
User: RDZ	000000000000000000000000000000000				0000 111
Agency or organ	nization name: DR	RMS			
HOURLY EQUIPME	<u>ENT COST</u>				
Basic Machine: Cat	D10T - 10SU				
Horsepower: 574					
	ni-Universal				
Attachment: 3-sl	hank ripper				
	er day				
	RG)				
	/				
Cost Breakdown:		I	TT.'1' .' or		
Oumanshin Cast/IIa		¢152 (7	<u>Utilization %</u>		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
Finner on Lost/Hour		\$0.00	0		
Ripper op. Cost/Hour:					
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$384.65 \$1,538.61	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$1,538.61	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$1,538.61 <u>TTIES</u>	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume:6,63	\$1,538.61 <u>ITIES</u> 5	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23	\$1,538.61 TTIES 5 0	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23	\$1,538.61 <u>ITIES</u> 5	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23	\$1,538.61 TTIES 5 0 1 LCY		NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16	\$1,538.61 TTIES 5 0 1 LCY ne:	 Estimate	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volu Source of estimated swell	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han	 Estimate	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volu Source of estimated swell HOURLY PRODUCT	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han FION	 Estimate	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CION 200 feet	Estimate dbook	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volu Source of estimated swell HOURLY PRODUCT	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CION 200 feet	Estimate dbook	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CAT Han CION 200 feet ction: 946.0 LCY/	Estimate dbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CION ction: 200 feet 946.0 LCY/ scription: Consoli	Estimate dbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CAT Han CION 200 feet ction: 946.0 LCY/	Estimate dbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient:	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CION ction: 200 feet ction: 946.0 LCY/ scription: Consoli 5 %	Estimate dbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude:	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CION ction: 200 feet ction: 946.0 LCY/ scription: Consoli 5 % 7,310 feet	Estimate dbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han FION ction: 200 feet ction: 946.0 LCY/ scription: Consoli 5 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor Factor	Estimate dbook	 bile 1.0 Source		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volut Source of estimated volut Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator 5	\$1,538.61 TTIES 5 0 1 LCY me: Division I 1 factor: CAT Han CION ction: 200 feet 946.0 LCY/ scription: Consoli 5 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0.'	Estimate dbook hr idated stockp			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator 5 Material consistency	\$1,538.61TTIES501 LCY 1 LCYme:Division I1 factor:CAT HanCION 200 feetction: 200 feetetion: 946.0 LCY/scription:Consoli 5% $7,310$ feet $2,100$ lbs/LCYEarth - LoamFactorSkill: 0.7	Estimate dbook hr idated stockp			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 6,63 Swell factor: 1.23 Loose volume: 8,16 Source of estimated volut Source of estimated volut Source of estimated volut Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator 3 Material consistency des Material consistency des Material consistency des Material consistency des Source of estimated swell Material weight: Material consistency des Material consistency	\$1,538.61TTIES501 LCY 1 LCYme:Division I1 factor:CAT HanCION 200 feetction: 200 feetscription:Consoli 5% $7,310$ feet $2,100$ lbs/LCYEarth - LoamFactorSkill: 0.7 cency: 1.4 thod: 1.4	Estimate dbook hr idated stockp			

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4924	
Adjusted unit production: 46	55.81 LCY/hr	
Adjusted fleet production: 18	863.24 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.826/LCY

Total job time:	4.38 Hours
Total job cost:	\$6,739

PROJECT IDENTIFICATION Task #: 112 Date: 5/29/2023 County: Delta Pilename: C038-112 User: RDZ Agency or organization name: DRMS HORENTY FOUTPMENT COST Basic Machine: Cat D10T - 108U Horsepower 574 Blade Type: Semi-Universal Antachment: 3-shaft ripper Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Ownership Cost/Hour: \$153.67 NA NA Operating Cost/Hour: \$166.94 Ripper op. Cost/Hour: \$341.30 NA Total with Cost/Hour: \$135.61 MATERIAL OUANTITIES Initial Volume: \$13.53.61 Initial Volume: \$10 Source of estimated volume: Division Estimate Source of estimated volume: 200 feet	Task description:	Replace Topsoil f	from Stockp	oile to Pond W-1		
Task #: 112 State: Colorado Abbreviation: None Dite: 529/2023 County: Delta Filename: C038-112 Use: RDZ Rency or organization name: DRMS Image: County: Delta C038-112 HOURLY EQUIPMENT COST Basic Machine: Cat DIOT - 108U Horsepower: 574 Basic Machine: Cat Diot - 108U Horsepower: State: State: Ownership Cost/Hour: \$153.67 NA NA Na Operating Cost/Hour: \$153.69 100 Na Na Na Total unit Cost/Hour: \$384.65 Total Field Cost/Hour: \$1.53.861 MATERIAL QUANTITIES Division Estimate Source of estimated swell factor: CAT Handbook Source of estimated swell factor: Consolidated stockpile 1.0 Average push distance: 200 feet Material weight: 2.100 Ibs/LCY	Bowie No. 1 Mine	Perr	mit Action:	RN8	Permit/Job#:	C1981038
Date: 5/29/2023 County: Delta Filename: C038-112 Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat D107 - 108U Horsepower: 574 Blade Type: Semi-Universal Attachment: 3-fank ripper Shift Basis: 1 per day Data Source: (CKG) Cost Breakdown: Sta6.54 Ownership Cost/Hour: \$153.67 NA Operating Cost/Hour: Stift Basis: 1 per day Operating Cost/Hour: \$165.94 Na 00 Operator Cost/Hour: \$316.94 Total unit Cost/Hour: \$341.30 NA NA Total unit Cost/Hour: \$358.65 Total Piect Cos/Hour: \$11.5 Loose volume: 591 LCY Source of estimated swell factor: CAT Handbook HOURLY PRODUCTION 200 feet Materials consistency description: Consolidated stockpile 1.0 Average site altitude: 7.310 feet Material weight: 2.100	PROJECT IDENTIF	ICATION				
Date: 5/29/2023 County: Delta Filename: C038-112 Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat D107 - 108U Horsepower: 574 Blade Type: Semi-Universal Attachment: 3-fank ripper Shift Basis: 1 per day Data Source: (CKG) Cost Breakdown: Sta6.54 Ownership Cost/Hour: \$153.67 NA Operating Cost/Hour: Stift Basis: 1 per day Operating Cost/Hour: \$165.94 Na 00 Operator Cost/Hour: \$316.94 Total unit Cost/Hour: \$341.30 NA NA Total unit Cost/Hour: \$358.65 Total Piect Cos/Hour: \$11.5 Loose volume: 591 LCY Source of estimated swell factor: CAT Handbook HOURLY PRODUCTION 200 feet Materials consistency description: Consolidated stockpile 1.0 Average site altitude: 7.310 feet Material weight: 2.100	Task #· 112	State	Colorado		Abbreviation.	None
User: RDZ Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat D107 - 10SU Basic Machine: Cat D107 - 10SU Horsepower: 574 Blade Type: Seni-Universal Attachment: 3-shank ripper Shift Basis: 1 per day Data Source: (CRG) Coast Breakdown: 100 0 Operating Cost/Hour: \$153.67 NA 00 Ripper own. Cost/Hour: \$153.67 NA 00 Operator Cost/Hour: \$153.67 NA 00 Operator Cost/Hour: \$153.61 100 0 Total unit Cost/Hour: \$153.61 NA 0 Matterial Cost/Hour: \$15.38.61 NA 0 Source of estimated volume: \$101.07 500 0 0 Source of estimated volume: \$101.CY Division Estimate 0 0 Source of estimated would factor: 200 feet 0 0 0 0 Source of estimated						
HOURLY EQUIPMENT COST Basic Machine: Cat D10T - 10SU Horsepover: 574 Blade Type: Semi-Universal Attachmeni: 3-shank ripper Shift Basis: Iper day Data Source: (CRG) Cownership Cost/Hour: \$153.67 NA Operating Cost/Hour: \$166.94 100 Ripper own. Cost/Hour: \$22.74 NA Ripper own. Cost/Hour: \$22.74 NA Operator Cost/Hour: \$22.74 NA Ripper own. Cost/Hour: \$22.74 NA Operator Cost/Hour: \$22.74 NA Operator Cost/Hour: \$28.46.5 Intic Cost/Hour: Total unit Cost/Hour: \$15.38.61 NA Source of estimated volume: Division Estimate Source of estimated sould factor: Source of estimated volume: Division Estimate Source of estimated sould factor: Source of estimated sould factor: CAT Handbook Material sonsistency description: Material consistency description: Consolidated stockpile 1.0 Average push distance: 7,310 feet Mat		County.	Delta		Thename.	0000-112
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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: Utilization % Ownership Cost/Hour: \$153,67 NA Operating Cost/Hour: \$153,67 NA Ripper op. Cost/Hour: \$22,74 NA Ripper op. Cost/Hour: \$30.00 0 Operator Cost/Hour: \$30.00 0 Operator Cost/Hour: \$344.65 NA Total unit Cost/Hour: \$1,538.61 NA MATERIAL OUANTITIES Initial Volume: \$30 Initial Volume: \$50 Swell factor: CAT Handbook Material volume: \$91 LCY Source of estimated well factor: CAT Handbook Hoursuppotention: 200 feet	HOURLY EQUIPME	ENT COST				
Blade Type: Semi-Universal Attachment: 3-shank ripper Shift Basi: 1per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$153.67 NA Operating Cost/Hour: \$166.94 100 Ripper own. Cost/Hour: \$22.74 NA Ripper op. Cost/Hour: \$34.65 Total Init Cost/Hour: \$153.61 MATERIAL QUANTITIES Initial Volume: \$30 Source of estimated volume: Division Estimate Source of estimated swell factor: CAT Handbook HOURLY PRODUCTION 946.0 LCY/hr Material sconsistency description: Consolidated stockpile 1.0 Average push distance: 200 feet Material weight: 2.100 lbs/LCY Weight description: Earth - Loam Job Condition Correction Factor Source Operator Skill: 0.750 Material consistency: 1.000 Operator Skill: 0.750						
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Material weight: 2,100 lbs/LCY Weight description: Earth - Loam Job Condition Correction Factor Source Operator Skill: 0.750 (AVG.) Material consistency: 1.000 (CAT HB) Dozing method: 1.000 (GEN.)	Average push gradient:	0 %				
Weight description: Earth - Loam Job Condition Correction Factor Source Operator Skill: 0.750 (AVG.) Material consistency: 1.000 (CAT HB) Dozing method: 1.000 (GEN.)	Average site altitude:	7,310 feet				
Weight description: Earth - Loam Job Condition Correction Factor Source Operator Skill: 0.750 (AVG.) Material consistency: 1.000 (CAT HB) Dozing method: 1.000 (GEN.)						
Job Condition Correction FactorSourceOperator Skill:0.750(AVG.)Material consistency:1.000(CAT HB)Dozing method:1.000(GEN.)	Material weight:	2,100 lbs/LCY				
Operator Skill:0.750(AVG.)Material consistency:1.000(CAT HB)Dozing method:1.000(GEN.)	Weight description:	Earth - Loam				
Operator Skill:0.750(AVG.)Material consistency:1.000(CAT HB)Dozing method:1.000(GEN.)	Job Condition Correction	Factor		Source		
Material consistency:1.000(CAT HB)Dozing method:1.000(GEN.)			750			
Dozing method: 1.000 (GEN.)						
				(AVG.)		

Job efficiency:		0.830	(1 SHIFT/DAY)
Spoil pil	le:	0.800	(FND-RF)
Push gradier	nt:	1.000	(CAT HB)
Altitud	le:	1.000	(CAT HB)
Material Weight:		1.095	(CAT HB)
Blade type:		1.000	(PAT)
Net correctio	on:	0.5453	
Adjusted unit production:	515	5.85 LCY/hr	
Adjusted fleet production:	206	63.4 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.746/LCY
Total job times	0 20 Hours

Total job time:	0.29 Hours
Total job cost:	\$441

Task description:	Replace Topsoil	n om Stockp			
Bowie No. 1 Mine	Perr	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIF	ICATION				
Task #: 113	State:	Colorado		Abbreviation:	None
Date: $5/29/2023$	County:	Delta		Filename:	C038-113
User: RDZ	County.	Dena		i nename.	0000-110
Agency or organ	nization name: DR	RMS			
HOURLY EQUIPME	ENT COST				
	t D10T - 10SU				
Horsepower: 574	1				
Blade Type: Ser	ni-Universal				
Attachment: 3-s	hank ripper				
	er day				
	RG)				
	/				
Cost Breakdown:		1			
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
		\$0.00	0		
Ripper op. Cost/Hour:					
Ripper op. Cost/Hour: Operator Cost/Hour:		\$41.30	NA		
Operator Cost/Hour:		\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour:	\$384.65	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour:	\$384.65 \$1,538.61	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour:		\$41.30	NA		
Operator Cost/Hour:	\$1,538.61	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u>	\$1,538.61	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 530	\$1,538.61 <u>TTIES</u>	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11	\$1,538.61 TTIES 5	\$41.30 	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11	\$1,538.61 <u>TTIES</u>	\$41.30 	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591	\$1,538.61 TTIES 5 LCY		NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volum	\$1,538.61 TTIES 5 LCY me:	 Estimate	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591	\$1,538.61 TTIES 5 LCY me:	 Estimate	NA		
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Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volum	\$1,538.61 CITIES 5 LCY me: Division I 1 factor: CAT Han	 Estimate	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volu Source of estimated swell HOURLY PRODUCT	\$1,538.61 <u>TITIES</u> 5 LCY me: Division I l factor: CAT Han <u>FION</u>	 Estimate	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,538.61 TITIES 5 LCY me: Division I l factor: CAT Han FION 200 feet	Estimate ndbook	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volut Source of estimated swell HOURLY PRODUCT	\$1,538.61 TITIES 5 LCY me: Division I l factor: CAT Han FION 200 feet	Estimate ndbook	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,538.61 TTIES 5 LCY me: Division I 1 factor: CAT Han FION ction: 200 feet 946.0 LCY/	Estimate ndbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	\$1,538.61 TTIES 5 LCY me: Division I 1 factor: CAT Han FION ction: 200 feet 946.0 LCY/ scription: Consoli	Estimate idbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient:	\$1,538.61 TTIES 5 LCY me: Division I l factor: CAT Han FION ction: 200 feet 946.0 LCY/ scription: Consoli 0 %	Estimate idbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	\$1,538.61 TTIES 5 LCY me: Division I 1 factor: CAT Han FION ction: 200 feet 946.0 LCY/ scription: Consoli	Estimate idbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude:	\$1,538.61 TTIES 5 LCY me: Division I l factor: CAT Han FION ction: 200 feet 946.0 LCY/ scription: Consoli 0 %	Estimate idbook			
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Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description:	\$1,538.61 STTIES 5 LCY me: Division I 1 factor: CAT Han FION ction: 200 feet ction: 946.0 LCY/ scription: Consoli 0 % 7,310 feet 2,100 lbs/LCY Earth - Loam	Estimate idbook	 bile 1.0		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,538.61 STTIES 5 LCY me: Division I 1 factor: CAT Han FION ction: 200 feet ction: 946.0 LCY/ scription: Consoli 0 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor Factor	Estimate ndbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volut 500 Source of estimated volut Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	\$1,538.61 TTIES 5 LCY me: Division I l factor: CAT Han FION ction: 200 feet scription: Consoli 0 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0.'	Estimate idbook /hr idated stockp			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$1,538.61 TTIES 5 LCY me: Division I 1 factor: CAT Han FION ction: 200 feet 946.0 LCY/ scription: Consoli 0 % 7,310 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0. ency: 1.	Estimate dbook			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 530 Swell factor: 1.11 Loose volume: 591 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing me	\$1,538.61TTIES5LCYme:Division Il factor: CAT HanEIONction: 200 feetction: 946.0 LCY/scription:Consoli0 % $7,310$ feet2,100 lbs/LCYEarth - LoamFactorSkill:0.ency:1.thod:1.	Estimate idbook /hr idated stockp			

Job efficiency:		0.830	(1 SHIFT/DAY)
Spoil pil	le:	0.800	(FND-RF)
Push gradier	nt:	1.000	(CAT HB)
Altitud	le:	1.000	(CAT HB)
Material Weight:		1.095	(CAT HB)
Blade type:		1.000	(PAT)
Net correctio	on:	0.5453	
Adjusted unit production:	515	5.85 LCY/hr	
Adjusted fleet production:	206	63.4 LCY/hr	
-			

Fleet size:	4 Dozer(s)
Unit cost:	\$0.746/LCY
Total job times	0 20 Hours

Total job time:	0.29 Hours
Total job cost:	\$441

BOREHOLE SEALING WORK

Task description:		Plug and Seal all Boreholes					
Site:	Bowie No. 1 Mine		Permit Action:	RN8	Permit/J	lob#: <u>C1981038</u>	
PROJE(CT IDENTIFICATION	N					
Task #:		State:	Colorado		Abbreviation:	None	
Date: User:		County:	Delta		Filename:	C038-125	
	Agency or organization	tion name:	DRMS				

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Bottom plug for 2.5" wells	PVC plug - 2 in. diameter borehole	2.5	na	9.00	EA	\$24.59	\$221.31
Fiil Holes with Concrete	Portland cement grout (Bag, material cost only94 lb. bag)	2.5	na	3.00	bag	\$19.95	\$59.85
Borehole Marker	Borehole location/identification marker (EA, material cost only)	na	na	9.00	EA	\$37.50	\$337.50
Cut Casing at Surface	Exposed casing removal - Calculate Circumference in Linear Feet	2.5	NA	9.00	LF	\$3.26	\$29.34
Drill Rig Time	SCHRAMM T450WS	na	na	9.00	EA	\$480.27	\$4,322.43
Water Truck Time	Water Tanker, 5,000 Gal.	na	na	9.00	EA	\$88.49	\$796.41
Bottom Plug for 5" Wells	PVC plug - 6 in. diameter borehole	6	na	13.00	EA	\$61.43	\$798.59
Fill Holes with concrete	Portland cement grout (Bag, material cost only94 lb. bag)	6	na	219.00	bag	\$19.95	\$4,369.05
Borehole Marker	Borehole location/identification marker (EA, material cost only)	na	na	13.00	EA	\$37.50	\$487.50
Cut Casing at Surface	Exposed casing removal - Calculate Circumference in Linear Feet	6	na	20.00	LF	\$3.26	\$65.20
Drill Rig Time	SCHRAMM T450WS	na	na	52.00	EA	\$480.27	\$24,974.04
Bottom Plug for Shallow 6" wells	PVC plug - 6 in. diameter borehole	6	na	3.00	EA	\$61.43	\$184.29
Fill Hole with concrete	Portland cement grout (Bag, material cost only94 lb. bag)	6	na	20.00	bag	\$19.95	\$399.00
Borehole Marker	Borehole location/identification marker (EA, material cost only)	na	na	3.00	EA	\$37.50	\$112.50
Cut Casing at Surface	Exposed casing removal - Calculate Circumference in Linear Feet	6	na	5.00	LF	\$3.26	\$16.30

Drill Rig Time	SCHRAMM T450WS	na	na	12.00	EA	\$480.27	\$5,763.24
Water Truck Time	Water Tanker, 5,000 Gal.	na	na	12.00	EA	\$88.49	\$1,061.88
Bottom Plug for	PVC plug - 6 in.	6	na	1.00	EA	\$61.43	\$61.43
Intermediate 6" Well	diameter borehole		inu inu	1.00		φ01115	\$01.15
Fill Holes with Concrete	Portland cement grout (Bag, material cost only94 lb. bag)	6	na	51.00	bag	\$19.95	\$1,017.45
Borehole Marker	Borehole location/identification marker (EA, material cost only)	na	na	1.00	EA	\$37.50	\$37.50
Cut Casing at Surface	Exposed casing removal - Calculate Circumference in Linear Feet	6	na	2.00	LF	\$3.26	\$6.52
Drill Rig Time	SCHRAMM T450WS	na	na	8.00	EA	\$480.27	\$3,842.16
Water Truck Time	Water Tanker, 5,000 Gal.	na	na	8.00	EA	\$88.49	\$707.92
Bottom Plug for	PVC plug - 6 in.	6	na	2.00	EA	\$61.43	\$122.86
Deep 6" Wells Fill Holes with Concrete	diameter borehole Portland cement grout (Bag, material cost	6	na	207.00	bag	\$19.95	\$4,129.65
	only94 lb. bag)						
Borehole Markers	Borehole location/identification marker (EA, material cost only)	na	na	2.00	EA	\$37.50	\$75.00
Cut Casing At Surface	Exposed casing removal - Calculate Circumference in Linear Feet	6	na	3.00	LF	\$3.26	\$9.78
Drill Rig Time	SCHRAMM T450WS	na	na	24.00	EA	\$480.27	\$11,526.48
Water Truck Time	Water Tanker, 5,000 Gal.	na	na	24.00	EA	\$88.49	\$2,123.76
Bottom Plug GVB-10A - B	PVC plug - 10 in. diameter borehole	10	na	2.00	EA	\$115.29	\$230.58
Fill Holes with Concrete	Portland cement grout (Bag, material cost only94 lb. bag)	na	na	330.00	bag	\$19.95	\$6,583.50
Borehole Marker	Borehole location/identification marker (EA, material cost only)	na	na	2.00	EA	\$37.50	\$75.00
Cut Casing At Surface	Exposed casing removal - Calculate Circumference in Linear Feet	10	na	5.00	LF	\$3.26	\$16.30
Drill Rig Time	SCHRAMM T450WS	na	na	16.00	EA	\$480.27	\$7,684.32
Water Truck Time	Water Tanker, 5,000 Gal.	na	na	16.00	EA	\$88.49	\$1,415.84
Bottom Plug Ex. Holes TR-49 & MR-124	PVC plug - 10 in. diameter borehole	10	na	3.00	EA	\$115.29	\$345.87
Fill Holes with Concrete	Portland cement grout (Bag, material cost only94 lb. bag)	na	na	1,065.00	bag	\$19.95	\$21,246.75
Borehole Marker	Borehole location/identification marker (EA, material cost only)	na	na	3.00	EA	\$37.50	\$112.50

alculate		na	8.00	LI	\$3.26	\$26.08
t						
HRAMM T450WS	na	na	48.00	EA	\$480.27	\$23,052.96
ter Tanker, 5,000 Gal.	na	na	48.00	EA	\$88.49	\$4,247.52
t H	umference in Linear RAMM T450WS	Image:	RAMM T450WS na na	Image:	Image:	RAMM T450WSnana48.00EA\$480.27

 Job Hours:
 177.00
 Total Cost:
 \$132,696.00

REVEGETATION WORK

Task descri	ption:	Reseed OVM - No Phase II I	Release			
te: Bowie No. 1 Mine		Permit Action: RN8		Permit/Job#: C1981038		
<u>PROJECT</u> Task #:	<u>T IDENTIFI(</u> 130	CATION State: Colorado		Abbreviation:	None	
Date:	5/29/2023	County: Delta		Filename:	C038-130	
User:	RDZ					

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-24-24, 10-15-15, 10-20-20	30.00	pound	\$0.35	\$10.50
			Total Fertilizer Materials	¢10.50
			Cost/Acre	\$10.50

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
	Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	0.40	4.59	\$3.70
Indian Ricegrass - Paloma	2.00	6.47	\$22.25
Bitterbrush, Antelope	8.00	2.46	\$156.00
Aster, Smooth	0.40	6.96	\$58.60
Burnett, Small (or Little) - Delar	4.00	5.05	\$10.00
Milk Vetch, Cicer - Lutana	2.00	6.66	\$16.40
Slender Wheatgrass - San Luis	1.60	5.84	\$6.80
Streambank Wheatgrass - Sodar	1.60	5.22	\$9.12
Thickspike Wheatgrass - Critana	1.60	5.66	\$11.00
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Rabbitbrush, Rubber	0.80	11.92	\$51.44

Rose, Wood's	3.00	0.00	\$61.50
Flax, Lewis Blue	1.00	6.63	\$16.50
Snowberry, Western	2.00	3.44	\$127.00
Winter Fat	3.00	7.64	\$61.50
Totals Seed Mix	33.40	83.60	\$624.81

Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,247.99
	Total Seed Application Cost/Acre	\$1,247.99

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hydromulch tackifier, >15 ac. {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Hydromulch, 1 ton/ac. rate {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Total Mulch Materials Cost/Acre				\$814.58

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,210.00
	Total Mulch Application Cost/Acre	\$1,210.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre \$					\$0.00

No. of Acres:	1.8	Cost /Acre:	\$4,064.70
Estimated Failure Rate:	20%	Cost /Acre*:	\$3,897.38
*Selected Replanting Work Items:	SEEDING, MULCHING		
Initial Job Cost: \$7.316.46			

Initial Job Cost:	\$7,316.46
Reseeding Job Cost:	\$1,403.06
Total Job Cost:	\$8,720
Job Hours:	119.00

REVEGETATION WORK

Site: Bowie No. 1 Mine		ne Permit Action: RN8		Permit/Job	Permit/Job#: C198103	
<u>PROJECT</u>	<u>IDENTIFI(</u>	CATION				
Task #:	130A	State: C	olorado	Abbreviation:	None	
Date:	5/29/2023	County: D	elta	Filename:	C038-130A	
User:	RDZ					

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-24-24, 10-15-15, 10-20-20	30.00	pound	\$0.35	\$10.50
			Total Fertilizer Materials	
			Cost/Acre	\$10.50

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
	Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	0.40	4.59	\$3.70
Indian Ricegrass - Paloma	2.00	6.47	\$22.25
Bitterbrush, Antelope	8.00	2.46	\$156.00
Aster, Smooth	0.40	6.96	\$58.60
Burnett, Small (or Little) - Delar	4.00	5.05	\$10.00
Milk Vetch, Cicer - Lutana	2.00	6.66	\$16.40
Slender Wheatgrass - San Luis	1.60	5.84	\$6.80
Streambank Wheatgrass - Sodar	1.60	5.22	\$9.12
Thickspike Wheatgrass - Critana	1.60	5.66	\$11.00
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Rabbitbrush, Rubber	0.80	11.92	\$51.44

Rose, Wood's	3.00	0.00	\$61.50
Flax, Lewis Blue	1.00	6.63	\$16.50
Snowberry, Western	2.00	3.44	\$127.00
Winter Fat	3.00	7.64	\$61.50
Totals Seed Mix	33.40	83.60	\$624.81

Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,247.99
	Total Seed Application Cost/Acre	\$1,247.99

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hydromulch tackifier, >15 ac. {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Hydromulch, 1 ton/ac. rate {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Total Mulch Materials Cost/Acre				\$814.58

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,210.00
	Total Mulch Application Cost/Acre	\$1,210.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre \$0.00				\$0.00	

JOB TIME AND COST

	No. of Acres:	57.82	Cost /Acre:	\$4,064.70	
Estimated Failure Rate:		20%	Cost /Acre*:	\$3,897.38	
*Selected Replanting Work Items:		SEEDING,MULCHING			
	\$225 020 05				
Initial Job Cost:	\$235,020.95				
Reseeding Job Cost:	\$45,069.30				
	\$300 000				

 Total Job Cost:
 \$280,090

 Job Hours:
 11.00

REVEGETATION WORK

Task description:		Reseed OVWM - Phase II Re	eleased		
Site:	Bowie No. 1 Mine	Permit Action:	RN8	Permit/Job	o#: <u>C1981038</u>
<u>P</u>	ROJECT IDENT	FICATION			
	Task #: 131	State: Colorado		Abbreviation:	None
	Date: 5/29/20	23 County: Delta		Filename:	C038-131

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-24-24, 10-15-15, 10-20-20	30.00	pound	\$0.35	\$10.50
			Total Fertilizer Materials	
			Cost/Acre	\$10.50

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
	Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	0.40	4.59	\$3.70
Indian Ricegrass - Paloma	2.00	6.47	\$22.25
Bitterbrush, Antelope	8.00	2.46	\$156.00
Aster, Smooth	0.40	6.96	\$58.60
Burnett, Small (or Little) - Delar	4.00	5.05	\$10.00
Milk Vetch, Cicer - Lutana	2.00	6.66	\$16.40
Slender Wheatgrass - San Luis	1.60	5.84	\$6.80
Streambank Wheatgrass - Sodar	1.60	5.22	\$9.12
Thickspike Wheatgrass - Critana	1.60	5.66	\$11.00
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Rabbitbrush, Rubber	0.80	11.92	\$51.44

Rose, Wood's	3.00	0.00	\$61.50
Flax, Lewis Blue	1.00	6.63	\$16.50
Snowberry, Western	2.00	3.44	\$127.00
Winter Fat	3.00	7.64	\$61.50
Totals Seed Mix	33.40	83.60	\$624.81

Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,247.99
	Total Seed Application Cost/Acre	\$1,247.99

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hydromulch tackifier, <15 ac. {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Hydromulch, 1 ton/ac. rate {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Total Mulch Materials Cost/Acre				\$814.58

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,210.00
	Total Mulch Application Cost/Acre	\$1,210.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre			\$0.00		

No. of Acres:	0.79	Cost /Acre:	\$4,064.70	
Estimated Failure Rate:	20%	Cost /Acre*:	\$3,897.38	_
*Selected Replanting Work Items:	SEEDING, MULCHING			_
Initial Job Cost: \$3,211.11				
D 1. L1 C + #617.70				

\$3,411.11
\$615.79
\$3,827
26.00

REVEGETATION WORK

Task description:		Reseed OVWM - NoPhase II	[Release		
Site: Bowie No. 1 Mine		Permit Action:	RN8	Permit/Job	#: <u>C1981038</u>
PROJECT	IDENTIFIC	CATION			
Task #:	131A	State: Colorado		Abbreviation:	None
Date:	5/29/2023	County: Delta		Filename:	C038-131A
User:	RDZ				

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-24-24, 10-15-15, 10-20-20	30.00	pound	\$0.35	\$10.50
			Total Fertilizer Materials Cost/Acre	\$10.50

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
	Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	0.40	4.59	\$3.70
Indian Ricegrass - Paloma	2.00	6.47	\$22.25
Bitterbrush, Antelope	8.00	2.46	\$156.00
Aster, Smooth	0.40	6.96	\$58.60
Burnett, Small (or Little) - Delar	4.00	5.05	\$10.00
Milk Vetch, Cicer - Lutana	2.00	6.66	\$16.40
Slender Wheatgrass - San Luis	1.60	5.84	\$6.80
Streambank Wheatgrass - Sodar	1.60	5.22	\$9.12
Thickspike Wheatgrass - Critana	1.60	5.66	\$11.00
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Rabbitbrush, Rubber	0.80	11.92	\$51.44

Rose, Wood's	3.00	0.00	\$61.50
Flax, Lewis Blue	1.00	6.63	\$16.50
Snowberry, Western	2.00	3.44	\$127.00
Winter Fat	3.00	7.64	\$61.50
Totals Seed Mix	33.40	83.60	\$624.81

Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,247.99
	Total Seed Application Cost/Acre	\$1,247.99

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hydromulch tackifier, <15 ac. {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Hydromulch, 1 ton/ac. rate {Materials Only}	1.00	ACRE	\$407.29	\$407.29
Total Mulch Materials Cost/Acre				\$814.58

Application

Description		Cost /Acre
Hydromulching (MEANS 32 92 19.13 1100)		\$1,210.00
	Total Mulch Application Cost/Acre	\$1,210.00

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre \$0.00					

No. of Acres:	4.5	Cost /Acre:	\$4,064.70
Estimated Failure Rate:	20%	Cost /Acre*:	\$3,897.38
*Selected Replanting Work Items:	SEEDING, MULCHING		
Initial Job Cost: \$18 201 15			

\$18,291.15
\$3,507.64
\$21,799
9.00

DEMOLITION WORK

Т	ask description:	East Mine	Crushing and So	creening Level		
Site: _]	Bowie No. 1 Mine		Permit Action:	RN8	Permit/.	Job#: <u>C1981038</u>
<u>PROJEC</u>	T IDENTIFICATIO	<u>N</u>				
Task #:	137	State:	Colorado		Abbreviation:	None
Date:	5/29/2023	County:	Delta		Filename:	C038-137
User:	RDZ					
	Agency or organiza	tion name:	DRMS			

Location adjustment: 98.20 %

UNIT COSTS

Structure or Item **Demolition Menu** Unit **Total Cost** Dimensions Quantity Unit Selection Description Cost Guard Shack Floor 120 sf Demo. and on-site 120.00 SF \$183.84 \$1.53 disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul Fencing, chain link, Guard Shack Fence 118 lf 118.00 LF \$3.08 \$363.44 including posts and fabric - 8 ft. to 10 ft. high Culvert Removal 18 115 lf Pipe, corrugated metal 115.00 LF \$5.90 \$678.73 inch (CMP) - 18 in. diameter pipe Pipe, corrugated metal Culvert Removal 24 100 lf 100.00 LF \$7.68 \$767.80 (CMP) - 24 in. diameter inch pipe Culvert Removal 48 125 lf Pipe, corrugated metal LF \$2,220.13 125.00 \$17.76 (CMP) - 48 in. diameter inch pipe

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	40.00	(unadjusted):	\$4,213.94	location):	\$4,138.09

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Mo	bilize/Demobilize	e Equipment fo	or Initial l	Reclamation		
e: Bowie No. 1 Mi	ne	Permit	Action: RN8		·	Permit/Job#: <u>C</u>	1981038
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: 146 Date: 5/29/ User: RDZ			olorado elta			eviation: None ilename: C038	
		name: DRMS					
EQUIPMENT TH	RANSPOR	<u>T RIG COST</u>					
					Shift ba Cost Data Sou		
Truck	Fractor Desc	ription: GENE	RIC ON-HIGH	WAY TR		OR, 6X4, DIESEI	
Truck	Trailer Desc	ription: G		DING GO		ROP DECK EQU	IPMENT
Cost Breakdown:							
Available Rig Ca	pacities	0-25 Tons	26-50 Tons	51	+ Tons		
Ownership (\$15.25	\$23.06	\$	537.58		
Operating (Cost/Hour:	\$25.26	\$30.83	\$	51.41		
Operator (Cost/Hour:	\$27.71	\$27.71	\$	527.71		
Helper (Cost/Hour:	\$0.00	\$20.22	\$	520.22		
Total Unit C		\$68.22	\$101.82		136.92		
NON ROADABL	<u>E EQUIPN</u>	<u>IENT:</u>					
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
1	(TONS)		t		fleet		
Cat D10T - 10SU	93.31	\$176.41	\$136.92	4	\$1,253.32	\$547.68	\$1,000.00
Cat 773F	49.74	\$113.99	\$101.82	5	\$1,079.05	\$509.10	\$1,250.00
CAT 990H	83.34	\$72.43	\$136.92	1	\$209.35	\$136.92	\$250.00
Water Tanker, 5,000 Gal.	15.00	\$37.19	\$68.22	2	\$210.82	\$136.44	\$500.00
CAT 14M	23.57	\$114.80	\$68.22	1	\$183.02	\$68.22	\$250.00
Cat 637G w/push- pull	59.59	\$287.19	\$136.92	2	\$848.22	\$273.84	\$500.00
CAT 815F	22.88	\$110.46	\$68.22	1	\$178.68	\$68.22	\$250.00
ATLAS COPCO ROC D3-01,3.0 in.	0.00	\$112.03	\$68.22	2	\$360.50	\$136.44	\$500.00
Cat 336D L 10'-6" Stick	32.23	\$83.53	\$101.82	1	\$185.35	\$101.82	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00

Subtotals: \$4,582.78

\$2,046.90

\$5,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/	Fleet Size	Haul Trip	Return Trip
	unit		Cost/hr/ fleet	Cost/hr/ fleet
Flatbed Truck, 6x4, 45K GVW	\$54.51	1	\$54.51	\$54.51
Fuel Tanker, 6x4, 210 HP	\$48.30	1	\$48.30	\$48.30
Lube Truck, 6x4, 250 HP	\$48.30	1	\$48.30	\$48.30
Light Duty Pickup, 4x4, 1 T.	\$24.30	1	\$24.30	\$24.30
Crew				
		Subtotals:	\$175.41	\$175.41

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 90.00 35.00	miles mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$44,095.50	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$902.11	

Transportation Cycle Time:

Haul Time (Hours): Return Time (Hours): Loading Time (Hours):	Non- Roadable Equipment 2.57 2.57 0.00	Roadable Equipment 2.57 2.57 NA
Unloading Time (Hours):	0.00	NA NA
Subtotals:	5.14	5.14

JOB TIME AND COST

Total job time: 10.29 Hours

Total job cost: \$44,998

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Bowie No. 1 N	Aine	Permit	Action: RN8		Pe	rmit/Job	o#: <u>C19</u>	981038
PROJECT IDE	NTIFICATI	<u>ON</u>						
Task #: 14	7	State: Co	olorado		Abbrevi	iation:	None	
Date: 5/3	30/2023	County: De	elta		File	name:	C038-1	147
User: RI	DZ							
Agency	or organization	n name: DRMS						
EQUIPMENT	<u> FRANSPOR</u>	<u>T RIG COST</u>						
					Shift basis	s: 1	per day	,
				C	Cost Data Source		RG Data	
	k Tractor Desc	-	RIC ON-HIGHV	400 HP	(2ND HALF, 20	006)		
True	ck Trailer Desc	ription: G	ENERIC FOLD				K EQUII	PMENT
			1	RAILER (25T, 50T, AND	D 100T)		
Cost Breakdown:			1	RAILER (25T, 50T, AND	D 100T)		
	anacities	0-25 Tons				D 100T)		
Available Rig (0-25 Tons \$15.25	26-50 Tons	51+	Tons	<u>0 100T)</u>		
Available Rig (Ownershi	Capacities p Cost/Hour: g Cost/Hour:	0-25 Tons \$15.25 \$25.26		51 +		<u>0 100T)</u>		
Available Rig (Ownershi Operatin	p Cost/Hour:	\$15.25	26-50 Tons \$23.06	51 + \$3 \$5	Tons 7.58	<u>0 100T)</u>		
Available Rig (Ownershi Operatin Operato Helpe	p Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour:	\$15.25 \$25.26	26-50 Tons \$23.06 \$30.83	51 + \$3 \$5 \$2	Tons 7.58 1.41	<u>0 100T)</u>		
Ownershi Operatin Operato Helpe	p Cost/Hour: g Cost/Hour: r Cost/Hour:	\$15.25 \$25.26 \$27.71	26-50 Tons \$23.06 \$30.83 \$27.71	51 + \$3 \$5 \$2 \$2 \$2	Tons 7.58 1.41 7.71	<u>0 100T)</u>		
Available Rig (Ownershi Operatin Operato Helpe Total Un	p Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour:	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	51 + \$3 \$5 \$2 \$2 \$2	Tons 7.58 1.41 7.71 0.22	<u>0 100T)</u>		
Available Rig (Ownershi Operatin Operato Helpe Total Un	p Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour:	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	51 + \$3 \$5 \$2 \$2 \$2	Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip	Return		DOT Permit
Available Rig (Ownershi Operatin Operato Helpe Total Un	p Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour: BLE EQUIPN Weight/ Unit	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT:	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni	51+ \$3 \$5 \$2 \$2 \$13	Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/			DOT Permit Cost/ fleet
Available Rig (Ownershi Operatin Operato Helpe Total Un NON ROADAI Machine Description Cat 336D L 10'-6	p Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour: BLE EQUIP Weight/ Unit (TONS)	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig	51+ \$3 \$5 \$2 \$2 \$1 \$1 5	Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet	Return		
Available Rig (Ownershi Operatin Operato Helpe Total Un NON ROADAI Machine Description	p Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour: BLE EQUIP Weight/ Unit (TONS)	\$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t \$101.82	51+ \$3 \$5 \$2 \$2 \$13 Fleet Size	Tons 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet	Return 7 Cost/hr/ \$101.82		Cost/ fleet

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 6x4, 45K GVW	\$54.51	1	\$54.51	\$54.51
Fuel Tanker, 6x4, 210 HP	\$48.30	1	\$48.30	\$48.30
Lube Truck, 6x4, 250 HP	\$48.30	1	\$48.30	\$48.30
Light Duty Pickup, 4x4, 1 T. Crew	\$24.30	1	\$24.30	\$24.30
		Subtotals:	\$175.41	\$175.41

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 90.00 35.00	miles mph
Total Non-Roadable Mob/Demob Cost *	\$1,976.87	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$902.11	

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	2.57	2.57
Return Time (Hours):	2.57	2.57
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	5.14	5.14

JOB TIME AND COST

Total job time: 10.29 Hours

Total job cost: \$2,879

EQUIPMENT MOBILIZATION/DEMOBILIZATION

1 a	sk descript	non:	WIUD	oilize/Demobilize	Equipment io		liiuvai			
e: _]	Bowie No.	. 1 Mine		Permit	Action: RN8		1	Permit/Jo	b#: <u>C1</u>	981038
<u>PR</u>	OJECT I	DENTIFI	<u>CATI(</u>	<u>DN</u>						
	Task #:	148		State: Co	olorado		Abbre	eviation:	None	
	Date:	5/30/2023		County: De	elta		Fi	ilename:	C038-	-148
	User:	RDZ								
	Age	ncy or organ	ization	name: DRMS						
EQ	<u>UIPMEN</u>	IT TRANS	SPOR1	<u>r RIG COST</u>						
							Shift ba		1 per day	
						(Cost Data Sour	rce: C	CRG Da	ta
	Т	Truck Tracto	r Descri	iption: GENE	RIC ON-HIGH		JCK TRACTO (2ND HALF,		DIESEL	POWERED,
						400 HP	IZIND HALF.	20001		
		Fruck Traile	r Descri	intion: G	ENERIC FOLD			,	K EOU	PMENT
	r	Fruck Traile	r Descri	iption: G	ENERIC FOLD	ING GOC	SENECK, DF	ROP DEC		IPMENT
~			r Descri	iption: G		ING GOC		ROP DEC		IPMENT
Cost	t Breakdov		r Descri	iption: G		ING GOC	SENECK, DF	ROP DEC		PMENT
	t Breakdov vailable R	<u>wn:</u> ig Capacitie	es	iption: G 		ING GOC TRAILER 51+	OSENECK, DF (25T, 50T, AN - Tons	ROP DEC		PMENT
	<u>t Breakdov</u> v ailable R Owner	<u>vn:</u> ig Capacitie rship Cost/H	es lour:	0-25 Tons \$15.25	7 26-50 Tons \$23.06	ING GOC TRAILER 51+	OSENECK, DF (25T, 50T, AN - Tons 37.58	ROP DEC		PMENT
	t Breakdow v ailable R Owner Opera	<u>vn:</u> ig Capacitic rship Cost/H ating Cost/H	es four: four:	0-25 Tons \$15.25 \$25.26	26-50 Tons \$23.06 \$30.83	ING GOC TRAILER 51- \$3 \$4	DSENECK, DF (25T, 50T, AN - Tons 37.58 51.41	ROP DEC		PMENT
	t Breakdov vailable R Owner Opera Ope	<u>wn:</u> ig Capacitic rship Cost/H ating Cost/H rator Cost/H	es our: our: our:	0-25 Tons \$15.25 \$25.26 \$27.71	26-50 Tons \$23.06 \$30.83 \$27.71	ING GOC TRAILER 51- \$3 \$5 \$2	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71	ROP DEC		PMENT
	t Breakdov vailable R Owner Opera Ope Ha	<u>wn:</u> ig Capacitic rship Cost/H ating Cost/H rator Cost/H elper Cost/H	es four: four: four: four:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	ING GOC TRAILER 51- \$3 \$5 \$2 \$2 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71 20.22	ROP DEC		PMENT
	t Breakdov vailable R Owner Opera Ope Ha	<u>wn:</u> ig Capacitic rship Cost/H ating Cost/H rator Cost/H	es four: four: four: four:	0-25 Tons \$15.25 \$25.26 \$27.71	26-50 Tons \$23.06 \$30.83 \$27.71	ING GOC TRAILER 51- \$3 \$5 \$2 \$2 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71	ROP DEC		PMENT
	t Breakdov vailable R Owner Opera Ope Ho Total	<u>wn:</u> rship Cost/H ating Cost/H rator Cost/H elper Cost/H Unit Cost/H	es our: our: our: our: our: our:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	ING GOC TRAILER 51- \$3 \$5 \$2 \$2 \$2 \$2	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71 20.22	ROP DEC		PMENT
	t Breakdov vailable R Owner Opera Ope Ha Total N ROAD	wn: ig Capacitie rship Cost/H ating Cost/H rator Cost/H Unit Cost/H DABLE EQ	es four: four: four: four: four: four: four:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 ENT:	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82	ING GOC TRAILER 51- \$3 \$2 \$2 \$2 \$2 \$1 \$1	SENECK, DF (25T, 50T, A) - Tons 37.58 51.41 27.71 20.22 36.92	ROP DEC ND 100T)		
	t Breakdov vailable R Owner Oper Ope Ho Total N ROAD achine	vn: ig Capacitie rship Cost/H ating Cost/H rator Cost/H elper Cost/H Unit Cost/H DABLE EQ Wei	es cour: cou	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 ENT: Owner ship	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig	ING GOC TRAILER	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71 20.22 36.92 Haul Trip	ROP DEC ND 100T)	Trip	DOT Permit
	t Breakdov vailable R Owner Opera Ope Ha Total N ROAD	<u>vn:</u> ig Capacitic rship Cost/H ating Cost/H elper Cost/H Unit Cost/H DABLE EQ Wei Uni	es cour: cou	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 ENT:	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni	ING GOC TRAILER 51- \$3 \$2 \$2 \$2 \$2 \$1 \$1	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71 20.22 36.92	ROP DEC ND 100T)	Trip	
	t Breakdow vailable R Owner Opera Ope Ha Total N ROAD achine escription	ig Capacitie rship Cost/H ating Cost/H rator Cost/H elper Cost/H Unit Cost/H DABLE EQ Wei Uni (TC	es cour: cou	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 UENT: Owner ship Cost/hr/ unit	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t	ING GOC TRAILER	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71 20.22 36.92 Haul Trip Cost/hr/ fleet	ROP DEC ND 100T) Return Cost/hr	Trip // fleet	DOT Permit Cost/ fleet
Au NO M De Ca	t Breakdov vailable R Owner Oper Ope Ho Total N ROAD achine	ig Capacitic rship Cost/H ating Cost/H ator Cost/H Unit Cost/H DABLE EQ Wei Uni (TC U 60.0	es our: our: our: our: our: DUIPM ight/ t NS) 1	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 ENT: Owner ship	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni	ING GOC TRAILER	SENECK, DF (25T, 50T, AN - Tons 37.58 51.41 27.71 20.22 36.92	ROP DEC ND 100T)	Trip // fleet	DOT Permit

Subtotals: \$357.69 \$205.14 \$500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$24.30	1	\$24.30	\$24.30
		Subtotals:	\$24.30	\$24.30

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 90.00 35.00	_ miles mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$3,894.55	_ 1
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$124.97	_

Transportation Cycle Time:

Haul Time (Hours): Return Time (Hours): Loading Time (Hours):	Non- Roadable Equipment 2.57 2.57 0.00	Roadable Equipment 2.57 2.57 NA
Unloading Time (Hours):	0.00	NA NA
Subtotals:	5.14	5.14

JOB TIME AND COST

Total job time: **10.29** Hours

Total job cost: **\$4,020**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Bowie No. 1 Mi	ne	Permit	Permit Action: RN8		Permit/Job#: C1981038		
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: 149		State: Co	lorado		Abbre	eviation: None	•
Date: 5/30/	2023	County: De	lta		Fi	lename: C038	3-149
User: RDZ							
Agency or	organization	n name: DRMS					
EQUIPMENT TI	RANSPOR	<u>T RIG COST</u>					
					Shift ba	sis: 1 per da	av
				C	Cost Data Sour	1	
Truck	Fractor Desc	ription: GENE	RIC ON-HIGHV		CK TRACTO (2ND HALF,	OR, 6X4, DIESE	L POWERED,
Truck	Trailer Desc	ription: G		ING GOO	SENECK, DR	ROP DECK EQU	IPMENT
Cost Breakdown:		·	Т	ING GOO TRAILER (SENECK, DR 25T, 50T, AN	ROP DECK EQU	IPMENT
Cost Breakdown: Available Rig Caj	pacities	0-25 Tons	T 26-50 Tons	ING GOO TRAILER (51+	SENECK, DR 25T, 50T, AN Tons	ROP DECK EQU	IPMENT
<u>Cost Breakdown:</u> Available Rig Caj Ownership (pacities Cost/Hour:	0-25 Tons \$15.25	26-50 Tons \$23.06	ING GOO TRAILER (51+ \$3	SENECK, DR 25T, 50T, AN Tons 7.58	ROP DECK EQU	IPMENT
Cost Breakdown: Available Rig Ca Ownership (Operating (pacities Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26	26-50 Tons \$23.06 \$30.83	ING GOO TRAILER (51+ \$3 \$5	SENECK, DR 25T, 50T, AN Tons 7.58 1.41	ROP DECK EQU	IPMENT
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (pacities Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71	26-50 Tons \$23.06 \$30.83 \$27.71	ING GOO TRAILER (51+ \$3 \$5 \$2	SENECK, DR 25T, 50T, AN Tons 7.58 1.41 7.71	ROP DECK EQU	IPMENT
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (Helper (pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	ING GOO TRAILER (51+ \$3 \$5 \$2 \$2 \$2	SENECK, DR 25T, 50T, AN 7.58 1.41 7.71 0.22	ROP DECK EQU	IPMENT
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71	26-50 Tons \$23.06 \$30.83 \$27.71	ING GOO TRAILER (51+ \$3 \$5 \$2 \$2 \$2	SENECK, DR 25T, 50T, AN Tons 7.58 1.41 7.71	ROP DECK EQU	IPMENT
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (Helper (pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	ING GOO TRAILER (51+ \$3 \$5 \$2 \$2 \$2	SENECK, DR 25T, 50T, AN 7.58 1.41 7.71 0.22	ROP DECK EQU	
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (Helper (Total Unit (pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22	26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22	ING GOO TRAILER (51+ \$3 \$5 \$2 \$2 \$2	SENECK, DR 25T, 50T, AN 7.58 1.41 7.71 0.22	Return Trip	DOT Permit
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (Helper (Total Unit (NON ROADABL	pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: E EQUIPN Weight/ Unit	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT:	T 26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni	ING GOO TRAILER (51+ \$3 \$5 \$2 \$2 \$13	SENECK, DR 25T, 50T, AN 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/	ROP DECK EQU ND 100T)	DOT Permit Cost/ fleet
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (Helper (Total Unit (NON ROADABL Machine Description	pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: E EQUIPN Weight/ Unit (TONS)	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship Cost/hr/ unit	T 26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni t	ING GOO TRAILER (51+ \$3 \$5 \$2 \$2 \$1 \$1 Fleet Size	SENECK, DR 25T, 50T, AN 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/ fleet	ROP DECK EQU ND 100T) Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cost Breakdown: Available Rig Ca Ownership (Operating (Operator (Helper (Total Unit (NON ROADABL Machine	pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: E EQUIPN Weight/ Unit	0-25 Tons \$15.25 \$25.26 \$27.71 \$0.00 \$68.22 MENT: Owner ship	T 26-50 Tons \$23.06 \$30.83 \$27.71 \$20.22 \$101.82 Haul Rig Cost/hr/uni	ING GOO TRAILER (51+ \$3 \$5 \$2 \$2 \$13 Fleet	SENECK, DR 25T, 50T, AN 7.58 1.41 7.71 0.22 36.92 Haul Trip Cost/hr/	Return Trip	DOT Permit

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$24.30	10	\$243.00	\$243.00
		Subtotals:	\$243.00	\$243.00

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 90.00 35.00	_ miles mph
Total Non-Roadable Mob/Demob Cost *	\$16,302.06	_
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$1,249.71	_

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	2.57	2.57
Return Time (Hours):	2.57	2.57
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	5.14	5.14

JOB TIME AND COST

Total job time: **10.29** Hours

Total job cost: \$17,552

SITE MAINTENANCE

,	Task description:	YEARLY SITE MNTNC			
Site:	Bowie No. 1 Mine	Permit Action:	RN8	Permit/.	Job#: <u>C1981038</u>
PROJE	CT IDENTIFICATION	<u>N</u>			
Task #:	158	State: Colorado		Abbreviation:	None
Date:	5/30/2023	County: Delta		Filename:	C038-158
User:	RDZ				
	Agency or organizat	ion name: DRMS			
UNIT CO	<u>OSTS</u>				

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
D3 Dozer	6.00	Cat D3K LGP - 3P	60.00	EA	\$106.51	\$6,390.60
CAT Motor Grader	2.00	CAT 14M	20.00	EA	\$222.75	\$4,455.00
POND CLEANING	5.00	USER PROVIDED ITEM	5.00	EA	\$17,500.00	\$87,500.00

Job Hours: 0.00

Total Cost: \$98,345.60

BOREHOLE SEALING WORK

,	Task description:	Seal Loadout Wells			
Site:	Bowie No. 1 Mine	Permit Action:	RN8	Permit/J	ob#: <u>C1981038</u>
<u>PROJE</u>	CT IDENTIFICATION	<u>v</u>			
Task #: Date: User:	5/30/2023	State: Colorado County: Delta		Abbreviation: Filename:	None C038-201
	Agency or organizat	ion name: DRMS			

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Bottom plug for 6" wells	PVC plug - 6 in. diameter borehole	6	na	1.00	EA	\$61.43	\$61.43
Fiil Holes with Concrete	Portland cement grout (Bag, material cost only94 lb. bag)	6	na	19.60	bag	\$19.95	\$391.02
Borehole Marker	Borehole location/identification marker (EA, material cost only)	na	na	1.00	EA	\$37.50	\$37.50
Cut Casing at Surface	Exposed casing removal - Calculate Circumference in Linear Feet	na	na	1.00	LF	\$3.26	\$3.26
Drill Rig Time	SCHRAMM T450WS	na	na	12.00	EA	\$480.27	\$5,763.24
Water Truck Time	Water Tanker, 5,000 Gal.	na	na	12.00	EA	\$88.49	\$1,061.88

 Job Hours:
 177.00
 Total Cost:
 \$7,318.00

DEMOLITION WORK

sk description:	Demolish and	Remove all S	tructures at T	Frain Loadout		
owie No. 1 Mine	Pe	rmit Action:	RN8	Permit/J	lob#:	C1981038
[IDENTIFICATI	<u>ON</u>					
202	State: C	Colorado		Abbreviation:	Non	e
5/30/2023	County: I	Delta		Filename:	C03	8-202
RDZ						
(owie No. 1 Mine <u> IDENTIFICATI(202 5/30/2023 </u>	owie No. 1 Mine Per <u>C IDENTIFICATION</u> 202 202 State: <u>C</u> 5/30/2023 County: <u>I</u>	owie No. 1 Mine Permit Action: TIDENTIFICATION 202 5/30/2023 State: Colorado County: Delta	owie No. 1 Mine Permit Action: RN8 CIDENTIFICATION 202 State: Colorado 5/30/2023 County: Delta	owie No. 1 Mine Permit Action: RN8 Permit/J CIDENTIFICATION 202 State: Colorado Abbreviation: 5/30/2023 County: Delta Filename:	owie No. 1 Mine Permit Action: RN8 Permit/Job#: C IDENTIFICATION 202 State: Colorado Abbreviation: Non 5/30/2023 County: Delta Filename: C033

UNIT COSTS

Location adjustment: 98.20 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Truck Dump Superstructure Slab	1200 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	1,200.00	SF	\$2.02	\$2,418.00
Truck Dump Superstructure Footing	170	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	170.00	LF	\$14.51	\$2,466.70
MCC at Truck Dump Superstructure Slab	364 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	364.00	SF	\$2.02	\$733.46
Scrubber Superstructure Footings	10 lf	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	10.00	LF	\$14.51	\$145.10
Tunnel Building Superstructure Slab	1152 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	1,152.00	SF	\$2.02	\$2,321.28
Tunnel Building Superstructure Footings	128 lf	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	128.00	LF	\$14.51	\$1,857.28
Tunnel Building Superstructure Concrete Tunnel	1440 sqft	Demo. and on-site disposal in excavated pit, 12 in. thick - Max. 200 ft. push	1,440.00	SF	\$2.53	\$3,643.20
Truck Scale Superstructure	768 cf	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 200 ft. push	768.00	CF	\$0.22	\$171.26
Truck Scale Superstructure Slab	996 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	996.00	SF	\$2.02	\$2,006.94
Silo Fan Footing	4.5 lf	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	4.50	LF	\$14.51	\$65.30
Silo Buildings Superstructure Slab	256 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	256.00	SF	\$2.02	\$515.84

Coal Storage Silos Superstructure Slab	11545 sqft	Floor, concrete, demolition only, average reinforcing - 12 in. thick	11,545.00	SF	\$2.23	\$25,745.35
Coal Storage Silos Superstructure Footings	89 cy	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	89.00	LF	\$14.51	\$1,291.39
MCC at Silo Superstructure Slab	504 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	504.00	SF	\$2.02	\$1,015.56
Substation Superstructure Slab	291 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	291.00	SF	\$2.02	\$586.37
Substation Superstructure Footing	168 lf	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	168.00	LF	\$14.51	\$2,437.68
Shop Building Superstructure	150000 cf	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 200 ft. push	150,000.00	CF	\$0.22	\$33,450.00
Shop Building Superstructure Slab	5420 sqft	Demo. and on-site disposal in existing pit, 10 in. thick - Max. 200 ft. push	5,420.00	SF	\$1.94	\$10,487.70
Shop Building Superstructure Footings	300 lf	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	300.00	LF	\$14.51	\$4,353.00
Pump House at Silo Superstructure Slab	1164 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	1,164.00	SF	\$2.02	\$2,345.46
MCC at Loadout Superstructure Slab	672 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	672.00	SF	\$2.02	\$1,354.08
Misc Fencing	2800 lf	Fencing, chain link, including posts and fabric - 8 ft. to 10 ft. high	2,800.00	LF	\$3.08	\$8,624.00
Train Loadout Superstructure Slab	900 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	900.00	SF	\$2.02	\$1,813.50
Train Loadout Superstructure Footings	120 lf	Demo. and on-site disposal in excavated pit, 2.0 ft. x 3 ft Max. 200 ft. push	120.00	LF	\$14.51	\$1,741.20
Train Loadout Superstructure Fence	120 lf	Fencing, chain link, including posts and fabric - 8 ft. to 10 ft. high	120.00	LF	\$3.08	\$369.60
Pump House at Loadout Superstructure	16280 cf	Bldg. (MN) demo./on- site disposal in excavated pit - Max.	16,280.00	CF	\$0.24	\$3,972.32

D W	010	200 ft. push	010.00		**	
Pump House at Loadout Slab	813 sqft	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	813.00	SF	\$2.02	\$1,638.20
Pump House at Loadout Walls	1944 sqft	Demo. and on-site disposal in excavated pit, 12 in. thick - Max. 200 ft. push	1,944.00	SF	\$2.53	\$4,918.32
Railroad Track	7088 lf	Railroad track - Ties and track	7,088.00	LF	\$9.98	\$70,738.24
Railroad Track Ballast	1590 cy	Railroad track - Ballast	1,590.00	CY	\$4.90	\$7,791.00
Bridge Reclamation (Adjusted Cyprus Estimate)	1 bridge	USER PROVIDED ITEM	1.00	ea	\$156,669.00	\$156,669.00
500 Gallon Fuel Tank (2)	500 gal	Hazardous waste removal - Drum solids/liquids, per drum, (7+ drum job)	2.00	DRUM	\$339.67	\$679.34
500 Gallon Fuel Tank (2) Remove Sludge	500 gal	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	2.00	EA	\$245.00	\$490.00
500 Gallon Fuel Tank (2) Disposal of Sludge	100 gal	Dispose of tank sludge off-site - Average	100.00	GAL	\$6.80	\$680.00
500 Gallon Fuel Tank (2) Add CO2 for Tank Cleaning	15 lbs	Insert dry ice (CO2) into tank to produce inert gas - 1.5 lbs./100 gal.	15.00	LB	\$1.99	\$29.85
500 Gallon Fuel Tank (2) Haul Tanks to Certified Dump	2 tanks	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	2.00	EA	\$760.00	\$1,520.00
Concrete Disposal Charges	1911 CY	Loading and 5 mile haul, salvage allowed - Concrete frame structures	1,911.00	СҮ	\$14.15	\$27,040.65
Culvert Removal - 24" Culvert	24 inches	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	934.00	LF	\$7.68	\$7,171.25
Culvert Removal - 36" Culvert	36 inches	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	36.00	LF	\$12.24	\$440.71
Culvert Removal - 60" Culvert	60 inches	Pipe, corrugated metal (CMP) - 60 in. diameter pipe	627.00	LF	\$23.89	\$14,978.40
Single post power poles	22 poles	Utility Poles, Wood 35' - 45' high (each pole)	22.00	EA	\$297.50	\$6,545.00
Single post cross members	22 Poles	Utility Pole Cross Arm	22.00	EA	\$106.00	\$2,332.00
Disposal of Utility Pole and Harware Surplus Material	4,400 ft Long	Disposal of utility pole and hardware surplus material	4,400.00	LF	\$0.02	\$88.00
Disposal of Utility Pole Cross Arms and Hardware Surplus Material	4,400 ft Long	Disposal of utility pole cross arms and hardware surplus material	4,400.00	LF	\$0.01	\$44.00
Metering Substation	3ft * 3ft *3ft	Bldg. (SN) demo./on-	27.00	CF	\$0.22	\$5.89

Demo Worksheet Cont'd

		site disposal in existing pit or cut - Max. 10,000 ft. haul				
Metering point concrete slab	4ft * 8ft * 4in	Floor, concrete, demolition only, average reinforcing - 4 in. thick	32.00	SF	\$0.74	\$23.68

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	175.00	(unadjusted):	\$419,755.10	location):	\$412,199.51

TRUCK/LOADER TEAM WORK

Site: Bowie No. 1 Mine	te: Bowie No. 1 Mine Permit Action:			n: RN8		Permit/Job#: C1	981038
PROJECT IDEN	TIFICATION	[
			olorad	do	At	breviation: No	
Date: 5/30/20 User: RDZ)23	County: D	elta			Filename: C0	38-204
Agency or o	organization nar	ne: DRMS	5				
HOURLY EQUIP	MENT COS	<u>r</u>			Shift bas	sis: <u>1 per day</u>	
			E	quipment Descri	otion		
Tr	uck Loader Tea	m -Truck:	Cat 7	73F			
	rt Equipment -I	-Loader:		990H 010T - 10SU			
Suppo	1 1	ump Area:		D101 - 10SU			
Road Ma	intenance –Mot			14M			
	-Wa	ter Truck:	Wate	er Tanker, 5,000 (Gal.		
Cost Breakdown:	Truck/Lo	ader Team		Support F	Equipment	Maintanan	ce Equipment
<u>Cost Dieakuowii</u> .	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		65	100	100	50	50
Ownership cost/hour:	\$113.99	\$72		\$153.67	\$153.67	\$114.80	\$37.19
Operating cost/hour:	\$95.31	\$72		\$166.94	\$166.94	\$39.70	\$25.65
%Utilization-riper:	NA	ψ/1	0	NA	NA	NA	\$25.05 NA
Ripper own. cost/hour:	NA	\$0	.00	\$0.00	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0	.00	\$0.00	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$33.34	\$40	.71	\$41.30	\$41.30	\$28.56	\$0.00
Unit Subtotals:	\$242.64	\$184	.45	\$361.91	\$361.91	\$183.05	\$62.84
Number of Units:	4		1	1	1	1	1
Group Subtotals:	Work:	\$1,155.01		Support:	\$723.82	Maint:	\$245.89
Total work team cost	/hour: <u>\$2,124.</u>	72					
MATERIAL QUA	<u>NTITIES</u>						
Initial volume:	1,613		CCY	Swell	factor: <u>1.370</u>		
Loose volume:	2,21	01	LCY				
	rce of estimated			on Estimate			
Source of	of estimated swe		Divisi \$0.00	on Estimate			
	1		\$0.00				
HOURLY PROI	DUCTION						
Truck Capacity:							
Truck Payload (weig							
Material we				Pounds/LCY			
Descrip Rated Pay		rovided		Pounds			
Rated Pau							

Struck Volume:		LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:	46.50	LCY				
Final	Truck Volume	Based on Number	of Loader Passes:	43.88	LCY	
Loading Tool Capacity						
Rated Capacity:	11.250	LCY (heaped		ket Size Class: <u>N</u>	A	
Bucket Fill Factor:	0.975			ates to 1/8" (95-100	0%)0975	_
Adjusted Capacity:	10.969	LCY			//0) 0.975	_
Job Condition Corrections	:		Site Altitude (ft.):	7100 feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE			
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:		r of Loading Tool I	Passes Required to	Fill Truck:	4 1	passes
Excavators and Front Shove	ls:					
Machine Cycle Time v Selected Value	s. Job Condition					
-	vs. Job Condition within this Basic	c Rating: NA				
Selected Value	vs. Job Condition within this Basic Material Descri	c Rating: NA				
Selected Value Track Loaders –	vs. Job Condition within this Basio Material Descri	c Rating: NA		 Dump:0.100)	
Selected Value Track Loaders – Cycle Time Elements (min.):	s. Job Condition within this Basic Material Descri : M	c Rating: NA iption: Ianeuver: NA	Гіme (load, dump, 1) .600 min	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA	s. Job Condition within this Basid Material Descri : M - Unadjusted Ba	c Rating: NA iption: Ianeuver: NA asic Loader Cycle T				utes
Selected Value v Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders -	rs. Job Condition within this Basic Material Descri Material Descri Unadjusted Ba	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7	00	naneuver): 0	.600 min	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	s. Job Condition within this Basid Material Description Material Description Material 3/4" Conveyor or d	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 <u>to 6" diameter 0.0</u> dozer piled 10 ft. h	00 high or less 0.01	naneuver): 0 Factor (min.) 0.000 0.010	.600 min Source (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	 Job Condition within this Basic Material Description Material Description Unadjusted Basic Material 3/4" Conveyor or o	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 2 to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks at	00 high or less 0.01	maneuver): 0 Factor (min.) 0.000 0.010 -0.040	.600 min Source (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descri - - - - - - - - - - - - - - - - - - -	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 c to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks ar ration -0.04	00 high or less 0.01	maneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	 Job Condition within this Basic Material Description Material Description Unadjusted Basic Material 3/4" Conveyor or o	c Rating: NA iption: Ianeuver: NA asic Loader Cycle T to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks ar ration -0.04 et 0.00	00 high or less 0.01 nd loaders -0.04	maneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descri - - - - - - - - - - - - - - - - - - -	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 ^c to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks and ration -0.04 et 0.00 Net Cycle T	00 high or less 0.01 nd loaders -0.04 Time Adjustment:	naneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descri - - - - - - - - - - - - - - - - - - -	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 7 to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks ar ration -0.04 et 0.00 Net Cycle T Adjusted Loa	00 high or less 0.01 nd loaders -0.04	maneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes
Selected Value Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition within this Basic Material Descri - - - - - - - - - - - - - - - - - - -	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 7 to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks ar ration -0.04 et 0.00 Net Cycle T Adjusted Loa	00 high or less 0.01 nd loaders -0.04 Time Adjustment: ader Cycle Time:	maneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.530	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	utes
Selected Value - Track Loaders - Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Condition within this Basic Material Descri Material Descri Unadjusted Ba Material 3/4" Conveyor or o Common own Constant open Nominal targe	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 7 to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks ar ration -0.04 et 0.00 Net Cycle T Adjusted Loa	00 high or less 0.01 nd loaders -0.04 Time Adjustment: ader Cycle Time: Time per Truck:	maneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.530	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Selected Value - Track Loaders - Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	rs. Job Condition within this Basic Material Descri- - Unadjusted Ba Material 3/4" Conveyor or o Common own Constant open Nominal targe	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks ar ration -0.04 et 0.00 Net Cycle 7 Adjusted Loa Net Load	00 high or less 0.01 nd loaders -0.04 Time Adjustment: ader Cycle Time: Time per Truck: Adjusted	maneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.530 1.690	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	
Selected Value - Track Loaders - Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time	rs. Job Condition within this Basic Material Descri- - M - Unadjusted Ba Material 3/4" Conveyor or of Common own Constant open Nominal targe	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 2 to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks an ration -0.04 et 0.00 Net Cycle T Adjusted Loa Net Load Minutes	00 high or less 0.01 nd loaders -0.04 Time Adjustment: ader Cycle Time: Time per Truck: Adjusted Adjusted	maneuver):0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.530 1.690 for site altitude:	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	utes — — — — — Minutes — — — Minutes
Selected Value - Track Loaders - Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Cycle Time: Truck Exchange Time Truck Load Time	rs. Job Condition within this Basic Material Descri- - Material Obscri- - Unadjusted Ba Material 3/4" Conveyor or of Conveyor or of Common own Constant oper Nominal targo :: 0.70 :: 0.70 :: 1.690 :: 1.10	c Rating: NA iption: Ianeuver: NA asic Loader Cycle 7 2 to 6" diameter 0.0 dozer piled 10 ft. h nership of trucks an ration -0.04 et 0.00 Net Cycle 7 Adjusted Loa Net Load Minutes Minutes Minutes	00 high or less 0.01 nd loaders -0.04 Time Adjustment: ader Cycle Time: Time per Truck: Adjusted Adjusted Adjusted	maneuver): 0 Factor (min.) 0.000 0.010 -0.040 -0.040 0.000 -0.070 0.530 1.690 for site altitude: for site altitude:	.600 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.700 ninutes 0.700 1.690 1.100	 Minute:

Haul Rou Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
5cg π	(Ft)	Jistanee	Grade (%)	(%)	(%)	(fpm)	Time (min)	
1	21120	.00	0.00	3.00	3.00	2983	7.643	
					Haul Time:	7.643	minutes	
Return Ro	oute:				-			
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	21120	.00	0.00	3.00	3.00	3569	6.131	
				Total Tru	Return Time: ck Cycle Time:	<u>6.131</u> 17.264	minutes	
				Total IIu	ck Cycle Tille.	17.204	Innutes	
Loading Too		1 101 46			A 1° / 1 C '	1 00' '	014.22	
Produ ick Unit Produ		1,101.46	LCY/Hour		Adjusted for j	ob efficiency:	914.22	LCY/Hour
	-	152.48	LCY/Hour		Adjusted for j	ob efficiency:	126.56	_ LCY/Hour
mal No. of Tr	ucks:	7	Truck(s)		Selected Num	ber of Trucks:	4	Truck(s)
			Adjuste	d hourly truc	k team production	on: 506.	.25 LCY/I	Hour
					er team production			
			Adjusted multip	le truck/loade	er team production	on: 506.	.25 LCY/I	Hour
-	ME AN	D COST						
<u>JOB TIN</u>								
JOB TIN Fleet	size:	1	Team(s)	r	Fotal job time:	4.37	Hou	rs

BULLDOZER RIPPING WORK

Task description	n: Rip	Coal Storage/	'Loadout A	rea				
Site: Bowie No. 1	Mine	Perm	nit Action:	RN8	Perr	nit/Job#:	C1981038	
PROJECT I	DENTIFICATI	<u>ON</u>						
Date: 5	05 /30/2023 RDZ	State: _ County: _	Colorado Delta			viation: ename:	None C038-205	
Agen	cy or organization	name: DR	MS					
HOURLY E	QUIPMENT C	OST						
		t D10T - 10SU	J		Horsepower:		574	
Ripper A	Attachment: 3-S	Shank Ripper			Shift Basis:		ber day	_
~ ~					Data Source:	()	CRG)	_
Cost Breakdow	<u>'n:</u>				Utilization %			
	Ownership C			\$153.67	NA			
D	Operating C			\$166.94	100 NA			
	pper Ownership C pper Operating C			\$22.74 \$11.11	NA 100			
	Operator C			\$41.30	NA			
	Total Unit C	ost/Hour:		\$395.76				
	Total Fleet C	ost/Hour:	\$1,5	83.05				
MATERIAL	QUANTITIES		Sel	ected estimating	method: Area			
Alternate Meth			501	eered estimating				
nic: NA		Bank	Volume:	NA	BCY		NA	
rea: 2.00	acres		Pepth (ft):	2.00		53		CY or
	Source of estin	mated quantity	: Map 8	-1				
HOURLY P	RODUCTION	1 2	1					
<u>Seismic:</u>		Seismic Veloc	ity:	NA	feet/secon	d		
Area:			·					
<u>Alca.</u>	Averag	ge Ripping De	pth:	2.87	feet/pass			
	Averag	e Ripping Wi	dth:	8.67	feet/pass			
		e Ripping Leng		200.00	feet/pass			
		age Dozer Spe Maneuver Ti		<u>88.00</u> 0.25	feet/minut minutes/pa			
		tion per unit a		0.23	acres/hour			
Job Condition	Correction Factors	-						
	Jnadjusted Hourly		ion.	0.947	Acres/hr			
(magasica mourry			6,800	feet			
		Site Altitu Altitude A		1.00	(CAT HB)		
		Job Efficier	•	0.83	(1 shift/da	·		
		Net Correcti		0.83	multiplier	-		
		Hourly Unit F Hourly Fleet F		0.79 3.14	Acres/hr Acres/hr			
JOB TIME A	ND COST							
Fleet size:	4	Grader(s)		Total job time	e:0.0	64	Hours	8

BULLDOZER WORK

		-			
Bowie No. 1 Mine	Peri	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIFI	ICATION				
Task #: 206	State:	Colorado		Abbreviation:	None
Date: $\frac{200}{5/30/2023}$	County:	Delta		Filename:	C038-206
User: RDZ	County.	Della		Filename.	0038-200
Agency or organ	nization name: DR	RMS			
HOURLY EQUIPME	ENT COST				
	D10T - 10SU				
Horsepower: 574					
VI	ni-Universal				
	hank ripper		_		
	er day				
Data Source: (CR	(G)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
Ripper op. Cost/Hour:		\$11.11	100		
Operator Cost/Hour:		\$41.30	NA		
Total Fleet Cost/Hour:	\$395.76 \$1,583.05				
MATERIAL QUANT	\$1,583.05				
MATERIAL QUANT Initial Volume: _23,23	\$1,583.05 <u>TITIES</u> 32				
MATERIAL QUANT Initial Volume: 23,2 Swell factor: 1.16	\$1,583.05 TTIES 32 5				
MATERIAL QUANT Initial Volume: 23,2 Swell factor: 1.16	\$1,583.05 <u>TITIES</u> 32				
MATERIAL QUANT Initial Volume: 23,2 Swell factor: 1.16	\$1,583.05 TTIES 32 5 65 LCY	 DI 1, Page 60			
MATERIAL QUANTInitial Volume:23,22Swell factor:1.163Loose volume:27,00	\$1,583.05 TTIES 32 5 65 LCY me:Permit Vo				
MATERIAL QUANT Initial Volume: 23,21 Swell factor: 1.163 Loose volume: 27,00 Source of estimated volur Source of estimated swell	\$1,583.05 ITTIES 32 5 65 LCY me: Permit Volume I factor: CAT Han				
MATERIAL QUANTInitial Volume:23,2:Swell factor:1.16:Loose volume:27,0Source of estimated volur	\$1,583.05 ITTIES 32 5 65 LCY me: Permit Volume I factor: CAT Han				
MATERIAL QUANT Initial Volume: 23,22 Swell factor: 1.16 Loose volume: 27,00 Source of estimated volur Source of estimated swell HOURLY PRODUCT	\$1,583.05 TTIES 32 5 65 LCY me: Permit Vo 1 factor: CAT Han FION				
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0: Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,583.05 ITIES 32 5 65 LCY me: Permit Vo I factor: CAT Han <u>CION</u> 400 feet	dbook			
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,00 Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	\$1,583.05 TTIES 32 5 65 LCY me: Permit Vol CAT Han I factor: Or CAT Han FION 400 feet ction: 497.3 LCY/	dbook			
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0: Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des	\$1,583.05 TTIES 32 5 65 LCY me: Permit Volume 1 factor: CAT Han TION ction: 400 feet 497.3 LCY/ scription: Comparison	dbook	 nbankment 0.9		
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16 Loose volume: 27,0 Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient:	\$1,583.05 TTIES 32 5 65 LCY me: Permit Vold 1 factor: CAT Han EION ction: 400 feet 497.3 LCY/ scription: Compa -5 %	dbook			
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0: Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des	\$1,583.05 TTIES 32 5 65 LCY me: Permit Volume 1 factor: CAT Han TION ction: 400 feet 497.3 LCY/ scription: Comparison	dbook			
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16 Loose volume: 27,0 Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient:	\$1,583.05 TTIES 32 5 65 LCY me: Permit Vold 1 factor: CAT Han EION ction: 400 feet 497.3 LCY/ scription: Compa -5 %	dbook			
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight:	\$1,583.05 TTIES 32 5 65 LCY me: Permit Vold 1 factor: CAT Han CAT Han CAT Han CAT Han Company 400 feet ction: 497.3 LCY/ scription: Company -5 % 7,000 feet 2,900 lbs/LCY	dbook hr 	nbankment 0.9		
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0 Source of estimated volur Source of estimated volur Source of estimated volur Materials consistency des Average push distance: Unadjusted hourly product Materials consistency des Average site altitude: Material weight: Weight description:	\$1,583.05 TTIES 32 5 65 LCY me: Permit Volume 1 factor: CAT Han TION ction: 400 feet ction: 497.3 LCY/ scription: Compa -5 % 7,000 feet 2,900 lbs/LCY Decomposed rock	dbook hr 			
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,583.05 TTIES 32 5 65 LCY me: Permit Vo 1 factor: CAT Han FION ction: 400 feet ction: 497.3 LCY/ scription: Compa -5 % 7,000 feet 2,900 lbs/LCY Decomposed rock Factor Factor	dbook hr cted fill or en - 50% Rock,	nbankment 0.9 50% Earth		
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0 Source of estimated volur Source of estimated volur Source of estimated volur Materials consistency des Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,583.05 TTIES 32 5 65 LCY me: Permit Vol 1 factor: CAT Han TION ction: 400 feet 497.3 LCY/ scription: Compa -5 % 7,000 feet 2,900 lbs/LCY Decomposed rock Factor 0.	dbook hr 			
MATERIAL QUANT Initial Volume: 23,2: Swell factor: 1.16: Loose volume: 27,0 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,583.05TTIES323565 LCYme:<	dbook hr 	nbankment 0.9 50% Earth		

Task # 206

cy: 0.830	(1 SHIFT/DAY)
le: 0.800	(FND-RF)
nt: 1.115	(CAT HB)
le: 1.000	(CAT HB)
ht: 0.793	(CAT HB)
be: 1.000	(PAT)
on: 0.3963	
197.08 LCY/hr	
788.32 LCY/hr	
	le: 0.800 nt: 1.115 le: 1.000 ht: 0.793 pe: 1.000 pn: 0.3963 197.08 LCY/hr

Fleet size:	4 Dozer(s)
Unit cost:	\$2.008/LCY

Total job time:	34.33 Hours
Total job cost:	\$54,351

BULLDOZER WORK

	Grade Railroad	abpai			
Bowie No. 1 Mine	Pe	ermit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENT	IFICATION				
Task #: 207	State	Colorado		Abbreviation:	None
Date: 5/30/202				Filename:	C038-207
User: RDZ				-	
Agency or or	ganization name:	ORMS			
HOURLY EQUIPM	MENT COST				
Basic Machine: 0	Cat D10T - 10SU				
	574				
Blade Type: S	Semi-Universal				
	3-shank ripper				
	1 per day				
Data Source: ((CRG)		_		
Cost Breakdown:		I	Utilization %		
Ownership Cost/Hou	**	\$153.67	NA		
Operating Cost/Hou		\$166.94	100		
Ripper own. Cost/Hou		\$22.74	NA		
Ripper op. Cost/Hou		\$11.11	100		
Operator Cost/Hou		\$41.30	NA		
Total Fleet Cost/Hour:	\$1,583.05				
MATERIAL QUAN					
MATERIAL QUAN Initial Volume: 11	NTITIES 13,504				
MATERIAL QUAN Initial Volume: 11 Swell factor: 1.	NTITIES 13,504 .330				
MATERIAL QUAN Initial Volume: 11 Swell factor: 1.	NTITIES 13,504				
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated volume: 15	NTITIES 13,504 .330 50,960 LCY blume: 1988 C	yprus Estimate			
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15	NTITIES 13,504 .330 50,960 LCY blume: 1988 C	yprus Estimate andbook			
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated sw	NTITIES 13,504 .330 50,960 LCY blume: 1988 C vell factor: CAT H				
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo 50 Source of estimated sw 10 HOURLY PRODU Average push distance	NTITIES 13,504 .330 50,960 LCY blume: 1988 C; vell factor: CAT H; CTION :: 100 feet	andbook			
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated sw HOURLY PRODU	NTITIES 13,504 .330 50,960 LCY blume: 1988 C; vell factor: CAT H; CTION :: 100 feet	andbook			
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo 50 Source of estimated sw 10 HOURLY PRODU Average push distance	NTITIES 13,504 .330 50,960 LCY olume: 1988 C vell factor: CAT H CTION :: 100 feet duction: 1,718.9 L	andbook	 		
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly product Source	NTITIES 13,504 .330 50,960 LCY olume: 1988 C; vell factor: CAT H; CTION :: 100 feet duction: 1,718.9 L; description: Comp	andbook CY/hr	 nbankment 0.9		
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prod Materials consistency of Average push gradient Average push gradient	NTITIES 13,504 .330 50,960 LCY blume: 1988 C; vell factor: CAT H; CTION :: 100 feet duction: 1,718.9 L; description: Comp :: -10 %	andbook CY/hr			
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prod Materials consistency of Average push gradient Average site altitude:	NTITIES 13,504 .330 50,960 LCY blume: 1988 C vell factor: CAT H CTION :: 100 feet duction: 1,718.9 L description: Comp :: -10 %	CY/hr pacted fill or en			
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prod Materials consistency of Average push gradient Average site altitude: Material weight: Weight description: Job Condition Correctification	NTITIES 13,504 .330 50,960 LCY olume: 1988 C vell factor: CAT H CTION :: 100 feet duction: 1,718.9 L description: Comp :: -10 %	CY/hr pacted fill or en	50% Earth		
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated volume: 16 Materials consistency of the stance 16 Average push distance 17 Materials consistency of the stance 16 Average push gradient 16 Average site altitude: 16 Material weight: 17 Weight description: 10 Job Condition Correction 10	NTITIES 13,504 .330 50,960 LCY olume: 1988 C; vell factor: CAT H CTION :: 100 feet duction: 1,718.9 L description: Comp :: -10 % 6,500 feet	CY/hr pacted fill or en 	50% Earth Source (AVG.)		
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Unadjusted hourly prov Materials consistency of Average push gradient Average site altitude: Material weight: Weight description: Job Condition Correcti Operate Material cons	NTITIES 13,504 .330 50,960 LCY olume: 1988 C; vell factor: CAT H CTION :: 100 feet duction: 1,718.9 L description: Comp :: -10 %	CY/hr pacted fill or en k - 50% Rock, 0.750 0.900	50% Earth <u>Source</u> (AVG.) (CAT HB))		
MATERIAL QUAN Initial Volume: 11 Swell factor: 1. Loose volume: 15 Source of estimated vo Source of estimated sw HOURLY PRODU Average push distance Average push distance Unadjusted hourly prod Materials consistency of Average site altitude: Material weight: Weight description: Job Condition Correction Operate Material cons Dozing alternation	NTITIES 13,504 .330 50,960 LCY olume: 1988 C; vell factor: CAT H CTION :: 100 feet duction: 1,718.9 L description: Comp :: -10 %	CY/hr pacted fill or en 	50% Earth Source (AVG.)		

Job efficienc	y: 0.830	(1 SHIFT/DAY)
Spoil pil	e: 0.800	(FND-RF)
Push gradier	nt: 1.225	(CAT HB)
Altitud	e: 1.000	(CAT HB)
Material Weigh	nt: 0.793	(CAT HB)
Blade typ	e: 1.000	(PAT)
Net correctio	n: 0.4354	
Adjusted unit production:	748.41 LCY/hr	
Adjusted fleet production:	2993.64 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.529/LCY

Total job time:	50.43 Hours
Total job cost:	\$79,828

MOTOR GRADER WORK

Task description:	Finish Grade R	ailroad Spur				
Bowie No. 1 Mir	ne Pe	ermit Action:	RN8	I	Permit/Job#:	C1981038
PROJECT IDEN	TIFICATION					
Task #: 208	State:	Colorado		Abl	breviation:	None
Date: $\frac{200}{5/30/2}$					Filename:	C038-208
User: RDZ	<u></u>				1 1101101101	0000 200
	organization name: D	ORMS				
	<u> </u>					
HOURLY EQUI						
Basic Ma				Horsepower:		259
Ripper Attac	hment:			Shift Basis:		er day
				Data Source:	((CRG)
Cost Breakdown:						
				Utilization %		
	Ownership Cost/Hour:		\$114.80	NA	_	
	Operating Cost/Hour:		\$79.39	100	_	
	Ownership Cost/Hour:		\$0.00	NA	_	
Ripper	Operating Cost/Hour:		\$0.00			
	Operator Cost/Hour:		\$28.56	NA	_	
	Total Unit Cost/Hour:		\$222.75			
	Tetal Elect Cest/Herry	\$222) 75			
	Total Fleet Cost/Hour: _	φ222	2.75			
	Area to be graded or ripp Source of estimated acrea		1			acres
			-			
HOURLY PROI						
	Average Grader S		1.50	mph	1 . 1 5	
	Selected Applic			grading (0-2.5 n		
	Selected Blade		30	degree	S	
TI.	Effective Blade L	0	12.10	feet		
	Vidth of blade overlap per	-	2.00 10.10	feet		
	ding or ripping width per justed Hourly Unit Produ		1.8364	feet acres/h	our	
Job Condition Corre	-			te Altitude: 700		
		Source	51	Annuae. <u>700</u>	<u>o</u> 1001	
Altitude A	.dj: 1.00	(CAT HE	3)			
Job Efficien		(1sh/d, mo				
Net Correcti		multiplier				
		-		/T T		
	Adjusted Hourly Un		1.5609	acres/Hou		
	Adjusted Hourly Flee	et Production:	1.5609	acres/Hou	r	
JOB TIME AND	<u>COST</u>					
Fleet size:	1 Grader(s	;)	Total job time	e: <u>16.</u>	27	Hours
II.	¢140.71		Tatel		(1)	
Unit cost:	\$142.71 per acre		Total job cost	t: \$3,6	023	

BULLDOZER WORK

Task description:		ii oin broon	oile to Truck Dump Stat	1011	
Bowie No. 1 Mine	Peri	mit Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTIF	ICATION				
Task #: 209	State:	Colorado		Abbreviation:	None
Date: $\frac{209}{5/30/2023}$	County:	Delta		Filename:	C038-209
User: RDZ	County.	Della		Phename.	0030-209
Agency or organ	nization name: DR	RMS			
HOURLY EQUIPME	ENT COST				
	t D10T - 10SU				
Horsepower: 574	1				
Blade Type: Ser	ni-Universal				
Attachment: 3-s	hank ripper				
Shift Basis: 1 p	er day				
Data Source: (CH	RG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$153.67	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
Ripper op. Cost/Hour:		\$11.11	100		
Operator Cost/Hour:		\$41.30	NA		
Total unit Cost/Hour:	\$395.76				
Total Fleet Cost/Hour:	\$1,583.05				
	\$1,583.05				
Total Fleet Cost/Hour: MATERIAL QUANT	\$1,583.05 <u>TITIES</u>				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume:2,00	\$1,583.05 <u>TITIES</u> 0				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11	\$1,583.05 <u>TITIES</u> 0 5				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23	\$1,583.05 <u>TITIES</u> 0 5 0 LCY				
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volume	\$1,583.05 <u>CITIES</u> 0 5 0 LCY me:Permit Vo		; Operator Estimate		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23	\$1,583.05 <u>CITIES</u> 0 5 0 LCY me:Permit Vo		; Operator Estimate		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell	\$1,583.05 <u>CITIES</u> 0 5 0 LCY me: <u>Permit Vo</u> 1 factor: <u>CAT Han</u>		; Operator Estimate		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volume	\$1,583.05 <u>CITIES</u> 0 5 0 LCY me: <u>Permit Vo</u> 1 factor: <u>CAT Han</u>		; Operator Estimate		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell HOURLY PRODUCT	\$1,583.05 <u>STITIES</u> 0 5 0 LCY me: <u>Permit Vo</u> 1 factor: <u>CAT Han</u> <u>FION</u>		; Operator Estimate		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,583.05 <u>CITIES</u> 0 5 0 LCY me: <u>Permit Vo</u> 1 factor: <u>CAT Han</u> <u>FION</u> 100 feet	dbook	; Operator Estimate		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell HOURLY PRODUCT	\$1,583.05 <u>CITIES</u> 0 5 0 LCY me: <u>Permit Vo</u> 1 factor: <u>CAT Han</u> <u>FION</u> 100 feet	dbook	; Operator Estimate		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Vol 1 factor: CAT Han FION ction: 100 feet 1,718.9 LCY	dbook			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency destance:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Volume 1 factor: CAT Han FION ction: 100 feet 1,718.9 LC scription: Consoli	dbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Volume 1 factor: CAT Han FION ction: 100 feet 1,718.9 LC scription: Consoli 0 %	dbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency destance:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Volume 1 factor: CAT Han FION ction: 100 feet 1,718.9 LC scription: Consoli	dbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Volume 1 factor: CAT Han FION ction: 100 feet 1,718.9 LC scription: Consoli 0 %	dbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Volume 1 factor: CAT Han FION ction: 1,718.9 LCY scription: Consolid 0 % 6,500 feet	dbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Volume 1 factor: CAT Han FION ction: 1,718.9 LCY scription: Consolid 0 % 6,500 feet 2,100 lbs/LCY Earth - Loam	dbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average site altitude: Material weight:	\$1,583.05 CITIES 0 5 0 LCY me: Permit Volume 1 factor: CAT Han FION ction: 100 feet ction: 1,718.9 LCY scription: Consolid 0 % 6,500 feet 2,100 lbs/LCY Earth - Loam Factor Factor	dbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average site altitude: Material weight: Weight description: Job Condition Correction Operator	\$1,583.05 CITIES 0 5 0 LCY me: Permit Vol 1 factor: CAT Han FION ction: 100 feet 1,718.9 LCY scription: Consoli 0 % 6,500 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0.	dbook Y/hr idated stockp	bile 1.0		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,00 Swell factor: 1.11 Loose volume: 2,23 Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$1,583.05 CITIES 0 5 0 LCY me: Permit Vol 1 factor: CAT Han FION ction: 100 feet 1,718.9 LC scription: Consoli 0 % 6,500 feet 2,100 lbs/LCY Earth - Loam Factor Skill: 0. ency: 1.	Y/hr idated stockp			

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.5453	
Adjusted unit production: 93	87.32 LCY/hr	
Adjusted fleet production: $\overline{37}$	49.28 LCY/hr	

Fleet size:	4 Dozer(s)
Unit cost:	\$0.422/LCY
Total job time:	0 50 Hours

I otal job time:	0.59 Hours
Total job cost:	\$942
Total job cost.	ψ/− <i>Δ</i>

REVEGETATION WORK

Task descr	Task description: Reseed Train Loadout and Coal Stockpile Areas		Areas		
Site: Bowie N	o. 1 Mine	Permit Action:	RN8	Permit/Jol	o#: <u>C1981038</u>
PROJECT	<u> IDENTIFI(</u>	CATION			
Task #:	210	State: Colorado		Abbreviation:	None
Date:	5/30/2023	County: Delta		Filename:	C038-210
User:	RDZ				

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-10-20, 3-9-18	1.00	pound	\$0.19	\$0.19
8-24-24, 10-15-15, 10-20-20	30.00	pound	\$0.35	\$10.50
			Total Fertilizer Materials Cost/Acre	\$10.69

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$39.64
	Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Fringed Bromegrass - Native	4.38	8.03	\$74.38
Rye, Perennial Tetraploid - Elgon	3.50	19.85	\$6.30
Meadow Brome - Regar	5.25	4.82	\$20.87
Orchardgrass - Potomac	4.38	54.24	\$18.66
Totals Seed Mix	17.50	86.94	\$120.20

Application

	Description	Cost /Acre
-		

Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$842.72

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$73.00
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
	Total Mulch Application Cost/Acre	\$214.57

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres: Estimated Failure Rate:				Cost /Acre: Cost /Acre*:		
*Selected Replanti	ng Work Items:	SEEDING,MUI	LCHING		· · · ·	
Initial Job Cost:	,					
Reseeding Job Cost:	\$11,275.92					
Total Job Cost:	\$74,356					
Job Hours:	80.00					

Page 1 of 2

BULLDOZER WORK

	Remove Coal Stock	pile Pond			
Bowie No. 1 Mine	Permit	Action:	RN8	Permit/Job#:	C1981038
PROJECT IDENTI	FICATION				
Task #: 211	State: C	Colorado		Abbreviation:	None
Date: $\frac{211}{5/30/2023}$		Delta		Filename:	C038-211
User: RDZ	County	Jona		i nonunie.	0000 211
		a			
Agency or org	anization name: DRM	5			
HOURLY EQUIPM	ENT COST				
Basic Machine: Ca	at D10T - 10SU				
Horsepower: 57					
Blade Type: Se	emi-Universal				
	shank ripper				
	per day				
Data Source: (C	CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		5153.67	NA		
Operating Cost/Hour:		6166.94	100		
Ripper own. Cost/Hour:		\$22.74	NA		
Ripper op. Cost/Hour:		\$11.11	100		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUAN	<u>TTTIES</u>				
Initial Volume: 565	5				
Initial Volume: 565 Swell factor: 1.3					
Initial Volume: 565 Swell factor: 1.3	30 LCY ume: Permit Vol 1				
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volu	30 LCY ume: Permit Vol 1 Il factor: CAT Handbo				
Initial Volume: 565 Swell factor: 1.3 Loose volume: 75 Source of estimated volution Source of estimated sweet	30 LCY Jume: Permit Vol 1 Il factor: CAT Handbo TION 50 feet	ook			
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volu Source of estimated sweet HOURLY PRODUC Average push distance:	30 1 LCY Jume: Permit Vol 1 Ul factor: CAT Handbo CTION 50 feet Juncial Statement of the second secon	r	nbankment 0.9		
Initial Volume: 565 Swell factor: 1.3 Loose volume: 75 Source of estimated volu Source of estimated sweet HOURLY PRODUC Average push distance: Unadjusted hourly product	30 1 LCY Jume: Permit Vol 1 Ul factor: CAT Handbo CTION 50 feet Juncial Statement of the second secon	r	nbankment 0.9		
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency de Average push gradient:	30 1 LCY Jme: Permit Vol 1 Ill factor: CAT Handbo 2TION Juction: 50 feet 2,748.7 LCY/h escription: Compacted 0 %	r	nbankment 0.9		
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volu Source of estimated sweet HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency de Average push gradient: Average site altitude:	$ \begin{array}{c} 30 \\ 1 \text{ LCY} \\ \text{ume: Permit Vol 1} \\ 11 \text{ factor: CAT Handbe} \\ \hline \hline \hline TION \\ \hline action: 50 \text{ feet} \\ 2,748.7 \text{ LCY/h} \\ \hline escription: Compacted \\ \hline 0 \% \\ \hline 7,200 \text{ feet} \\ \hline \end{array} $	r d fill or en			
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volto Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produce Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Source to the second se	30 1 LCY ume: Permit Vol 1 Il factor: CAT Handbo TION action: 50 feet 2,748.7 LCY/h escription: Compacted 0 % 7,200 feet 2,900 lbs/LCY Decomposed rock - 50 n Factor Factor	r d fill or en	50% Earth		
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volto Source of estimated sweet HOURLY PRODUC Average push distance: Unadjusted hourly produce Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	30 1 LCY ume: Permit Vol 1 Ill factor: CAT Handbox TION action: 50 feet action: $2,748.7$ LCY/h escription: Compacted 0 % 7,200 feet 2,900 lbs/LCY Decomposed rock - 50 n Factor 0.750	r d fill or en	50% Earth Source (AVG.)		
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volto Source of estimated sweet HOURLY PRODUC Average push distance: Unadjusted hourly prodet Materials consistency det Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Operator	30 1 LCY ume: Permit Vol 1 .ull factor: CAT Handbox .ull factor: 50 feet .uction: 2,748.7 LCY/h escription: Compacted 0 % 7,200 feet 2,900 lbs/LCY Decomposed rock - 50 n Factor 0.750 Skill: 0.750 .utency: 0.900	nr d fill or en 0% Rock,	50% Earth <u>Source</u> (AVG.) (CAT HB))		
Initial Volume: 565 Swell factor: 1.3 Loose volume: 751 Source of estimated volto Source of estimated sweet HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing m	30 1 LCY ume: Permit Vol 1 .ull factor: CAT Handbox .ull factor: 50 feet .uction: 2,748.7 LCY/h escription: Compacted 0 % 7,200 feet 2,900 lbs/LCY Decomposed rock - 50 n Factor 0.750 Skill: 0.750 .utency: 0.900	nr d fill or en 0% Rock,))	50% Earth Source (AVG.)		

Job efficienc	y: 0.830	(1 SHIFT/DAY)
Spoil pil	e: 0.800	(FND-RF)
Push gradier	nt: 1.000	(CAT HB)
Altitud	e: 1.000	(CAT HB)
Material Weigh	nt: 0.793	(CAT HB)
Blade typ	e: 1.000	(PAT)
Net correctio	n:0.3554	
Adjusted unit production:	976.89 LCY/hr	
Adjusted fleet production:	3907.56 LCY/hr	
-		

Fleet size:	4 Dozer(s)
Unit cost:	\$0.405/LCY

Total job time:	0.19 Hours
Total job cost:	\$304

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BULLDOZER WORK

Task description:	Remove Train Loadout P				
Bowie No. 1 Mine	Permit Action	n: <u>RN8</u>		Permit/Job#:	C1981038
PROJECT IDENTIFI	CATION				
Task #: 212	State: Colorad	lo	А	bbreviation:	None
Date: 5/30/2023	County: Delta			Filename:	C038-212
User: RDZ					
Agency or organ	ization name: DRMS				
HOURLY EQUIPME	NT COST				
	D10T - 10SU				
Horsepower: 574					
VI	ni-Universal				
	ank ripper				
	er day				
Data Source: (CR	U)				
Cost Breakdown:		1			
	. .	Utilizati			
Ownership Cost/Hour:	\$153.6				
Operating Cost/Hour:	\$166.9				
Ripper own. Cost/Hour:	\$22.74 \$11.1				
Ripper op. Cost/Hour:		1 100	1		
Operator Cost/Hours					
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL OLIANT	\$41.3 \$395.76 \$1,583.05	0 NA			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume:2,904	\$395.76 \$1,583.05 <u>ITIES</u> 4	0 NA			
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 2,904 Swell factor: 1.330	\$395.76 \$1,583.05 <u>ITIES</u> 4	0 NA			
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 2,904 Swell factor: 1.330	\$395.76 \$1,583.05 ITIES 4 0 2 LCY				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862	\$395.76 \$1,583.05 ITIES 4 0 2 LCY ne: Permit Vol 1, Page				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated swell	\$395.76 \$1,583.05 ITIES 4 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated swell HOURLY PRODUCT	\$395.76 \$1,583.05 ITIES 4 0 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook YON				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated swell	\$395.76 \$1,583.05 ITIES 4 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook YION 100 feet				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance:	\$395.76 \$1,583.05 ITIES 4 0 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook YON ettion: 1,718.9 LCY/hr				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated volur Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc Materials consistency des Average push gradient:	\$395.76 \$1,583.05 ITIES 4 0 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook CION etion: 100 feet 1,718.9 LCY/hr cription: Compacted fill o 0 %	111; Map 8a-2			
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Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated volur Source of estimated volur Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude:	\$395.76 \$1,583.05 ITIES 4 0 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook YON ettion: 1,718.9 LCY/hr cription: Compacted fill o 0 % 7,200 feet	111; Map 8a-2			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated volur Source of estimated volur Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$395.76 \$1,583.05 ITIES 4 0 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook YON etion: 1,718.9 LCY/hr cription: Compacted fill o 0 % 7,200 feet 2,900 lbs/LCY Decomposed rock - 50% Ro Factor	111; Map 8a-2 r embankment 0.9			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated volur Source of estimated volur Materials consistency des Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	$\frac{\$395.76}{\$1,583.05}$ $\frac{ITIES}{4}$ $\frac{4}{2}$ $\frac{100}{2 \text{ LCY}}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{0\%}{7,200 \text{ feet}}$ $\frac{2,900 \text{ lbs/LCY}}{2,900 \text{ lbs/LCY}}$ $\frac{100 \text{ feet}}{2,900 \text{ lbs/LCY}}$ $\frac{100 \text{ feet}}{2,900 \text{ lbs/LCY}}$	111; Map 8a-2 	ource VG.)		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated volur Source of estimated volur Materials consistency des Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S Material consistence	$\frac{\$395.76}{\$1,583.05}$ $\frac{ITIES}{4}$ $\frac{4}{2}$ $\frac{1}{2}$ $\frac{2 \text{ LCY}}{2}$ $\frac{1}{2} \text{ LCY}}$ $\frac{1}{2} \text{ LCY}$ $\frac{1}{2} \text{ CAT Handbook}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{100 \text{ feet}}{2,900 \text{ lbs/LCY}}$	111; Map 8a-2 111; Map 8a-2 r embankment 0.9 ck, 50% Earth (A (CA	ource VG.) T HB))		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 2,904 Swell factor: 1.330 Loose volume: 3,862 Source of estimated volur Source of estimated volur Source of estimated volur Materials consistency des Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator S	\$395.76 \$1,583.05 ITIES 4 0 2 LCY ne: Permit Vol 1, Page factor: CAT Handbook TION 2 trion: 100 feet tion: 1,718.9 LCY/hr cription: Compacted fill o 0 % 7,200 feet 2,900 lbs/LCY Decomposed rock - 50% Ro Factor Skill: 0.750 cncy: 0.900 1.000	111; Map 8a-2	ource VG.)		

Job efficienc	y: 0.830	(1 SHIFT/DAY)
Spoil pil	e: 0.800	(FND-RF)
Push gradier	nt: 1.000	(CAT HB)
Altitud	e: 1.000	(CAT HB)
Material Weigh	nt: 0.793	(CAT HB)
Blade typ	e: 1.000	(PAT)
Net correctio	n:0.3554	
Adjusted unit production:	610.90 LCY/hr	
Adjusted fleet production: 2443.6 LCY/hr		

Fleet size:	4 Dozer(s)
Unit cost:	\$0.648/LCY

Total job time:	1.58 Hours
Total job cost:	\$2,502