

Simmons - DNR, Leigh <leigh.simmons@state.co.us>

# C1981022, Elk Creek Mine, SI-1, Adequacy letter and updated RCE

**Doug Smith** <Doug.Smith@oxbow.com> To: "Simmons - DNR, Leigh" <leigh.simmons@state.co.us> Cc: Mike Ludlow <Mike.Ludlow@oxbow.com> Mon, Dec 6, 2021 at 9:35 AM

Leigh,

Oxbow Mining accepts the revised cost estimate, and will continue to further pursue bond release for the work that has been completed.

**Doug Smith** 

Oxbow Mining, LLC

(970) 929-6034

From: Simmons - DNR, Leigh <leigh.simmons@state.co.us> Sent: Monday, December 6, 2021 9:00 AM To: Doug Smith <Doug.Smith@OXBOW.COM> Subject: Re: C1981022, Elk Creek Mine, SI-1, Adequacy letter and updated RCE

#### [external email-use caution]

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P 303.866.3567 x 8121 | C 720.220.1180 | F 303.832.8106

1313 Sherman Street, Room 215, Denver, CO 80203

leigh.simmons@state.co.us | https://drms.colorado.gov

On Thu, Jul 22, 2021 at 3:45 PM Mike Ludlow <<u>Mike.Ludlow@oxbow.com</u>> wrote:

Leigh, please accept this email as a request for an informal hearing regarding the bonding cost calculations as calculated at the midterm permit review. I have reviewed the cost summary provided in your email. The total of the direct cost on your review calculations was \$1,974,914. I have used the divisions costs to perform the remaining tasks and have added the direct cost for the remaining work to be \$543,468. I have attached the bonding sheets with the work tasks crossed out that have been completed which should not be included in the remaining work to be performed. Section 3.02.2(4) requires the division to adjust the bond for the future cost of the reclamation. The divisions' methodology of calculating the bond for Elk Creek does not give adequate credit for the work that has been completed. The work completed has been clearly documented in the Quarterly inspection reports.

Best Regards,

Michael W Ludlow

President

Oxbow Mining, LLC

Elk Creek Mine

P.O. Box 535

Somerset, CO 81434

970-929-5494 Office

970-261-5142 Cell

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Doug Smith Oxbow Mining, LLC. PO Box 535 Somerset, CO 81434

November 18, 2021

#### Re: Elk Creek Mine (C-1981-022) Proposed Surety Increase (SI-1)

Dear Mr. Smith,

Following discussion at the SI-1 informal conference on August 5, 2021, and the subsequent approval of MR-456, I have reviewed the entire site-wide reclamation cost estimate for the Elk Creek Mine.

I edited 5 tasks from the version completed with MT-8, details are given below:

- Task 001 (Dozer)
  - Average push distance reduced from 400' to 200'
  - Direct cost reduced from \$220,672 to \$102,325
- Tasks 016, 121 and 122 (Reveg)
  - Since all areas these tasks apply to have received Phase II bond release, initial seeding costs have been removed
  - o Mulching costs have been removed
  - Re-seeding is applicable to 2% of the total acreage
  - Herbicide is applicable to 5% of the total acreage
  - Work hours = total acreage
  - Direct cost reduced from \$33,770 to \$517 (task 016); from \$82,858 to \$1033 (task 121); and from \$60,188 to \$1033 (task 122)
- Task 120 (Reveg)
  - Since this area has not yet received Phase II bond release, initial seeding costs have been retained
  - Mulching costs have been removed
  - Re-seeding is applicable to 10% of the total acreage
  - Work hours =  $2 \times 10^{-10}$  x total acreage
  - o Direct cost reduced from \$400,136 to \$88,171

I have attached a copy of the full SI-1 cost estimate. As you will see, the total dollar amount including indirect costs is estimated at \$1,755,100.

If you concur with the attached estimate I will update the record and finalize SI-1.



Sincerely,

-Λ 1

Leigh Simmons Environmental Protection Specialist

# COST SUMMARY WORK

]	Fask descrip	otion:	Updated sitewid	e estimate fo	r SI-1			
Site:	ite: Elk Creek Mine		Permit Action:		SI1	11 Permit/Job#: C1981022		
<u>P</u> ]	ROJECT	IDENTIFIC	CATION					
	Task #:	000	State:	Colorado		Abbreviation:	None	
	Date:	11/18/2021	County:	Delta		Filename:	C022-000	
	User:	LDS						

Agency or organization name: DRMS

## TASK LIST (DIRECT COSTS)

Took		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
001	Backfill and Regrade Elk Creek Facilities Area	DOZER	3	90.27	\$102,325
004	Backfill and Grade Material Used to Widen Access	DOZER	3	1.53	\$1,738
	Road				
005	Backfill and Regrade Elk Creek Mine Area	DOZER	3	101.64	\$115,215
006	Move Fill Material from Elk Creek Mine to Elk	SCRAPER1	1	45.33	\$40,628
	Creek Faciliti				
008	Backfill and Regrade Primary Riprap Borrow Area	DOZER	3	4.75	\$5,390
009	Backfill and Regrade Secondary Riprap Borrow	DOZER	3	12.05	\$13,654
	Area				
010	Backfill and Regrade Elk Creek Mine Rock Safety	DOZER	3	23.52	\$26,665
	Catch Bench				
011	Backfill and Regrade Temporary Conveyor	DOZER	3	11.87	\$13,457
012		DOZED		1.0.0	¢1.107
012	Regrade Expanded Elk Creek Mine Fan Bench	DOZER	3	1.06	\$1,197
016	Re-seed Drill Pads and Roads, 20.72 acres @ 2%	REVEGE	1	20.72	\$812
000	failure rate		1	12.01	¢11.567
023	Spread Overburden on East Refuse Pile	SCRAPERI		12.91	\$11,567
034	Rip All Surface Facility Areas	RIPPER	3	29.04	\$36,310
041	Regrade Lower Power Line Access Road	EXCAVATE	1	41.01	\$7,993
042	Regrade Pond C Access Road	DOZER	3	3.85	\$4,364
050	Finish Grade All Disturbed Areas	GRADER	1	53.85	\$9,411
066	Remove Upper Hubbard Creek Sediment Pond	DOZER	1	2.99	\$1,128
067	Regrade East Bench Pond	DOZER	1	0.61	\$229
068	Excavate/Backfill Pond C Wall Area	EXCAVATE	1	1.67	\$326
069	Regrade West Valley Fill Diversion	EXCAVATE	1	1.81	\$354
071	Remove Sewage Leach Field	DOZER	1	0.61	\$229
072	Regrade Pond A	DOZER	1	0.61	\$229
073	Regrade Pond B	DOZER	1	26.02	\$9,830
075	Regrade Pond E	DOZER	1	4.39	\$1,657
077	Regrade Pond F	DOZER	1	2.26	\$853
090	Replace Topsoil from Stockpile to Previously	SCRAPER1	1	1.86	\$1,670
	Disturbed Elk A				
092	Replace Topsoil from Stockpile to East Refuse	SCRAPER1	1	5.07	\$4,545
	Area				
093	Replace Topsoil from Stockpile to West Valley Fill	SCRAPER1	1	27.58	\$24,724
	Area		1		
094	Replace Topsoil from Stockpile to II-West Refuse	SCRAPER1	1	5.80	\$5,195
	Pile				

095	Replace Topsoil from Stockpile to II West Refuse	SCRAPER1	1	1.09	\$977
096	Replace Topsoil from Stockpile to Expanded Elk Creek Mine Fa	DOZER	3	0.13	\$152
098	Replace Topsoil from Stockpile to Elk Creek Mine Area	SCRAPER1	1	18.89	\$16,934
103	Replace Topsoil from Stockpile to Pond F, Ditches and Plunge	DOZER	1	2.86	\$1,079
120	Broadcast Seed Mine Site	REVEGE	1	216.50	\$88,281
121	Re-seed Drill Pads, MR's and TR's, 46.23 acres @ 2% failure	REVEGE	1	46.23	\$1,033
122	Re-seed Light-Use Roads, MR's and TR's, 35.59 acres @ 2% fai	REVEGE	1	35.59	\$1,522
130	Demolish and Remove All Mine Facilities	DEMOLISH	1	600.00	\$747,568
131	Plug and Seal 7 Monitoring wells	BOREHOLE	1	42.00	\$11,422
140	Mobilize/Demobilize Equipment for Initial Reclamation	MOBILIZE	1	10.00	\$25,203
141	Mobilize/Demobilize Equipment for Pond Removal	MOBILIZE	1	7.14	\$5,880
142	Mobilize/Demobilize Equipment for Site Maintenance	MOBILIZE	1	14.00	\$13,875
150	Yearly site maintenance	SITEMAINT ENANCE	1	140.00	\$12,275
		<u>SUBTO</u>	TALS:	1669.11	\$1,367,896

## **INDIRECT COSTS**

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$27,631
Performance bond:	1.05	Total =	\$14,363
Job superintendent:	834.56	Total =	\$60,113
Profit:	10.00	Total =	\$136,790
		TOTAL O & P =	\$238,897
		CONTRACT AMOUNT (direct + O & P) = $($	\$1,606,793

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$0	Total =	\$0
Engineering work and/or contract/bid preparation:	5.23	Total =	\$84,035
Reclamation management and/or administration:	4.00	-	\$64,272
CONTINGENCY:	0.00	Total =	\$0
	TOTAL IN	DIRECT COST =	\$387,204
TOTAL BO	ND AMOUNT (di	irect + indirect) =	\$1,755,100

Page 1 of 2

Task description:	Backfill and Reg	rade Elk Cr	eek Facilities Area		
Elk Creek Mine	Peri	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIF	<u>ICATION</u>				
Task #: 001 Date: 11/18/2021 User: LDS	State: 1 County:	Colorado Delta		Abbreviation: Filename:	None 022-001
Agency or orga	nization name: DR	RMS			
HOURLY EQUIPME	ENT COST				
Basic Machine: <u>Ca</u>	t D10T - 10SU				
Horsepower: 5/4	4 mi Universel				
Attachment: NA	nn-Oniversai				
Shift Basis: 1 n	n Nor dav				
Data Source: (Cl	RG)				
	NO)				
Cost Breakdown:		1			
		¢1.co.co	<u>Utilization %</u>		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Rinner on Logi/Hour	. <u></u>	\$0.00	0		
		CA1 20	NT A		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$377.84 \$1,133.53	\$41.30			
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$377.84 \$1,133.53	\$41.30	NA		
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       112	\$377.84 \$1,133.53 <b>EITIES</b> 000		NA		
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0	\$377.84 \$1,133.53 FITIES 000 25 000 LCY		NA		
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0	\$377.84 \$1,133.53 <b>TITIES</b> 000 25 000 LCY		NA		
Appen op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu	\$377.84 \$1,133.53 <b>EITIES</b> 000 25 000 LCY me: Appendix	\$41.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel	\$377.84 \$1,133.53 FITIES 000 25 000 LCY me: Appendix Il factor: Cat Hand	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel	\$377.84 \$1,133.53 FITIES 000 25 000 LCY me: Appendix Il factor: Cat Hand	 	NA		
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUCT	\$377.84 \$1,133.53 <b>EITIES</b> 000 25 000 LCY me: Appendix 11 factor: Cat Hand <b>TION</b>	  k K book	NA		
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUCC         Average push distance:	\$377.84 \$1,133.53 <b>FITIES</b> 000 25 000 LCY me: <u>Appendix</u> Il factor: <u>Cat Hand</u> <b>TION</b> 200 feet	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ	\$377.84         \$1,133.53 <b>FITIES</b> 000         25         000 LCY         me:       Appendix         Il factor:       Cat Hand <b>TION</b> action:       200 feet         946.0 LCY/	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ         Materials consistency destance	\$377.84         \$1,133.53         EITIES         000         25         000 LCY         me:       _Appendix         Cat Hand         TION         action:       _200 feet         946.0 LCY/         scription:       _Compa	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produ         Materials consistency destance:	\$377.84         \$1,133.53 <b>EITIES</b> 000         25         000 LCY         me:       Appendix         11 factor:       Cat Hand <b>TION</b> action:       200 feet         946.0 LCY/         scription:       Compare	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ         Materials consistency dest         Average push gradient:	\$377.84         \$1,133.53         FITIES         000         25         000 LCY         me:       Appendix         I factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         scription:       Compa         5 %         6 150 feet	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produ         Materials consistency dest         Average push gradient:         Average site altitude:	\$377.84         \$1,133.53 <b>EITIES</b> 000         25         000 LCY         me:       Appendix         1 factor:       Cat Hand <b>TION</b> action:       200 feet         946.0 LCY/         scription:       Compa         5 %         6,150 feet	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUCY         Average push distance:         Unadjusted hourly produ         Materials consistency destance:         Average site altitude:         Material weight:	\$377.84         \$1,133.53         EITIES         000         25         000 LCY         me:       Appendix         11 factor:       Cat Hand         TION         action:       946.0 LCY/         scription:       Compa         5 %       6,150 feet         2,650 lbs/LCY	541.30			
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produ         Materials consistency des         Average site altitude:         Material weight:         Weight description:	\$377.84         \$1,133.53         EITIES         000         25         000 LCY         me:       Appendix         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         scription:       Compare         5 %       6,150 feet         2,650 lbs/LCY       Decomposed rock				
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produ         Materials consistency des         Average site altitude:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	\$377.84         \$1,133.53         FITIES         000         25         000 LCY         me:       Appendix         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         scription:       Compare         5 %       6,150 feet         2,650 lbs/LCY       Decomposed rock         n Factor       Factor				
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ         Materials consistency des         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	\$377.84         \$1,133.53         FITIES         000         25         000 LCY         me:       Appendix         l factor:       Cat Hand         TION         action:       200 feet         action:       946.0 LCY/         scription:       Compa         5 %       6,150 feet         2,650 lbs/LCY       Decomposed rock         n Factor       Skill:       0.				
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         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	\$377.84         \$1,133.53         FITIES         000         25         000 LCY         me:       Appendix         11 factor:       Cat Hand         TION         action:       200 feet         action:       946.0 LCY/         scription:       Compa         5 %       6,150 feet         2,650 lbs/LCY       Decomposed rock         h Factor       Skill:       0.         tency:       0.				
Appen op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       80,0         Swell factor:       1.12         Loose volume:       90,0         Source of estimated volu         Source of estimated swel         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ         Materials consistency des         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator         Material consist         Dozing me	\$377.84         \$1,133.53 <b>EITTIES</b> 000         25         000 LCY         me:       Appendix         Il factor:       Cat Hand <b>TION</b> action: $200$ feet         action: $246.0$ LCY/         scription:       Compare $5\%$ $6,150$ feet $2,650$ lbs/LCY       Decomposed rock <b>h</b> Factor       Skill:       0.         tency:       0.       0.				

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:		0.868	(CAT HB)
Blade type:		1.000	(PAT)
Net correction	on:	0.3513	
Adjusted unit production:	33	2.33 LCY/hr	
Adjusted fleet production:	99	6.99 LCY/hr	
	-		

Fleet size:	3 Dozer(s)
Unit cost:	\$1.137/LCY

Total job time:	<b>90.27</b> Hours
Total job cost:	\$102,325

Elk Creek Mine	Per	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIF	ICATION				
Task #· 004	State	Colorado		Abbreviation	None
Date: $11/18/2021$	State.	Delta		Filename:	022-004
User: $LDS$	County.	Della		T nename.	022 004
Agency or orga	nization name: DF	RMS			
HOURI V FOUIPME	ENT COST				
Desis Mashirat Cat	DIOT 1051				
Horsepower: 57/	1				
Blade Type: Set	ni-Universal				
Attachment: NA					
Shift Basis: 1 n	er dav				
Data Source: (CI	RG)				
	,				
Cost Breakdown:		1			
0 11 0		¢1.coco	<u>Utilization %</u>		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT	<u>TITIES</u>				
MATERIAL QUANT Initial Volume: 1,60	0				
MATERIAL QUANT Initial Volume: 1,60 Swell factor: 1.16	0 5				
MATERIAL QUANTInitial Volume:1,60Swell factor:1.16Loose volume:1,86	0 5 4 LCY				
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volume       1,80	TTTES           0           5           4 LCY           me:         Technica	  I Revision 21			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volu       5000000000000000000000000000000000000	1TTIES 0 5 4 LCY me: <u>Technica</u> 1 factor: Cat Hand	  l Revision 21 book			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volum         Source of estimated swell	0         5         4 LCY         me:       Technica         1 factor:       Cat Hand	  I Revision 21 book			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT	0         5         4 LCY         me:       Technica         1 factor:       Cat Hand         FION	I Revision 21			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT	TTTES       0       5       4 LCY       me:     Technical       1 factor:     Cat Hand <b>FION</b>	  l Revision 21 book			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volum       1,86         Source of estimated volum       1,86         MOURLY PRODUCT       1,86         Average push distance:       1,86	TTTES         0         5         4 LCY         me:       Technical         1 factor:       Cat Hand         TION         125 feet	I Revision 21			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product	ITTIES         0         5         4 LCY         me:       Technical         1 factor:       Cat Hand         FION         ction:       125 feet         1,450.0 LC	 l Revision 21 book Y/hr			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volu       1,86         Source of estimated swell       1,86         Mource of estimated swell       1,86         HOURLY PRODUCT       1         Average push distance:       1         Unadjusted hourly product       1         Materials consistency destance       1	0         5         4 LCY         me:       Technica         1 factor:       Cat Hand         FION         ction:       1,450.0 LC         scription:       Compa	 I Revision 21 book Y/hr cted fill or en	 		
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency destance:	0         5         4 LCY         me:       Technica         1 factor:       Cat Hand <b>FION</b> ction:       125 feet         1,450.0 LC         scription:       Compa         10 %	I Revision 21 book Y/hr cted fill or en	  mbankment 0.9		
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         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:	0         5         4 LCY         me:       Technical         1 factor:       Cat Hand <b>FION</b> ction:       1,450.0 LC         scription:       Compa         10 %         6 100 feet	 I Revision 21 book Y/hr cted fill or en	 		
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         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:         Average site altitude:	0         5         4 LCY         me:       Technical         1 factor:       Cat Hand         FION         ction:       125 feet         ction:       1,450.0 LC         scription:       Compa         10 %       6,100 feet	 I Revision 21 book Y/hr cted fill or en	mbankment 0.9		
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         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:	ITTIES         0         5         4 LCY         me:       Technica         1 factor:       Cat Hand         FION         ction:       125 feet         1,450.0 LC         scription:       Compa         10 %       6,100 feet         2,900 lbs/LCY	 I Revision 21 book Y/hr cted fill or en	  mbankment 0.9		
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volumes       1,86         Source of estimated volumes       1,86         Source of estimated volumes       1,86         Materials consistence:       1,86         Unadjusted hourly product       1,86         Average push distance:       1         Unadjusted hourly product       1         Average push gradient:       1         Average site altitude:       1         Material weight:       1         Weight description:       1	ITTIES           0           5           4 LCY           me:         Technica           1 factor:         Cat Hand           FION           ction:         125 feet           1,450.0 LC           scription:         Compa	 I Revision 21 book Y/hr cted fill or en  - 50% Rock,	  mbankment 0.9		
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         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:         Average site altitude:         Material weight:         Weight description:         Iob Condition Correction	0         5         4 LCY         me:       Technica         1 factor:       Cat Hand <b>FION</b> ction:       125 feet         ction:       1,450.0 LC         scription:       Compa         10 %       6,100 feet         2,900 lbs/LCY       Decomposed rock         Factor       Factor	 I Revision 21 book Y/hr cted fill or en  - 50% Rock,	  mbankment 0.9  , 50% Earth  Source		
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volu       Source of estimated volu         Source of estimated swell       Source of estimated swell         HOURLY PRODUCT       Average push distance:         Unadjusted hourly product       Materials consistency destance:         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Iob Condition Correction       Operator	0         0         5         4 LCY         me:       Technica         1 factor:       Cat Hand <b>FION</b> ction:       1,25 feet         ction:       1,450.0 LC         scription:       Compa         10 %       6,100 feet         2,900 lbs/LCY       Decomposed rock         Factor       Skill:       0.	 <u>I Revision 21</u> book Y/hr cted fill or en  - 50% Rock, 750			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volum       1,86         Source of estimated volum       Source of estimated volum         Source of estimated swell       1,86         Mource of estimated swell       1,86         HOURLY PRODUCT       Average push distance:         Unadjusted hourly product       Materials consistency destance:         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Iob Condition Correction       Operator         Material consist       100	ITTIES           0           5           4 LCY           me:         Technical           1 factor:         Cat Hand           Ifactor:         125 feet           ction:         1,450.0 LC           scription:         Compa           10 %         6,100 feet           2,900 lbs/LCY         Decomposed rock           Factor         Skill:         0.           ency:         0.	 I Revision 21 book Y/hr cted fill or en  - 50% Rock, 750 900			
MATERIAL QUANT         Initial Volume:       1,60         Swell factor:       1.16         Loose volume:       1,86         Source of estimated volumes       1,86         Source of estimated volumes       1,86         Source of estimated volumes       1,86         Material sconsistence:       1,86         Unadjusted hourly product       1,86         Average push distance:       1,86         Unadjusted hourly product       1,86         Average push distance:       1,86         Materials consistency des       1,86         Average push gradient:       1,86         Average site altitude:       1,86         Material weight:       1,86         Weight description:       1,90         Iob Condition Correction       1,90         Operator       1,90         Material consist       1,90         Dozing me       1,90	$\begin{array}{c c} \textbf{TTTES} \\ 0 \\ 5 \\ \hline 4 \text{ LCY} \\ \hline me: \underline{\text{Technical}} \\ 1 \text{ factor: } \underline{\text{Cat Hand}} \\ \hline \textbf{TION} \\ \hline \textbf{Cat Hand} \\ \hline \textbf{TION} \\ \hline \textbf{ction: } \underline{125 \text{ feet}} \\ \hline \textbf{ction: } \underline{1,450.0 \text{ LC}} \\ \hline \textbf{scription: } \underline{\text{Compa}} \\ \hline \textbf{compared} \\ \hline \textbf{add} \\ \hline \textbf{ction: } \underline{1,450.0 \text{ LC}} \\ \hline \textbf{scription: } \underline{\text{Compa}} \\ \hline \textbf{add} \\ \hline \textbf{add} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{add} \\ \hline \textbf{add} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{add} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{add} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{add} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{add} \\ \hline \textbf{add} \\ \hline \textbf{ction: } \underline{10 \%} \\ \hline \textbf{add} \hline \hline \textbf{add} $	 <u>I Revision 21</u> book Y/hr cted fill or en  - 50% Rock, 750 900 000			

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:	405.13 LCY/hr	
Adjusted fleet production:	1215.39 LCY/hr	

Fleet size:	3 Dozer(s)
Unit cost:	\$0.933/LCY

Total job time:	<b>1.53</b> Hours
Total job cost:	\$1,738

	Ducin	in and Keg	raue Eik Cr	eek Mine Area		
Elk Creek Mine		Peri	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDEN	<b>FIFICATIO</b>	N				
Task #· 005		State	Colorado		Abbreviation:	None
Date: $\frac{1000}{11/18/2}$	2021	County:	Delta		Filename:	022-005
User: LDS		county.				022 000
Agency or c	organization n	ame: DR	RMS			
HOURLY EQUIP	MENT CO	<u>ST</u>				
Basic Machine:	Cat D10T -	10SU				
Horsepower:	574					
Blade Type:	Semi-Univer	rsal				
Attachment:	NA					
Shift Basis:	1 per day					
Data Source:	(CRG)					
<u>Cost Breakdown:</u>						
				Utilization %		
Ownership Cost/Ho	our:		\$169.60	NA		
Operating Cost/Ho	our:		\$166.94	100		
Ripper own. Cost/Ho	our:		\$0.00	NA		
Ripper op. Cost/Ho	our:		\$0.00	0		
Operator Cost/Ho	our:		\$41.30	NA		
	<b>*255</b> 0					
Total Fleet Cost/Hou	r: <b>\$1,133</b>	.53				
Fotal Fleet Cost/Hou	r: <b>\$1,133</b> ANTITIES	.53				
Fotal Fleet Cost/Hou <u>MATERIAL QUA</u> Initial Volume:	r: <b>\$1,133</b> ANTITIES 88.000	.53				
Fotal Fleet Cost/Hou MATERIAL QUA Initial Volume: Swell factor:	r: <b>\$1,133</b> ANTITIES 88,000 1,165	.53				
Fotal Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:	r: <b>\$1,133</b> ANTITIES 88,000 1.165 <b>102.520</b> LCY	.53				
Fotal Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:	r: <b>\$1,133</b> ANTITIES 88,000 1.165 <b>102,520</b> LCY	.53				
Fotal Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated volume:	r: <b>\$1,133</b> ANTITIES 88,000 1.165 102,520 LCY volume:	Operator	Estimate			
Fotal Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s	r: <b>\$1,133</b> <b>ANTITIES</b> 88,000 1.165 <b>102,520</b> LCY volume: swell factor:	.53 Operator Cat Hand	Estimate book			
Fotal Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s	r: \$1,133 ANTITIES 88,000 1.165 102,520 LCY volume: swell factor:	.53 Operator Cat Hand	 Estimate book			
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODU	r: <b>\$1,133</b> ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION	Operator Cat Hand	 Estimate book			
Fotal Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODU         Average push distance	r: <b>\$1,133</b> ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION ce:	Operator Cat Hand	 Estimate book			
Fotal Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODI         Average push distance         Jnadjusted hourly pr	r: \$1,133 ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION ce: coduction:	.53 Operator Cat Hand 200 feet 946.0 LCY/	Estimate book			
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODU         Average push distance         Jnadjusted hourly pr	sr:       \$1,133         ANTITIES         88,000         1.165         102,520 LCY         volume:         swell factor:         UCTION         ce:         coduction:	.53 Operator Cat Hand 200 feet 946.0 LCY/	Estimate book			
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODU         Average push distanc         Jnadjusted hourly pr         Vaterials consistency	xr:       \$1,133         xNTITIES       88,000         1.165       102,520 LCY         volume:       swell factor:         wolume:       swell factor:         UCTION	.53 Operator Cat Hand 200 feet 946.0 LCY/ Compa	Estimate book	  mbankment 0.9		
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODU         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average push gradier	x:       \$1,133         ANTITIES         88,000         1.165         102,520 LCY         volume:         swell factor:         UCTION         ce:         coduction:         y         description:         nt:       0 %	Operator Cat Hand 200 feet 946.0 LCY/ Compa	Estimate book	  mbankment 0.9		
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODU         Average push distanc         Jnadjusted hourly pr         Vaterials consistency         Average push gradier	x:       \$1,133         ANTITIES         88,000         1.165         102,520 LCY         volume:         swell factor:         UCTION         ce:         coduction:         y         description:         nt:       0 %         :       6.300 f	Operator Cat Hand 200 feet 946.0 LCY/ Compa	Estimate book hr cted fill or en	  mbankment 0.9		
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODI         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average push gradier         Average site altitude:	antime       \$1,133         antime       \$8,000         1.165       102,520 LCY         volume:       \$well factor:         wolume:       \$well factor:         UCTION       \$	Operator Cat Hand 200 feet 946.0 LCY/ Compa	Estimate book hr cted fill or en	  mbankment 0.9		
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODI         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average push gradier         Average site altitude:         Vaterial weight:	x:       \$1,133         ANTITIES       88,000         1.165       102,520 LCY         volume:       swell factor:         wolume:       well factor:         UCTION	.53 Operator Cat Hand 200 feet 946.0 LCY/ Compa Feet bs/LCY	Estimate book hr cted fill or en	  mbankment 0.9		
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated v         Source of estimated s         HOURLY PRODI         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average site altitude:         Average site altitude:         Vaterial weight:         Weight description:	r: $$1,133$ ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION ce: roduction: y description: nt: 0 % $= 2,9001$ Decom	.53 Operator Cat Hand 200 feet 946.0 LCY/ Compa Feet bs/LCY	Estimate book hr cted fill or en	  mbankment 0.9		
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated s         HOURLY PRODI         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average site altitude:         Verage site altitude:         Verage site altitude:         Material weight:         Weight description:         Ob Condition Correct	r: \$1,133 ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION ce: roduction: y description: nt:0 % 2,900 1  Decomention Factor	Operator Cat Hand 200 feet 946.0 LCY/ Compa Feet bs/LCY aposed rock	Estimate book hr cted fill or en 	  mbankment 0.9 , 50% Earth Source		
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average push gradier         Average site altitude:         Vaterial weight:         Weight description:         ob Condition Correct         Opera	r: $$1,133$ ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION ce: roduction: y description: nt: 0 % c c c c	.53 Operator Cat Hand 200 feet 946.0 LCY/ Compa Seet bs/LCY aposed rock 0.	Estimate book hr cted fill or en - 50% Rock, 750			
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Source of estimated v         Source of estimated s         HOURLY PRODI         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average push gradier         Average site altitude:         Vaterial weight:         Weight description:         ob Condition Correct         Opera         Material cor	r: \$1,133 ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION ce: roduction: y description: nt:0 % :6,300 ff 2,900 l  ction Factor ator Skill: nsistency:	.53 Operator Cat Hand 200 feet 946.0 LCY/ Compa Feet bs/LCY posed rock 0. 0.				
Total Fleet Cost/Hou         MATERIAL QUA         Initial Volume:         Swell factor:         Loose volume:         Source of estimated v         Average push distance         Jnadjusted hourly pr         Vaterials consistency         Average push gradier         Average site altitude:         Material weight:         Weight description:         ob Condition Correct         Operation         Material cor         Dozing	r: $$1,133$ ANTITIES 88,000 1.165 102,520 LCY volume: swell factor: UCTION ce: voluction: y description: nt:0 % coduction factor ction Factor ator Skill: nsistency: g method:	.53 Operator Cat Hand 200 feet 946.0 LCY/ Compa Feet bs/LCY posed rock 0. 0.				

Job efficience	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 1.000	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 0.793	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correction	on: 0.3554	
Adjusted unit production:	336.21 LCY/hr	
Adjusted fleet production:	1008.63 LCY/hr	

Fleet size:	3 Dozer(s)
Unit cost:	\$1.124/LCY

Total job time:	101.64 Hours
Total job cost:	\$115,215

## SCRAPER TEAM WORK

PROJECT IDENT Task #: 006 Date: 11/18/2( User: LDS Agency or or HOURLY EQUIPM Support	TFICATION St 221 Cou ganization name: <u>MENT</u>	tate: <u>Colorado</u> nty: <u>Delta</u> DRMS		Abbrevia	ation: <u>None</u> 1ame: <u>022-006</u>	
Task #: 006 Date: 11/18/2( User: LDS Agency or or HOURLY EQUIPM	<u></u> Cou  ganization name: <u>MENT</u>	tate: <u>Colorado</u> nty: <u>Delta</u> DRMS		Abbrevia	ation: <u>None</u> name: <u>022-006</u>	
Date: <u>11/18/2(</u> User: <u>LDS</u> Agency or of HOURLY EQUIP!	021 Cou  rganization name: <u>MENT</u>	nty: <u>Delta</u>		Filer	name: 022-006	5
Agency or or HOURLY EQUIPM	rganization name:	DRMS				
HOURLY EQUIP	<u>MENT</u>					
Support			COSTSh	iift basis: <u>1 per day</u>	<u>/</u>	
Support		Equipme	nt Description			
Support	-Sc	craper: Cat 637	G w/push-pull			
	t Equipment -Load	Area: NA				
	-Dump	Area: NA				
Road Mair	ntenance – Motor G	brader: NA				
	- water	TTUCK: NA				
Cost Breakdown:	Scraper Worl	k Team	Support Equip	ment	Maintenance I	Equipment
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water T
%Utilization-machine:	100	NA	NA	NA	NA	
Ownership cost/hour:	\$223.48	NA	NA	NA	NA	
Operating cost/hour:	\$193.77	NA	NA	NA	NA	
%Utilization-ripper:	NA	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	NA	NA	NA	NA	
Ripper op. cost/hour:	NA	NA	NA	NA	NA	
Operator cost/hour:	\$30.90	NA	NA	NA	NA	
Unit Subtotals:	\$448.15	NA	NA	NA	NA	
Number of Units:	2	0	0	0	0	
Group Subtotals:	Work:	\$896.30	Support:	\$0.00	Maint:	\$0.00
Total work team cost/l	hour: <u><b>\$896.30</b></u>					
MATERIAL QUA	<u>NTITIES</u>					
Initial volume:	22,000	CCY	Swell fact	or: <u>1.125</u>		
Loose volume:	24,750	LCY				
Source Source of	ce of estimated vol	ume: Operator	Estimate			
Source of	commated Swell la		IUUUK			
HOURLY PRODU	UCTION					
			Scraper Bo	wl (volume) Basis.	:	
Material waight	2.650 lbs/I CV		Struck V	Volume: 24.00		v
	Decomposed rock	- 25% Rock,	Heaped V	Volume: 34.00		Ϋ́Υ
Material description:	75% Earth					

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6200 feet

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

Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2800.00	-10.00	5.00	-5.00	2972	0.99

Haul Time: **0.99** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2800.00	10.00	5.00	15.00	1047	2.70

Return Time:	2.70	minutes
Total Scraper team cycle time:	5.29	minutes
Adjusted for job conditions:	546.01	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	546.01	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	546.01	LCY/Hour
Unadjusted unit production/hour: 657.84 ICV/Hour		

Unadjusted unit production/hour: 657.84 LCY/Hour Optimal Number of Scrapers per push dozer:

Fleet size:	1	Team(s)	Total job time:	45.33	Hours
Unit cost:	\$1.642	/LCY	Total job cost:	\$40,628	

		<b>,</b>			
Elk Creek Mine	Per	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIF	<b>ICATION</b>				
Task # 008	State	Colorado		Abbreviation:	None
Date: $11/18/2021$	County:	Delta		Filename	022-008
User: LDS	County.	Dena		i nename.	022 000
Agency or orga	nization name:]	RMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	t D10T - 10SU				
Horsepower: 574	4				
Blade Type: Ser	mi-Universal				
Attachment: NA	1				
Shift Basis: <u>1 p</u>	er day				
Data Source: (Cl	RG)				
Cost Breakdown					
<u></u>			Utilization %		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT	<u>TTTES</u>				
Initial Volume: 1,50	0				
Initial Volume: 1,50 Swell factor: 1.16	00 55				
Initial Volume:1,50Swell factor:1.16Loose volume:1,74	00 55 18 LCY				
Initial Volume:       1,50         Swell factor:       1.16         Loose volume:       1,74         Source of estimated volu	10 55 <b>8</b> LCY me: Map 18				
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel	0 55 <b>8</b> LCY me: <u>Map 18</u> 1 factor: Cat Hanc	  Ibook			
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel	0 55 <b>8</b> LCY me: <u>Map 18</u> 1 factor: <u>Cat Hanc</u>	lbook			
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUCT	0 55 8 LCY me: <u>Map 18</u> 1 factor: <u>Cat Hanc</u> FION	lbook			
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUCT	0 55 8 LCY me: <u>Map 18</u> 1 factor: <u>Cat Hanc</u> <u><b>FION</b></u> 200 fact	lbook			
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted bourly produ	0 55 <b>8</b> LCY me: <u>Map 18</u> 1 factor: <u>Cat Hanc</u> <u><b>TION</b></u> 200 feet ction: <u>946 0 LCY</u>	lbook			
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ	0 5 8 LCY me: <u>Map 18</u> 1 factor: <u>Cat Hand</u> FION 200 feet ction: <u>946.0 LCY</u>	lbook /hr			
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency dest	0 5 8 LCY me: <u>Map 18</u> 1 factor: <u>Cat Hanc</u> <b>FION</b> ction: <u>200 feet</u> 946.0 LCY scription: <u>Partly</u>	lbook /hr consolidated s	stockpile 1.1		
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient:	00         55         8 LCY         me:       Map 18         1 factor:       Cat Hand         I factor:       200 feet         ction:       946.0 LCY         scription:       Partly         30 %       30 %	lbook /hr consolidated s	stockpile 1.1		
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUC' Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude:	00         55         18 LCY         me:       Map 18         1 factor:       Cat Hand <b>TION</b> ction:       200 feet         946.0 LCY         scription:       Partly         30 %         6,400 feet	/hr consolidated s	stockpile 1.1		
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUC' Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude:	00         55         8 LCY         me:       Map 18         1 factor:       Cat Hand <b>FION</b> ction:       200 feet         946.0 LCY         scription:       Partly         30 %         6,400 feet	/hr consolidated s	stockpile 1.1		
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUC' Average push distance: Unadjusted hourly produ Materials consistency des Average push gradient: Average site altitude: Material weight:	00         55         8 LCY         me:       Map 18         1 factor:       Cat Hand         filon         ction:       200 feet         946.0 LCY         scription:       Partly         30 %         6,400 feet         2,900 lbs/LCY	/hr consolidated s	stockpile 1.1		
Initial Volume:1,50Swell factor:1.16Loose volume:1,74Source of estimated voluSource of estimated swel <b>HOURLY PRODUC'</b> Average push distance:Unadjusted hourly produMaterials consistency desAverage push gradient:Average site altitude:Material weight:Weight description:	200           35           8 LCY           me:         Map 18           1 factor:         Cat Hand           FION         200 feet           ction:         946.0 LCY           scription:         Partly           30 %         6,400 feet           2,900 lbs/LCY         Decomposed rock	/hr consolidated s			
Initial Volume:       1,50         Swell factor:       1.16         Loose volume:       1,74         Source of estimated volu       Source of estimated swell         HOURLY PRODUC'       Average push distance:         Unadjusted hourly produ       Materials consistency des         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Job Condition Correction       Job Condition Correction	00         55         8 LCY         me:       Map 18         1 factor:       Cat Hand         I factor:       200 feet         ction:       946.0 LCY         scription:       Partly         30 %       6,400 feet         2,900 lbs/LCY       Decomposed rock         h Factor       Eactor	/hr consolidated s			
Initial Volume:       1,50         Swell factor:       1.16         Loose volume:       1,74         Source of estimated volu       Source of estimated swell         HOURLY PRODUC'       Average push distance:         Unadjusted hourly produ       Materials consistency des         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Job Condition Correction       Operator	00         55         8 LCY         me:       Map 18         1 factor:       Cat Hand         I factor:       200 feet         ction:       946.0 LCY         scription:       Partly         30 %       6,400 feet         2,900 lbs/LCY       Decomposed rock         Factor       Skill:       0	<pre>/hr /hr consolidated s //</pre>			
Initial Volume:       1,50         Swell factor:       1,16         Loose volume:       1,74         Source of estimated volu       Source of estimated swell         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ         Materials consistency dest         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator         Material consist	00         55         8 LCY         me:       Map 18         1 factor:       Cat Hand         I factor:       200 feet         ction:       946.0 LCY         scription:       Partly         30 %       6,400 feet         2,900 lbs/LCY       Decomposed rock         Factor       Skill:       0         ency:       1				
Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 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 Dozing me	$\begin{array}{c c} 0 \\ \hline 0 \\ \hline 5 \\ \hline 8 \text{ LCY} \\ \hline \text{me:} & \underline{\text{Map 18}} \\ 1 \text{ factor:} & \underline{\text{Cat Hanc}} \\ \hline \text{I factor:} & \underline{200 \text{ feet}} \\ \hline \text{Cat Hanc} \\ \hline \hline \text{Scription:} & \underline{946.0 \text{ LCY}} \\ \hline \text{becomposed rock} \\ \hline \text{skill:} & \underline{00} \\ \hline \text{ency:} & \underline{1} \\ \hline \text{sthod:} & \underline{1} \end{array}$		50% Earth <u>Source</u> (AVG.) (CAT HB) (GEN.)		

Job efficience	ey: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradier	nt: 0.298	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weigl	ht: 0.793	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correction	on: 0.1295	
Adjusted unit production:	122.51 LCY/hr	
Adjusted fleet production:	<b>367.53</b> LCY/hr	

Fleet size:	3 Dozer(s)
Unit cost:	\$3.084/LCY

Total job time:	<b>4.75</b> Hours
Total job cost:	\$5,390

			<i>i i i</i>		
Elk Creek Mine	Per	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIF	FICATION				
Task #· 009	State:	Colorado		Abbreviation.	None
Date: $11/18/202$	1 County:	Delta		Filename:	022-009
User: LDS	<u> </u>	Donu		-	022 00)
Agency or orga	anization name: DF	RMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	at D10T - 10SU				
Horsepower: 57	'4				
Blade Type: Se	emi-Universal				
Attachment: NA	A				
Shift Basis: <u>1 r</u>	per day				
Data Source: (C	(RG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL OUAN					
MATERIAL QUAN Initial Volume: 3.80	<u>\$1,133.55</u> <u>TITIES</u> 00				
MATERIAL QUAN Initial Volume: <u>3,80</u> Swell factor: 1.16	<u>\$1,133.55</u> <u>TITIES</u> 00 65				
MATERIAL QUAN'         Initial Volume:       3,80         Swell factor:       1.10         Loose volume:       4,42	<b><u>\$1,135.55</u></b> <b><u>TITIES</u></b> 00 65 <b>27</b> LCY				
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.16         Loose volume:       4,42	\$1,135.55         TITIES         00         65         27 LCY         max         Map 18				
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.16         Loose volume:       4,42         Source of estimated volu         Source of estimated swell	\$1,133.55           TITIES           00           65           27 LCY           Ime:         Map 18           Il factor:         Cat Hand				
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.10         Loose volume:       4,42         Source of estimated volu       Source of estimated swell	\$1,133.55           TITIES           00           65           27 LCY           ime:         Map 18           11 factor:         Cat Hand	  lbook			
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu         Source of estimated swell	\$1,133.55 <b>TITIES</b> 00           65           27 LCY           1me:         Map 18           11 factor:         Cat Hand           TTION	  lbook			
MATERIAL QUAN'.         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu         Source of estimated swel         HOURLY PRODUCC	\$1,133.55         TITIES         00         65         27 LCY         Ime:       Map 18         Il factor:       Cat Hand         TION	  lbook			
MATERIAL QUAN'.         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu         Source of estimated swel         HOURLY PRODUC         Average push distance:	\$1,133.55         TITIES         00         65         27 LCY         ume:       Map 18         11 factor:       Cat Hand         TION         200 feet         00 feet				
MATERIAL QUAN'.         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu       3000000000000000000000000000000000000	\$1,133.55         TITIES         00         65         27 LCY         ime:       Map 18         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/	lbook /hr			
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu       Source of estimated swel         HOURLY PRODUC       Average push distance:         Unadjusted hourly produ         Materials consistency de	\$1,133.55         TITIES         00         65         27 LCY         Ime:       Map 18         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         escription:       Partly of	 lbook /hr consolidated	stockpile 1.1		
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu       Source of estimated swel         HOURLY PRODUC'       Average push distance:         Unadjusted hourly produ       Vaterials consistency de	\$1,133.55         TITIES         00         65         27 LCY         ume:       Map 18         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         escription:       Partly of         30 %	/hr consolidated	  stockpile 1.1		
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu       3000000000000000000000000000000000000	\$1,133.55         TITIES         00         65         27 LCY         ime:       Map 18         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         escription:       Partly of         30 %       6.400 feet	/hr consolidated	stockpile 1.1		
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu       3000000000000000000000000000000000000	\$1,135.55         TITIES         00         65         27 LCY         ume:       Map 18         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         escription:       Partly of         30 %       6,400 feet	/hr consolidated			
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu         Source of estimated swel         HOURLY PRODUC         Average push distance:         Unadjusted hourly produ         Vaterials consistency de         Average push gradient:         Average site altitude:         Vaterial weight:	\$1,135.55         TITIES         00         65         27 LCY         ime:       Map 18         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         escription:       Partly of         30 %       6,400 feet         2,900 lbs/LCY	/hr consolidated			
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu       Source of estimated swel         HOURLY PRODUC         Average push distance:         Jnadjusted hourly produ         Vaterials consistency de         Average site altitude:         Vaterial weight:         Weight description:	\$1,133.55         TITIES         00         65         27 LCY         ime:       Map 18         11 factor:       Cat Hand         TION         action:       200 feet         946.0 LCY/         escription:       Partly of         30 %       6,400 feet         2,900 lbs/LCY       Decomposed rock	 lbook /hr consolidated  - 50% Rock,	stockpile 1.1		
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.16         Loose volume:       4,42         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:         Iob Condition Correction       Iob Condition Correction	\$1,135.55         TITIES         00         65         27 LCY         ume:       Map 18         27 LCY         ume:       Map 18         11 factor:       Cat Hand         TION         action:       946.0 LCY/         escription:       Partly c         30 %       6,400 feet         2,900 lbs/LCY       Decomposed rock         n Factor       Partor	/hr consolidated 			
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.1(         Loose volume:       4,42         Source of estimated volu       Source of estimated swel         BOURLY PRODUC       Average push distance:         Unadjusted hourly produ       Materials consistency de         Average push gradient:       Average site altitude:         Vaterial weight:       Weight description:         (ob Condition Correction Operator       Operator	$\begin{array}{c} \$1,133.53 \\ \hline \textbf{TITIES} \\ 00 \\ 65 \\ \hline \textbf{27 LCY} \\ \hline \textbf{me:} & \underline{Map \ 18} \\ 11 \ factor: & \underline{Cat \ Hand} \\ \hline \textbf{2TION} \\ \hline \textbf{action:} & \underline{946.0 \ LCY} \\ \hline \textbf{escription:} & \underline{Partly \ c} \\ \hline \underline{30 \ \%} \\ \hline \underline{6,400 \ feet} \\ \hline \underline{2,900 \ lbs/LCY} \\ \hline \underline{Decomposed \ rock} \\ \hline \textbf{n \ Factor} \\ \hline \textbf{Skill:} & \underline{0}. \end{array}$	 lbook /hr consolidated  - 50% Rock, 750			
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.16         Loose volume:       4,42         Source of estimated volu       3000000000000000000000000000000000000	$\$1,135.55$ TITIES         00       65 $27 LCY$ Imme: Map 18         If factor: Cat Hand         TION         Cat Hand         TION         action: 200 feet         Of feet         action: 946.0 LCY/         escription: Partly of         30 %       6,400 feet         2,900 lbs/LCY       Decomposed rock         n Factor $\circ$ Skill: 0.       0.         tency: 1.       1.				
MATERIAL QUAN'         Initial Volume:       3,8(         Swell factor:       1.16         Loose volume:       4,42         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:         [ob Condition Correction Operator         Material consist         Dozing me	$\$1,135.55$ TITIES         00         65         27 LCY         ime:       Map 18         11 factor:       Cat Hand         TION         action:       946.0 LCY/         escription:       Partly of $\frac{30 \%}{6,400 \text{ feet}}$ $2,900 \text{ lbs/LCY}$ Decomposed rock         n Factor $\cdot$ Skill:       0.         tency:       1.         ethod:       1.				

Job efficient	cy: 0.	830	(1 SHIFT/DAY)
Spoil pi	le: 0.	800	(FND-RF)
Push gradie	nt: 0.	298	(CAT HB)
Altitud	le: 1.	000	(CAT HB)
Material Weig	ht: 0.	793	(CAT HB)
Blade typ	be: 1.	000	(PAT)
Net correction	on: 0.1295		
Adjusted unit production:	122.51 LCY/hr		
Adjusted fleet production:	367.53 LCY/hr		

Fleet size:	3 Dozer(s)
Unit cost:	\$3.084/LCY

Total job time:	12.05 Hours
Total job cost:	\$13,654

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Flk Creek Mine					
	Peri	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIFI	CATION				
Task #: 010 Date: 11/18/2021 User: LDS	State: County:	Colorado Delta		Abbreviation: Filename:	None 022-010
Agency or organ	nization name: DR	RMS			
HOURLY EQUIPME	NT COST				
Basic Machine: Cat	D10T - 10SU				
Horsepower: $5/4$	• • • • •				
Blade Type: Sem	ni-Universal				
Attachment: NA					
Data Source: (CD	a uay				
Data Source: (CR	(U)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT	ITIES				
MATERIAL QUANT Initial Volume: 11,10 Swell factor: 1165 Loose volume: 12,93	<b>ITIES</b> 00 5 <b>32</b> L C X				
MATERIAL QUANTInitial Volume:11,10Swell factor:1.165Loose volume:12,93	<b>ITIES</b> 00 5 <b>32</b> LCY				
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volum	ITIES 00 5 32 LCY ne:Division 1	 Estimate			
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volum         Source of estimated swell	ITIES D0 5 32 LCY ne: Division 1 factor: Cat Hand	Estimate book			
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volum         Source of estimated swell	ITIES 00 5 32 LCY ne: Division 1 factor: Cat Hand	Estimate book			
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT	ITIES 00 5 32 LCY ne: Division 1 factor: Cat Hand CION	Estimate book			
MATERIAL QUANT:         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:	ITIES 00 5 32 LCY ne: Division 1 factor: Cat Hand CION 200 feet	 Estimate book			
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product	ITIES           00           5           32 LCY           ne:         Division 1           factor:         Cat Hand           CION           200 feet           ettion:         946.0 LCY/	 Estimate book			
MATERIAL QUANT:         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc	ITIES         00         5         32 LCY         ne:       Division 1         factor:       Cat Hand         CION         200 feet         stion:       946.0 LCY/         cription:       Compa	Estimate book	  mbankment 0.9		
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc	ITIES         00         5         32 LCY         ne:       Division 1         factor:       Cat Hand         CION         etion:       200 feet         946.0 LCY/         cription:       Compa	Estimate book	  mbankment 0.9		
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc         Average push gradient:         Average site altitude:	ITIES         00         5         32 LCY         ne:       Division 1         factor:       Cat Hand         CION         200 feet         etion:       946.0 LCY/         cription:       Compa         20 %         6,700 feet	 Estimate book /hr cted fill or en	  mbankment 0.9		
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc         Average push gradient:         Average site altitude:	ITIES           00           5           32 LCY           ne:         Division 1           factor:         Cat Hand           CION           cription:         200 feet           946.0 LCY/           cription:         Compa           20 %         6,700 feet           2,900 lbs/LCY	 Estimate book /hr cted fill or en	  mbankment 0.9		
MATERIAL QUANT         Initial Volume:       11,10         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc         Average site altitude:         Material weight:         Weight description:	ITIES 00 5 32 LCY ne: Division 1 factor: Cat Hand CION 200 feet 946.0 LCY/ cription: Compa 20 % 6,700 feet 2,900 lbs/LCY Decomposed rock	Estimate book hr cted fill or en	 mbankment 0.9		
MATERIAL QUANT         Initial Volume:       11,1(         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc         Average site altitude:         Material weight:         Weight description:         Iob Condition Correction	ITIES 200 5 32 LCY ne: Division 1 factor: Cat Hand CION 200 feet 20% 6,700 feet 2,900 lbs/LCY Decomposed rock Factor	 Estimate book /hr cted fill or en  - 50% Rock,	 mbankment 0.9		
MATERIAL QUANT         Initial Volume:       11,1(         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc         Average site altitude:         Material weight:         Weight description:         Iob Condition Correction	ITIES 00 5 32 LCY ne: Division I factor: Cat Hand CION 200 feet 20% 6,700 feet 2,900 lbs/LCY Decomposed rock Factor Skill: 0				
MATERIAL QUANT         Initial Volume:       11,1(         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Iob Condition Correction         Operator S         Material consisten	ITIES           00           5           32 LCY           ne:         Division I           factor:         Cat Hand           CION           200 feet           200 feet           946.0 LCY/           cription:         Compa           20 %           6,700 feet           2,900 lbs/LCY           Decomposed rock           Factor           Skill:         0.				
MATERIAL QUANT         Initial Volume:       11,1(         Swell factor:       1.165         Loose volume:       12,93         Source of estimated volun         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produc         Materials consistency desc         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Iob Condition Correction         Operator S         Material consiste         Dozing met	ITTIES $00$ $5$ $32 LCY$ ne:       Division I         factor:       Cat Hand         TON         200 feet         etion:       946.0 LCY/         cription:       Compa         20 %         6,700 feet         2,900 lbs/LCY         Decomposed rock         Factor         Skill:       0.         ency:       0.         thod:       1.				

Job efficience	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 0.545	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 0.793	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correction	on: 0.1937	
Adjusted unit production:	183.24 LCY/hr	
Adjusted fleet production:	549.72 LCY/hr	

Fleet size:	3 Dozer(s)
Unit cost:	\$2.062/LCY

Total job time:	<b>23.52</b> Hours
Total job cost:	\$26,665

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Task description:	Backfill and Reg	rade Tempo	orary Conveyor Corrie	lor	
Elk Creek Mine	Peri	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIF	<b>ICATION</b>				
Task #: 011 Date: 11/18/2021 User: LDS	State: County:	Colorado Delta		Abbreviation: Filename:	None 022-011
Agency or organ	nization name: DR	RMS			
HOURLY EQUIPME	ENT COST				
Basic Machine:Cat	D10T - 10SU				
Horsepower: 5/4	+ : TT=:				
Attachments NA	ni-Universal				
Shift Design 1 m	or dou				
Data Source: (CE	C)				
Data Source. (Cr	(0)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$0.00	NA		
		\$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:	\$377.84 <b>\$1,133.53</b>	\$41.30			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$377.84 \$1,133.53 TTIES	\$41.50	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40	\$377.84 \$1,133.53 TTIES 0	\$41.3U	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Losse volume: 862	\$377.84 <b>\$1,133.53</b> TTIES 0 5 11 CY		NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62	\$377.84 <b>\$1,133.53</b> TTIES 0 5 1 LCY				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum	\$377.84 \$1,133.53 TTIES 0 5 1 LCY me:Operator	 Estimate			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum Source of estimated swell	\$377.84 <b>\$1,133.53</b> TTIES 0 5 1 LCY me: Operator 1 factor: Cat Hand	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum Source of estimated swell	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volu Source of estimated swell HOURLY PRODUCT	\$377.84 \$1,133.53 TTIES 0 5 1 LCY me: Operator 1 factor: Cat Hand FION	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volu Source of estimated swell <b>HOURLY PRODUCT</b> Average push distance:	\$377.84 \$1,133.53 TTIES 0 5 1 LCY me: Operator 1 factor: Cat Hand <u>CION</u> 250 feet	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volu Source of estimated volu Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly produc	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         FION         250 feet         ction:       754 3 LCY	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum Source of estimated swell <b>HOURLY PRODUCT</b> Average push distance: Unadjusted hourly produc	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         Cat Hand         Constraints         Cat Hand         Constraints         Constraints         250 feet         754.3 LCY/	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum Source of estimated volum Source of estimated swell <b>HOURLY PRODUCT</b> Average push distance: Unadjusted hourly product	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand <b>EION</b> ction:       250 feet         ction:       754.3 LCY/         scription:       Compa	541.30			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum Source of estimated volum Source of estimated swell <b>HOURLY PRODUCT</b> Average push distance: Unadjusted hourly product Materials consistency des Average push gradient:	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       250 feet         ction:       754.3 LCY/         scription:       Compa         5 %	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 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 push gradient: Average site altitude:	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       250 feet         ction:       754.3 LCY/         scription:       Compa         5 %       6,250 feet	 Estimate book			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum Source of estimated volum Source of estimated swell <b>HOURLY PRODUCT</b> Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight:	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         Cat Hand         Constant         250 feet         ction:       250 feet         754.3 LCY/         scription:       Compa         5 %         6,250 feet         2,900 lbs/LCY	 Estimate book hr 			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 Source of estimated volum Source of estimated volum Source of estimated swell <u>HOURLY PRODUCT</u> Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description:	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       250 feet         ction:       754.3 LCY/         scription:       Compa         5 %       6,250 feet         2,900 lbs/LCY       Decomposed rock	 Estimate book hr cted fill or en  - 50% Rock,			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 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	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       250 feet         ction:       754.3 LCY/         scription:       Compa         5 %       6,250 feet         2,900 lbs/LCY       Decomposed rock         Factor       Factor	 Estimate book hr cted fill or en  - 50% Rock,			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 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 3	\$377.84         \$1,133.53         TTIES         0         5         1 LCY         me:       Operator         1 factor:       Cat Hand         Cat Hand         Company         250 feet         ction:       754.3 LCY/         scription:       Compa         5 %         6,250 feet         2,900 lbs/LCY         Decomposed rock         Factor       Skill:         0.				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 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: Job Condition Correction Operator 5	$\begin{array}{c c} & \$377.84 \\ \hline \$1,133.53 \\ \hline \textbf{TTIES} \\ 0 \\ 5 \\ \hline 1 \text{ LCY} \\ \hline \textbf{me:} & Operator \\ \hline 1 \text{ LCY} \\ \hline \textbf{me:} & Operator \\ \hline \textbf{Iactor:} & Cat Hand \\ \hline \hline \textbf{TION} \\ \hline \textbf{ction:} & 250 \text{ feet} \\ \hline \textbf{Cat Hand} \\ \hline \textbf{Cat Hand} \\ \hline \textbf{Comparison} \\ \hline \textbf{ction:} & Compa \\ \hline \textbf{ction:} & Compa \\ \hline \textbf{5\%} \\ \hline \textbf{6},250 \text{ feet} \\ \hline \textbf{2},900 \text{ lbs/LCY} \\ \hline \textbf{Decomposed rock} \\ \hline \hline \textbf{Factor} \\ \hline \textbf{Skill:} & 0. \\ \hline \textbf{ency:} & 0. \\ \hline \end{array}$				
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,40 Swell factor: 1.16 Loose volume: 8,62 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: Job Condition Correction Operator 5 Material consistency des	$\begin{array}{c c} \$ 377.84 \\ \$ 1,133.53 \\ \hline \textbf{TTIES} \\ 0 \\ 5 \\ \hline 1 \text{ LCY} \\ \hline \textbf{me:} & Operator \\ \hline 1 \text{ factor:} & Cat Hand \\ \hline \textbf{CION} \\ \hline \textbf{ction:} & 250 \text{ feet} \\ \hline \textbf{ction:} & 754.3 \text{ LCY} \\ \hline \textbf{scription:} & Compa \\ \hline \underline{5 \%} \\ \hline \underline{6,250 \text{ feet}} \\ \hline 2,900 \text{ lbs/LCY} \\ \hline \textbf{Decomposed rock} \\ \hline \hline \textbf{Factor} \\ \hline \textbf{Skill:} & 0. \\ \hline \textbf{ency:} & 0. \\ \hline \textbf{thod:} & 1. \\ \hline \end{array}$	 Estimate book hr cted fill or en  - 50% Rock, 750 900 000			

Job efficiency:		0.830	(1 SHIFT/DAY)
Spoil pile:		0.800	(FND-RF)
Push gradie	ent:	0.903	(CAT HB)
Altitud	de:	1.000	(CAT HB)
Material Weig	,ht:	0.793	(CAT HB)
Blade typ	pe:	1.000	(PAT)
Net correction	on: _	0.3209	
Adjusted unit production:	242	.05 LCY/hr	
Adjusted fleet production:	726	.15 LCY/hr	
	-		

THEEL SIZE. JL	ozer(s)
Unit cost: \$1.	561/LCY

Total job time:	<b>11.87</b> Hours
Total job cost:	\$13,457

Page 1 of 2

Task description:	Regrade Expand	ieu Eik Ciee	k white Fair Denen		
Elk Creek Mine	Peri	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIF	TICATION				
Task #:         012           Date:         11/18/202           User:         LDS	State: 1 County:	Colorado Delta		Abbreviation: Filename:	None 022-012
Agency or orga	nization name: DR	RMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	tt D10T - 10SU				
Horsepower: 5/	4				
Attachment N	mi-Universal				
Shift Design 1 r	A A ar day				
Deta Source: (C	PC)				
	NU)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
		\$0.00	NA		
Ripper own. Cost/Hour:		\$0.00	0		
Ripper own. Cost/Hour: Ripper op. Cost/Hour:		\$0.00	ů.		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$377.84 \$1,133.53	\$41.30	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1.50	\$377.84 \$1,133.53 FITIES	\$41.30	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>1,50</u> Swell factor: <u>1,16</u>	\$377.84 \$1,133.53 FITIES 00 55	\$41.30	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,74	\$377.84 <b>\$1,133.53</b> <b><u>FITIES</u> 00 55 <b>48</b> LCY</b>	\$0.00	NA		
Ripper own. Cost/Hour:         Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:         1.16         Loose volume:         1.76	\$377.84 <b>\$1,133.53</b> <b><u>FITIES</u> 00 55 <b>48</b> LCY</b>	\$0.00 \$41.30	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,74 Source of estimated volu Source of estimated swel	\$377.84 <b>\$1,133.53</b> <b>FITIES</b> 00 55 <b>48</b> LCY ume: Operator U factor: Cat Hand	\$0.00 \$41.30	NA		
Ripper own. Cost/Hour:         Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       1,50         Swell factor:       1.10         Loose volume:       1,72         Source of estimated volu       Source of estimated swel	\$377.84 <b>\$1,133.53</b> <b>FITIES</b> 00 55 <b>48</b> LCY Ime: Operator Il factor: Cat Hand	\$0.00 \$41.30 	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,72 Source of estimated volu Source of estimated swel	\$377.84 <b>\$1,133.53</b> <b><u><b>IITIES</b></u> 00 55 <b>18</b> LCY Ime: <u>Operator</u> Il factor: <u>Cat Hand</u> <b>TION</b></b>	\$0.00 \$41.30 	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,70 Source of estimated volu Source of estimated swel HOURLY PRODUC	\$377.84 <b>\$1,133.53</b> <b><u>FITIES</u> 00 55 <b>48</b> LCY Ime: Operator Il factor: Cat Hand <b>TION</b></b>	\$0.00 \$41.30 	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1.10 Loose volume: 1,74 Source of estimated volu Source of estimated swel HOURLY PRODUCC Average push distance:	\$377.84 <b>\$1,133.53</b> <b>FITIES</b> 00 55 <b>48</b> LCY ume: Operator 11 factor: Cat Hand <b>TION</b> 100 feet	\$0.00 \$41.30 	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,72 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$377.84 <b>\$1,133.53</b> <b>FITIES</b> 00 55 <b>48</b> LCY Ime: Operator Il factor: Cat Hand <b>TION</b> <b>100</b> feet 1,718.9 LC	\$0.00 \$41.30 	NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,72 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$377.84 <b>\$1,133.53</b> <b><u><b>FITIES</b></u> 00 55 <b>48</b> LCY ume: Operator 11 factor: Cat Hand <b><u>TION</u></b> uction: 1,718.9 LC escription: Compa</b>	\$41.30 \$41.30 Estimate book			
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 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 push gradient:	\$377.84 \$1,133.53 FITIES 00 55 48 LCY ume: Operator 11 factor: Cat Hand TION 100 feet 1,718.9 LC scription: Compa 5 % 7 500 feet	\$41.30 \$41.30 			
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume: 1,50 Swell factor: 1.10 Loose volume: 1,72 Source of estimated volu Source of estimated swel <b>HOURLY PRODUC</b> Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$377.84 <b>\$1,133.53</b> <b>FITIES</b> 00 55 <b>48</b> LCY Ime: Operator If factor: Cat Hand <b>TION</b> action: 1,718.9 LC escription: Compa 5 % 7,500 feet	\$41.30 \$41.30 			
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1.10 Loose volume: 1,72 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:	\$377.84 <b>\$1,133.53</b> <b>FITIES</b> 00 55 <b>48</b> LCY Ime: Operator Il factor: Cat Hand <b>TION</b> action: 1,718.9 LC escription: Compa 5 % 7,500 feet 2,900 lbs/LCY	\$41.30 \$41.30 Estimate book Y/hr cted fill or en			
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,74 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:	\$377.84 <b>\$1,133.53</b> <b>FITIES</b> 00 55 <b>48</b> LCY Ime: Operator Il factor: Cat Hand <b>TION</b> action: 1,718.9 LC escription: Compa 5 % 7,500 feet 2,900 lbs/LCY Decomposed rock	\$41.30 \$41.30 			
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1.16 Loose volume: 1,74 Source of estimated volu 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: Job Condition Correction	$\frac{\$377.84}{\$1,133.53}$ <b>FITIES</b> 00 55 <b>48</b> LCY ume: Operator Il factor: Cat Hand <b>TION</b> action: 100 feet 1,718.9 LC ascription: Compa $\frac{5 \%}{7,500 \text{ feet}}$ 2,900 lbs/LCY Decomposed rock n Factor	\$0.00 \$41.30 	NA NA 		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1,10 Loose volume: 1,74 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: Job Condition Correction Operator	$\begin{array}{c c} \$377.84 \\ \$1,133.53 \\ \hline \\ \hline \\ \$1,133.53 \\ \hline \\ \hline \\ \$1,133.53 \\ \hline \\ \hline \\ \hline \\ \$1,133.53 \\ \hline \\ \hline \\ \hline \\ 100 \\ \hline \\ 100 \\ \hline \\ \hline \\ \hline \\ 1,718.9 \\ \hline \\ \hline \\ \hline \\ 1,718.9 \\ \hline \\ \hline \\ \hline \\ \hline \\ 1,718.9 \\ \hline \\ $	\$0.00 \$41.30 	NA NA NA 		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1.10 Loose volume: 1,72 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: Job Condition Correction Operator Material consist	\$377.84         \$1,133.53         FITTIES         00         55         48 LCY         ume:       Operator         11 factor:       Cat Hand         TION         action:       100 feet         1,718.9 LCY         escription:       Compa         5 %       7,500 feet         2,900 lbs/LCY       Decomposed rock         n Factor       Skill:       0.         tency:       0.	\$41.30 \$41.30 	NA NA NA NA Source (AVG.) (CAT HB))		
Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,50 Swell factor: 1.10 Loose volume: 1,74 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: Job Condition Correction Operator Material consist	\$377.84         \$1,133.53         FITTIES         00         55         48 LCY         ume:       Operator         11 factor:       Cat Hand         TION         action:       1,718.9 LCY         escription:       Compa         5 %       7,500 feet         2,900 lbs/LCY       Decomposed rock         n Factor       Skill:       0.         tency:       0.         ethod:       1.	\$41.30 \$41.30 	NA NA NA NA NA Source (AVG.) (CAT HB)) (GEN.)		

Job efficiency:		0.830	(1 SHIFT/DAY)
Spoil pile:		0.800	(FND-RF)
Push gradient:		0.903	(CAT HB)
Altitud	de:	1.000	(CAT HB)
Material Weig	t:	0.793	(CAT HB)
Blade ty	pe:	1.000	(PAT)
Net correction	on:	0.3209	
Adjusted unit production:	55	1.60 LCY/hr	
Adjusted fleet production:	16	54.8 LCY/hr	

Fleet size:	3 Dozer(s)
Unit cost:	\$0.685/LCY

Total job time:	<b>1.06</b> Hours
Total job cost:	\$1,197

## **REVEGETATION WORK**

Task descr	iption:	<b>Re-seed Drill Pads and Road</b>	ls, 20.72 acres	@ 2% failure rate	
ite: Elk Cre	ek Mine	Permit Action:	SI1	Permit/Jol	o#: <u>C1981022</u>
PROJECT	<u>IDENTIFIC</u>	<u>CATION</u>			
Task #:	016	State: Colorado		Abbreviation:	None
	11/18/2021	County: Delta		Filename:	022-016
Date:	11/10/2021	2			

### **FERTILIZING**

#### Materials

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

### Application

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

## **TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$290.40

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	1.50	4.89	\$17.59
Indian Ricegrass - Native	0.50	1.62	\$3.25
Mountain Brome - Bromar	2.00	3.21	\$7.60
Sandberg Bluegrass - VNS	1.50	31.85	\$12.60
Coreopsis, Lance Leafed	0.15	3.84	\$4.28
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Prairie Junegrass	0.25	13.29	\$6.50
Penstemon, Rocky Mountain	0.15	2.35	\$4.43
Yarrow, White	0.05	3.18	\$2.00

Totals Seed Mix	8.10	69.28	\$71.25	
i otulo ottula	0.10	07.20	$\psi$	

#### Application

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

#### **MULCHING and MISCELLANEOUS**

#### Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	2.00	ACRE	\$7.78	\$15.56
Herbicide - Escort @ 1.0 pt/ac	2.00	ACRE	\$194.52	\$389.04
<b>Total Mulch Materials Cost/Acre</b>				\$404.60

Application

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

### NURSERY STOCK PLANTING

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

No. of Acres: Estimated Failure Rate: *Selected Replanting Work Items:	0.5 0%	Cost /Acre: Cost /Acre*:	\$1,033.47 \$0.00
*Selected Replanting work items:         Initial Job Cost:       \$516.74         Reseeding Job Cost:       \$0.00         Total Job Cost:       \$517         Job Hours:       20.72	NONE		

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## SCRAPER TEAM WORK

Site: Elk Creek Mine		Permit	Action:	SI1	Peri	nit/Job#: <u>C198</u>	1022
PROJECT IDEN	<b>FIFICATION</b>						
Task #: 023	Stat	to: (	Colorado		Abbroy	vistion: None	
Date: $11/18/2$	2021 Count	ty: $\Gamma$	Delta		Abble Fil	ename: $022-02$	23
User: LDS							
Agency or o	organization name: _	DRM	S				
HOURLY EQUIE	<u>PMENT</u>			COSTS	hift basis: <u>1 per d</u>	ay	
			Equipme	ent Description			
	-Scra	aper:	Cat 637	G w/push-pull			
Suppo	-Do rt Equipment -Load A	ozer: Area:	NA NA				
Suppo	-Dump A	Area:	NA				
Road Ma	intenance – Motor Gra	ader:	NA				
	-Water Tr	ruck:	NA				
Cost Breakdown:	Scraper Work	Team		Support Equi	pment	Maintenance	Equipmer
	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	Water
%Utilization-machine:	100		NA	NA	NA	NA	
Ownership cost/hour:	\$223.48		NA	NA	NA	NA	
Operating cost/hour:	\$193.77		NA	NA	NA	NA	
%Utilization-ripper:	NA		NA	NA	NA	NA	
Ripper own. cost/hour:	NA		NA	NA	NA	NA	
Ripper op. cost/hour:	NA		NA	NA	NA	NA	
Operator cost/hour:	\$30.90		NA	NA	NA	NA	
Unit Subtotals:	\$448.15		NA	NA	NA	NA	
Number of Units:	2		0	0	0	0	
Group Subtotals:	Work:	\$896	5.30	Support:	\$0.00	Maint:	\$0.
Total work team cost	/hour: <u><b>\$896.30</b></u>						
MATERIAL OU	NTTTEC						
Initial volume:	14,100		CCY	Swell fac	tor: <u>1.125</u>		
Loose volume.			D: · ·				
Sou Source of	of estimated volue	me:	Cat Hand	of Reclamation, Ibook	winning & Safety		
HOURLY PROD	UCTION						
				Scraper B	owl (volume) Basi	<u>s:</u>	
Material weight:	2,650 lbs/LCY			Struck	Volume: 24.00	L	CY
Material description:	Decomposed rock - 75% Earth	25% F	Rock,	Heaped	Volume: 34.00	L	CY
Rated Payload:	81,600 pounds			Average	Volume: 29.00	L	CY
				2			

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6200 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Nac	0.820	NTA	
Net Correction:	0.830	NA	

Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	1867	0.40

Haul Time: **0.40** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	2795	0.35

Return Time:	0.35	minutes
Total Scraper team cycle time:	2.35	minutes
Adjusted for job conditions:	1,229.11	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	1,229.11	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	1,229.11	LCY/Hour
$\mathbf{U}_{\mathbf{r}} = 1^{T} \mathbf{r} \mathbf{r} 1 + 1^{T} \mathbf{r} \mathbf{r} 1 + 1^{T} \mathbf{r} 1 \mathbf{r} 1 \mathbf{r} 1 \mathbf{r} 1 \mathbf{r} 1 1 1 0 0 0 5 \mathbf{r} 1 \mathbf{C} \mathbf{V} \mathbf{T} 1 \mathbf{r} 1 0 0 1 0 1 0 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0$		

Unadjusted unit production/hour: 1,480.85 LCY/Hour Optimal Number of Scrapers per push dozer:

Fleet size:	1	Team(s)	Total job time:	12.91	Hours
Unit cost:	\$0.729	/LCY	Total job cost:	\$11,567	

## BULLDOZER RIPPING WORK

	Task description:	Rip All Su	face Facility Area	IS				
Site	: Elk Creek Mi	ne	Permit Action:	SI1	Р	ermit/Job#:	C19810	22
	PROJECT ID	ENTIFICATION						
	Task #:     034       Date:     11/       User:     LD	4 S (18/2021 Con (S	tate: Colorado inty: Delta		Abb	reviation: Filename:	None 022-034	
	Agency	or organization name:	DRMS					
	HOURLY EQ	UIPMENT COST						
	Basic Ripper Att	Machine: Cat D10T achment: 3-Shank R	- 10SU Lipper		Horsepower: Shift Basis: Data Source:	<u> </u>	574 ber day	
	Cost Breakdown				Bulu Source.	(	(100)	
	<u>Cost Broakdown</u>	Ownership Cost/Hot	ır:	\$169.60	Utilization % NA	_		
	Pinn	Operating Cost/Hou	ır:	\$166.94 \$25.10	100 NA	-		
	Ripp	per Ownership Cost/Hot	Ir:	\$23.19	100	_		
	11	Operator Cost/Hou	ır:	\$41.30	NA	-		
		Total Unit Cost/Hou	ır:	\$416.77				
		Total Fleet Cost/Hou	ır: <b>\$1,25</b>	0.32				
	MATERIAL (	<u>UANTITIES</u>	Sele	cted estimating	method: Area	a		
	Alternate Method	<u>ls:</u>						
Seismic: Area:	NA 70.80	acres	Bank Volume:	NA 2.00	BCY Volume:	228,448	NA	BCY or CCY
		Source of estimated of	uantity: Page ?	05-20		- , -		
			[uullity: <u>1 uge 2</u> .	.05 20				
	HOURLYPRO	JUCTION						
	<u>Seismic:</u>	Seismi	velocity:	NΔ	feet/sec	ond		
		beisini		1111		ond		
	<u>Area:</u>	Average Rinn	ing Denth <sup>.</sup>	2.00	feet/nas	s		
		Average Ripp	ing Width:	8.67	feet/pas	55 55		
		Average Rippi	ng Length:	300.00	feet/pas	s		
		Average Do	zer Speed:	88.00	feet/min	nute		
		Average Mane	iver Time:	0.25	minutes	s/pass		
		Production pe		0.979		Jur		
	Job Condition Co	orrection Factors						
	Un	adjusted Hourly Unit F	roduction:	0.979	Acres/h	r		
		Sit	e Altitude:	6,200	feet			
		Al	titude Adj:	1.00	(CAT F	HB)		
		Job . Not (	Efficiency:	0.83	(1 shift/	/day)		
		INCL V		0.85	munipi	ler		
		Adjusted Hourly Adjusted Hourly	Unit Production: Fleet Production:	0.81 2.44	Acres/hr Acres/hr			
	JOB TIME AN	ND COST						
	Fleet size:	3 Grad	ler(s)	Total job tim	e:2	29.04	Но	ours
	Unit cost:	\$512.847 Per a	acre	Total job cos	st: \$3	36,310		

#### HYDRAULIC EXCAVATOR WORK

Elk Creek Mine       Permit Action:       SI1       Permit/Job#:       C19         PROJECT IDENTIFICATION       Task #:       041       State:       Colorado       Abbreviation:       Non         Date:       11/18/2021       County:       Delta       Abbreviation:       Non         User:       LDS       County:       Delta       Permit Action:       Non         Agency or organization name:       DRMS       DRMS       Permit Action:       268         HOURLY EQUIPMENT COST       Basic Machine:       Cat 336D L 10°-6" Stick       Horsepower:       268         Attachment 1:       ROPS Cab       Weight (MT):       29.30         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Operating Cost/Hour:       \$83.42       NA         Operator Cost/Hour:       \$37.32       NA         Total Unit Cost/Hour:       \$194.88       Total Fleet Cost/Hour:       \$194.88	981022 ie -041 /
PROJECT IDENTIFICATION         Task #:       041       State:       Colorado       Abbreviation:       Non         Date:       11/18/2021       County:       Delta       Filename:       022-         User:       LDS       Agency or organization name:       DRMS         HOURLY EQUIPMENT COST         Basic Machine:       Cat 336D L 10'-6" Stick       Horsepower:       268         Attachment 1:       ROPS Cab       Weight (MT):       29.30         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$74.14       100         Operator Cost/Hour:       \$194.88         Total Unit Cost/Hour:       \$194.88	ne -041
Task #:       041       State:       Colorado       Abbreviation:       Non         Date:       11/18/2021       County:       Delta       Filename:       022-         User:       LDS       Agency or organization name:       DRMS         HOURLY EQUIPMENT COST         Basic Machine:       Cat 336D L 10'-6" Stick       Horsepower:       268         Attachment 1:       ROPS Cab       Weight (MT):       29.30         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$88.42       NA         Operator Cost/Hour:       \$74.14       100         Operator Cost/Hour:       \$37.32       NA         Total Unit Cost/Hour:       \$194.88         Total Fleet Cost/Hour:       \$194.88	e -041
Agency or organization name:       DRMS         HOURLY EQUIPMENT COST       Horsepower:       268         Basic Machine:       Cat 336D L 10'-6" Stick       Horsepower:       268         Attachment 1:       ROPS Cab       Weight (MT):       29.30         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$83.42       NA         Operating Cost/Hour:       \$74.14       100         Operator Cost/Hour:       \$37.32       NA         Total Unit Cost/Hour:       \$194.88       Total Fleet Cost/Hour:	
HOURLY EQUIPMENT COST         Basic Machine:       Cat 336D L 10'-6" Stick       Horsepower:       268         Attachment 1:       ROPS Cab       Weight (MT):       29.30         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$83.42       NA         Operating Cost/Hour:       \$74.14       100         Operator Cost/Hour:       \$37.32       NA         Total Unit Cost/Hour:       \$194.88         Total Fleet Cost/Hour:       \$194.88	<u>/</u>
Basic Machine:       Cat 336D L 10'-6" Stick       Horsepower:       268         Attachment 1:       ROPS Cab       Weight (MT):       29.30         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$83.42       NA         Operating Cost/Hour:       \$74.14       100         Operator Cost/Hour:       \$37.32       NA         Total Unit Cost/Hour:       \$194.88         Total Fleet Cost/Hour:       \$194.88	ý
Cost Breakdown:Utilization %Ownership Cost/Hour:\$83.42NAOperating Cost/Hour:\$74.14100Operator Cost/Hour:\$37.32NATotal Unit Cost/Hour:\$194.88Total Fleet Cost/Hour:\$194.88	
Utilization %Ownership Cost/Hour:\$83.42Operating Cost/Hour:\$74.14Operator Cost/Hour:\$37.32Total Unit Cost/Hour:\$194.88Total Fleet Cost/Hour:\$194.88	
Total Unit Cost/Hour:   \$194.88     Total Fleet Cost/Hour:   \$194.88	
Total Fleet Cost/Hour: \$194.88	
Initial volume:7,500CCYSwell factor:1.125Loose volume:8,438LCYLCY	
Source of estimated volume: Appendix E-1; Map S-038	
HOURLY PRODUCTION	
Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):	
Basic Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE	
Cycle Time Value: 0.321 min	utes
Load Bucket Capacity Bucket Size Class: Small	
Rated Capacity: 1.56 LCY (heaped)	
Bucket Fill Factor:         0.850         Hard, tough clay (80% - 90%) 0.850	
Adjusted Capacity: 1.33 LCY	
Job Condition Correction Factors         Site Altitude: 6400 feet	
Altitude Adj:1.00(CAT HB)Job Efficiency:0.83(1 shift/day)	
Net Correction: 0.83 multiplier	
Unadjusted Hourly Unit Production:247.85LCY/HourAdjusted Hourly Unit Production:205.72LCY/HourAdjusted Hourly Fleet Production:205.72LCY/Hour	
JOB TIME AND COST	
JOD THE AND CONT	lours
Fleet size:     1     Excavator     Total job time:     41.02     H	louis

Task description:	<b>Regrade Pond C Access Road</b>			
Elk Creek Mine	Permit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIF	ICATION			
Task #: 042	State: Colorado		Abbreviation:	None
Date: 11/18/2021	County: Delta		Filename:	022-042
User: LDS				
Agency or orga	nization name: DRMS			
HOURLY EQUIPMI	ENT COST			
Basic Machine: Ca	t D10T - 10SU			
Horsepower: 574	4	_		
Blade Type: Set	mi-Universal			
Attachment: NA	<u> </u>	_		
Shift Basis: <u>1 p</u>	er day	_		
Data Source: (C	RG)	_		
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$169.60	NA		
Operating Cost/Hour:	\$166.94	100		
Ripper own. Cost/Hour:	\$0.00	NA		
11	\$0.00	0		
Ripper op. Cost/Hour:	\$0.00			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL OUANT	\$377.84 \$377.84 \$1,133.53	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16	\$377.84 \$377.84 \$1,133.53 <b>FITIES</b> 33 55	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88	\$377.84 \$377.84 \$1,133.53 <b>TITIES</b> 33 55 33 LCY	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu	\$377.84 \$377.84 \$1,133.53 <b>FITIES</b> 33 55 33 LCY me: Division Estimate	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated swel	\$377.84 \$377.84 \$1,133.53 <b>TITIES</b> 33 55 53 LCY me: Division Estimate 1 factor: Cat Handbook	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated swel	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated swel HOURLY PRODUC	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated swel HOURLY PRODUCC	\$377.84 \$377.84 \$1,133.53 <b>TITIES</b> 33 55 33 LCY me: Division Estimate 1 factor: Cat Handbook <b>TION</b> 200 feet	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION         200 feet         ction:       946.0 LCY/br	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         ElON         200 feet         ction:       946.0 LCY/hr         scription:       Compacted fill or en			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCC Average push distance: Unadjusted hourly produ	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION         200 feet         ction:       946.0 LCY/hr         scription:       Compacted fill or em	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.10 Loose volume: 3,88 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 push gradient: Average site altitude:	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION         200 feet         ction:       946.0 LCY/hr         scription:       Compacted fill or en         0 %       6,100 feet	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 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:	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         3         55         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook <b>TION</b> ction:       946.0 LCY/hr         scription:       Compacted fill or en         0 %       6,100 feet         2,900 lbs/LCY			
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description:	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION         200 feet         ction:       946.0 LCY/hr         scription:       Compacted fill or en         0 %       6,100 feet         2,900 lbs/LCY       Decomposed rock - 50% Rock,	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 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 push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION         200 feet         ction:       946.0 LCY/hr         scription:       Compacted fill or en         0 %       6,100 feet         2,900 lbs/LCY       Decomposed rock - 50% Rock,         Pactor       1	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 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 push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION         200 feet         ction:       946.0 LCY/hr         scription:       Compacted fill or en         0 %	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 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: Job Condition Correction Operator Material consist	\$30.00         \$41.30         \$377.84         \$1,133.53         CITIES         33         55         33 LCY         me:       Division Estimate         1 factor:       Cat Handbook         TION         200 feet         ction:       946.0 LCY/hr         scription:       Compacted fill or en         0 %       6,100 feet         2,900 lbs/LCY       Decomposed rock - 50% Rock,         Factor       Skill:       0.750         sency:       0.900	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 3,33 Swell factor: 1.16 Loose volume: 3,88 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCC 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	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	NA		

Job efficience	cy:	0.830	(1 SHIFT/DAY)
Spoil pi	ile:	0.800	(FND-RF)
Push gradie	ent:	1.000	(CAT HB)
Altitud	de:	1.000	(CAT HB)
Material Weig	t:	0.793	(CAT HB)
Blade typ	pe:	1.000	(PAT)
Net correction	on:	0.3554	
Adjusted unit production:	33	6.21 LCY/hr	
Adjusted fleet production:	10	08.63 LCY/hr	
	-		

Fleet size:	3 Dozer(s)
Unit cost:	\$1.124/LCY

Total job time:	<b>3.85</b> Hours
Total job cost:	\$4,364

### MOTOR GRADER WORK

Task description:	Finish Grade All Distu	rbed Areas		
Elk Creek Mine	Permit Ac	tion: <u>SI1</u>	Perm	it/Job#: <u>C1981022</u>
PROJECT IDENT	FICATION			
Task #: 050	State: Cold	orado	Abbrevi	ation: None
Date: $11/18/20$	21 County: Delt	a	File	name: 022-050
User: LDS	<u> </u>			
Agency or or	ganization name: DRMS			
HOURLY EQUIPM	<u>IENT COST</u>			
Basic Mach	ine: CAT 14M		Horsepower:	259
Ripper Attachm	ent:		Shift Basis:	1 per day
			Data Source:	(CRG)
				× /
Cost Breakdown:		1	TT.'1' (* 0/	
^	norshin Cost/Hours	¢0= 00	Utilization %	
Ow Or	nership Cost/Hour:	\$85.80 \$60.40	<u>INA</u> 100	
U] Dinnar Ou	marship Cost/Hour:	\$00.40 \$0.00	NA	
Ripper Ow Rippor O	hership Cost/Hour:	\$0.00 \$0.00	INA	
Kipper Of	Derator Cost/Hour	\$78 56	NΔ	
То	tal Unit Cost/Hour:	\$20.50 \$174.76		
10		\$174.70		
Tot	al Fleet Cost/Hour:	\$174.76		
Sou	rce of estimated acreage: F	Page 2.05-20; Division	n Estimate	
HOUKLI FRODU	Avanaa Cradar Speed	1.50	mah	
	Selected Application:	1.30 Finish	$_{arading} (0.2.5 \text{ mph})$	15
	Selected Blade Angle	30	degrees	- 1.5
	Effective Blade Length:	12.10	tegrees	
Wid	h of blade overlap per pass:	2.00	feet	
Net gradin	g or ripping width per pass:	10.10	feet	
Unadjus	ted Hourly Unit Production:	1.8364	acres/hour	
Job Condition Correcti	on Factors	Si	te Altitude: <u>6200</u> fee	t
	S	ource		
Altitude Adj:	1.00 (CA	AT HB)		
Job Efficiency:	0.90 (1sł	ı/d, fav.)		
Net Correction:	0.9000 mul	tiplier		
	A diustad Haundry Hait Day 1	1 (507	00000/11	
	Adjusted Hourly Elect Dre der	1.052/	acres/Hour	
	Aujusted nourly Fleet Produc	1.052/	acres/Hour	
JOB TIME AND C	OST			
Fleet size:	1 Grader(s)	Total job time	s: <b>53.8</b> 5	Hours
Unit cost:	105 74 per sore	Total job cost	• <b>\$0</b> <i>4</i> 11	
	per acre	1000100		

Task description:	Remove Upper F		ek Sediment Pond		
Elk Creek Mine	Peri	mit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENTIE	FICATION				
Task #: 066 Date: <u>11/18/202</u> User: LDS	State: 1 County:	Colorado Delta		Abbreviation: Filename:	None 022-066
Agency or orga	anization name: DR	RMS			
HOURLY EQUIPM	ENT COST				
Basic Machine: Ca	tt D10T - 10SU				
Horsepower: $57$	4		_		
Blade Type: Se	mi-Universal				
Shift Design 1.4	A an day		_		
Data Sources (C	Der day				
Data Source. (C	KU)		_		
Cost Breakdown:					
			Utilization %		
Ownershin Cost/Hour		\$169.60	NA		
Sincising Costitiour.		\$166.94	100		
Operating Cost/Hour:		<b>~~</b>			
Operating Cost/Hour: Ripper own. Cost/Hour:		\$0.00	NA 0		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour:		\$0.00 \$0.00	0 0		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$377.84 <b>\$377.84</b>	\$0.00 \$0.00 \$41.30	0 NA		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN'	\$377.84 \$377.84 <b>\$377.84</b>	\$0.00 \$0.00 \$41.30	0 NA		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 1,90	\$377.84 \$377.84 \$377.84 FITIES 68	\$0.00 \$0.00 \$41.30	0 NA		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1.99 Swell factor: 1.10	\$377.84 \$377.84 \$377.84 FITIES 58 55 52 L CY	\$0.00 \$0.00 \$41.30	0NA		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,25	\$377.84 \$377.84 <b>\$377.84</b> FITIES 68 65 93 LCY	\$0.00 \$0.00 \$41.30	  		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu	\$377.84 <b>\$377.84</b> <b>FITIES</b> 58 55 <b>93</b> LCY Ime:	\$0.00 \$0.00 \$41.30	0NA		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,29 Source of estimated volu Source of estimated swe	\$377.84 \$377.84 \$377.84 FITIES 58 55 93 LCY ume: TR-05; A Cat Hand	\$0.00 \$0.00 \$41.30	NA		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated swe	<u>\$377.84</u> <b>\$377.84</b> <b>FITIES</b> 58 55 <b>93</b> LCY ume: <u>TR-05; A</u> Il factor: <u>Cat Hand</u>	\$0.00 \$0.00 \$41.30			
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated swe HOURLY PRODUCC	\$377.84 \$377.84 <b>FITIES</b> 58 55 93 LCY ume: TR-05; A Cat Hand TION	\$0.00 \$0.00 \$41.30	 		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance:	\$377.84 \$377.84 <b>FITIES</b> 58 55 93 LCY ume: TR-05; A Cat Hand TION 50 feet	\$0.00 \$0.00 \$41.30	0		
Operating Cost/Hour: Nipper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,29 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadiusted hourly produ	\$377.84 <b>\$377.84</b> <b>FITIES</b> 58 55 <b>93</b> LCY Ime: TR-05; A Cat Hand <b>TION</b> 50 feet action: 2.748.7 LC	\$0.00 \$0.00 \$41.30 			
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN' Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$377.84 \$377.84 \$377.84 <b>FITIES</b> 58 55 93 LCY ume: TR-05; A Cat Hand <b>TION</b> action: 50 feet 1,748.7 LC escription: Compa	\$0.00 \$0.00 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30	 		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ	\$377.84 \$377.84 <b>FITIES</b> 58 55 93 LCY Ime: TR-05; A Cat Hand TION 50 feet 1ction: 50 feet 2,748.7 LC escription: Compa	\$0.00 \$0.00 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30	 		
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average push gradient: Average site altitude:	<u>\$377.84</u> <b>\$377.84</b> <b>\$377.84</b> <b>FITIES</b> 58 55 <b>93</b> LCY Ime: TR-05; A Cat Hand <b>TION</b> 10 factor: <u>Compa</u> 10 % 6,400 feet	\$0.00 \$0.00 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30 \$41.30			
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANY Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight:	\$377.84 \$377.84 \$377.84 <b>FITIES</b> 58 55 93 LCY Ime: TR-05; A Cat Hand <b>TION</b> action: 50 feet 2,748.7 LC escription: Compa 10 % 6,400 feet 2,900 lbs/LCY	\$0.00 \$0.00 \$0.00 \$41.30 			
Operating Cost/Hour: Nipper own. Cost/Hour: Ripper own. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description:	\$377.84 \$377.84 \$377.84 <b>FITIES</b> 58 55 93 LCY Ime: TR-05; A 11 factor: Cat Hand <b>TION</b> 10 % 6,400 feet 2,900 lbs/LCY Decomposed rock	\$0.00 \$0.00 \$41.30 \$41.			
Operating Cost/Hour: Nipper own. Cost/Hour: Ripper own. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$377.84 <b>\$377.84</b> <b>FITIES</b> 58 55 <b>93</b> LCY Ime: TR-05; A 11 factor: Cat Hand <b>TION</b> 10 % 50 feet 2,748.7 LC escription: Compa 10 % 6,400 feet 2,900 lbs/LCY Decomposed rock n Factor	\$0.00 \$0.00 \$0.00 \$41.30 			
Operating Cost/Hour: Nipper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	$\begin{array}{c c} & & & \\ & & & \\ \hline \\ & & & \\ \hline \\ \hline \\ \textbf{S}377.84 \\ \hline \\ \hline \\ \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \\ \hline \\ \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \\ \hline \\ \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \textbf{S}377.84 \\ \hline \\ $	\$0.00 \$0.00 \$0.00 \$41.30 			
Operating Cost/Hour: Nipper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,94 Swell factor: 1.16 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consis	\$377.84         \$377.84         \$377.84 <b>FITIES</b> 58         55         93 LCY         ume:       TR-05; A         Il factor:       Cat Hand <b>TION</b> action:       2,748.7 LC         escription:       Compa         10 %       6,400 feet         2,900 lbs/LCY       Decomposed rock         n Factor       0.         tency:       0.	\$0.00 \$0.00 \$0.00 \$41.30 			
Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 1,90 Swell factor: 1.10 Loose volume: 2,22 Source of estimated volu Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consis Dozing m	$\begin{array}{c c} & & & \\ & & & \\ \hline & & \\ \hline & & \\ \hline & & \\ \hline \textbf{S}377.84 \\ \hline \\ \hline & \\ \hline \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \textbf{S}377.84 \\ \hline \\ \hline \\ \hline \hline \\ \hline \hline \\ \hline \\ \hline \hline \\ \hline \\ \hline $	\$0.00 \$0.00 \$41.30 \$41.30 \$41.30 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	NA           0           NA		

Job efficience	ey: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradier	nt: 0.786	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weigl	ht: 0.793	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correction	on: 0.2794	
Adjusted unit production:	767.99 LCY/hr	
Adjusted fleet production:	767.99 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.492/LCY

Total job time:	2.99 Hours
Total job cost:	\$1,128

Page 1 of 2

Task description:	Regrade East Benc	h Pond			
Elk Creek Mine	Permi	t Action: <u>S</u>	I1	Permit/Job#:	C1981022
PROJECT IDENTIF	<b>ICATION</b>				
Task #: 067	State:	Colorado		Abbreviation:	None
Date: 11/18/202	l County:	Delta		Filename:	022-067
User: LDS					
Agency or orga	nization name: DRM	IS			
HOURLY EQUIPM	ENT COST				
Basic Machine: Ca	t D10T - 10SU				
Horsepower: 57	4				
Blade Type: Se	mi-Universal				
Attachment: <u>NA</u>	4				
Shift Basis: <u>I p</u>	ber day				
Data Source: (C	KG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$169.60	NA		
Operating Cost/Hour:		\$166.94	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Rinner on Cost/Hour		\$0.00	0		
		A 1 1 A A			
Operator Cost/Hour: Total unit Cost/Hour:	\$377.84	\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$377.84 <b>\$377.84</b>	\$41.30	NA		
Mapper op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:         400         Swell factor:         Loose volume:	\$377.84 \$377.84 FITIES 55 LCY	\$41.30	NA		
Mapper op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:         400         Swell factor:         1.16         Loose volume:         466	\$377.84 <b>\$377.84</b> <b>TITIES</b> 55 LCY me: Map 15	\$41.30	NA		
Mapper op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANY         Initial Volume:       400         Swell factor:       1.16         Loose volume:       466         Source of estimated volu       Source of estimated swell	\$377.84 <b>\$377.84</b> <b><u>FITIES</u></b> 55 LCY me: <u>Map 15</u> I factor: <u>Cat Handbo</u>	\$41.30 	NA		
Mapper op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN'.         Initial Volume:         400         Swell factor:         1.16         Loose volume:         466         Source of estimated volu         Source of estimated swell	\$377.84 <b>\$377.84</b> <b>TITIES</b> 55 LCY me: <u>Map 15</u> I factor: <u>Cat Handbo</u> <b>TION</b>	\$41.30	NA		
Mapper op. Cost Hour.         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANY.         Initial Volume:       400         Swell factor:       1.16         Loose volume:       466         Source of estimated volu       Source of estimated swell         HOURLY PRODUCC       Average push distance:	\$377.84 \$377.84 <b>FITIES</b> 55 LCY me: <u>Map 15</u> 11 factor: <u>Cat Handbo</u> <b>TION</b> 50 feet	\$41.30	NA		
Mapper op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANY         Initial Volume:         400         Swell factor:         1.16         Loose volume:         466         Source of estimated volu         Source of estimated swell         HOURLY PRODUCY         Average push distance:         Unadjusted hourly product	\$377.84 \$377.84 <b>EITIES</b> 55 LCY me: <u>Map 15</u> Cat Handbo <b>TION</b> 50 feet action: <u>50 feet</u> 2,748.7 LCY/	\$41.30	NA		
Mapper op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN'.         Initial Volume:         400         Swell factor:         1.16         Loose volume:         466         Source of estimated volu         Source of estimated swell         HOURLY PRODUC         Average push distance:         Unadjusted hourly produ         Materials consistency de	\$377.84 \$377.84 <b>STITIES</b> 55 LCY me: <u>Map 15</u> Cat Handbo TION 50 feet action: <u>50 feet</u> 2,748.7 LCY/ scription: <u>Compacte</u>	\$41.30 sook hr ed fill or emb	 		
Mapper op. Cost Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN'.         Initial Volume:         400         Swell factor:         1.16         Loose volume:         466         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:	\$377.84 <b>\$377.84</b> <b>TITIES</b> 55 LCY me: <u>Map 15</u> Cat Handbo <b>TION</b> scription: <u>50 feet</u> 2,748.7 LCY/ scription: <u>Compacted</u> <u>10 %</u> 6,400 feet	\$41.30 \$41.30			
Mapper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANY         Initial Volume:       400         Swell factor:       1.10         Loose volume:       466         Source of estimated volu       Source of estimated swell         HOURLY PRODUCC       Average push distance:         Unadjusted hourly produce       Materials consistency de         Average push gradient:       Average site altitude:         Material weight:       Material weight:	\$377.84         \$377.84         \$377.84 <b>EITIES</b> 55         LCY         me:       Map 15         If factor:       Cat Handbox <b>TION</b> action:       50 feet         2,748.7 LCY/         scription:       Compacted         10 %       6,400 feet         2,900 lbs/LCY	\$41.30			
Mapper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANY.         Initial Volume:       400         Swell factor:       1.10         Loose volume:       466         Source of estimated volu       Source of estimated swell         HOURLY PRODUCC       Average push distance:         Unadjusted hourly produce       Materials consistency de         Average push gradient:       Average site altitude:         Material weight:       Weight description:	\$377.84         \$377.84         \$377.84         TITIES         55         LCY         me:       Map 15         If factor:       Cat Handbox         TION         action:       50 feet         2,748.7 LCY/         scription:       Compacts         10 %       6,400 feet         2,900 lbs/LCY       Decomposed rock - 4	\$41.30 \$41.30 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			
Mapper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANY.         Initial Volume:       400         Swell factor:       1.16         Loose volume:       466         Source of estimated volu       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       Operator	\$377.84 \$377.84 \$377.84 <b>EITIES</b> 55 LCY me: <u>Map 15</u> Cat Handbo <b>TION</b> 50 feet action: <u>50 feet</u> cat Handbo <b>TION</b> 50 feet 2,748.7 LCY/ scription: <u>Compacted</u> <u>10 %</u> 6,400 feet 2,900 lbs/LCY <u>Decomposed rock - 5</u> 5kill: 0.75	\$41.30   			
Mapper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUAN'.         Initial Volume:       400         Swell factor:       1.10         Loose volume:       466         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:         Job Condition Correction       Operator	\$377.84         \$377.84         \$377.84         \$377.84         \$377.84         EITIES         55         LCY         me:       Map 15         If factor:       Cat Handbox         TION         action:       50 feet         2,748.7 LCY/s         scription:       Compacted         10 %       6,400 feet         2,900 lbs/LCY       Decomposed rock - 5         Factor       Skill:       0.75         Skill:       0.75	\$41.30   			
Mapper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANY         Initial Volume:       400         Swell factor:       1.10         Loose volume:       466         Source of estimated volu       Source of estimated volu         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:         Job Condition Correction       Operator         Material consistency       Dozing me	$\begin{array}{c c} & \$377.84 \\ \hline \$377.84 \\ \hline \$377.84 \\ \hline \\ \hline \$377.84 \\ \hline \\ \hline \$377.84 \\ \hline \\ \hline \\ \hline \$377.84 \\ \hline \\ $	\$41.30 \$41.30 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			
Job efficiency	0.830	(1 SHIFT/DAY)			
----------------------------	---------------	---------------			
Spoil pile	0.800	(FND-RF)			
Push gradient	t: 0.786	(CAT HB)			
Altitude	2: 1.000	(CAT HB)			
Material Weight	t: 0.793	(CAT HB)			
Blade type	2: 1.000	(PAT)			
Net correction	n: 0.2794				
Adjusted unit production:	767.99 LCY/hr				
Adjusted fleet production:	767.99 LCY/hr				

Fleet size:	1 Dozer(s)
Unit cost:	\$0.492/LCY
Total ich time	0 61 Hours

I otal job time:	<b>0.61</b> Hours
Total job cost:	\$229

### HYDRAULIC EXCAVATOR WORK

			all Al Ca			
Elk Creek Mine	Perr	nit Action:	SI1	Pe	rmit/Job#:	C1981022
PROJECT IDENTIFIC	ATION					
Task #:         068           Date:         11/18/2021           User:         LDS	State: County:	Colorado Delta		Abbr F	eviation: ïlename:	None 022-068
Agency or organiz	ation name: <u>DR</u>	MS				
HOURLY EQUIPMEN	T COST					
Basic Machine: C Attachment 1: R	at 336D L 10'-6" OPS Cab	Stick	) W	Horsepower: Veight (MT): Shift Basis:	2 1 p	268 29.30 ber day
Cost Breakdown:			I	Jata Source:	(0	CRG)
Ownership Cost/Ho Operating Cost/Ho	ur: \$83.4 ur: \$74.1	12 14 32	Utilization % NA 100 NA	-		
Total Unit Cost/Ho	ur: \$194.	88	11/1	-		
Total Fleet Cost/Ho	our: \$194	.88				
Initial volume: $\frac{275}{344}$ Source of e	estimated volume:	CCY LCY Division o	Swell facto	r: <u>1.250</u> ining & Safety	,	
Source of estin	nated swell factor:	Cat Handl	book			
HOURLY PRODUCTI	<u>ON</u>					
Excavator Cycle Time (load	l bucket, swing loa	ded, dump bi	ucket, swing empt	<u>y):</u>	CE	
Load Puekat Canacity	Secondary Job Co	ndition withi	n Basic Descriptio Cycle Time Valu	on: AVERA ue: 0.321	GE	minutes
				Bucket Size C	lass: Sn	nall
Rated Capacity:	1.56	_ LCY (hea	ped)			
Adjusted Capacity:	1.33	$\_$ Hard, tou	gh clay (80% - 909	%) 0.850		
Adjusted Capacity: Iob Condition Correction Fa	1.33 actors	LCY	gh clay (80% - 909 Site A	%) 0.850 Altitude: <u>6000</u>	feet	
Adjusted Capacity: <u>Job Condition Correction Fa</u> Altitude Adj: Job Efficiency: Net Correction: Unadj	1.33           actors           1.00           0.83           0.83           usted Hourly Unit	LCY Source (CAT HB (1 shift/day multiplier Production:	<u>gh clay (80% - 909</u> Site 2 <u>)</u> <u>y)</u> 247.85	%) 0.850 Altitude: <u>6000</u> LCY/Hour	feet	
Adjusted Capacity: Job Condition Correction Factor Altitude Adj: Job Efficiency: Net Correction: Unadji Adju	1.33         actors         1.00         0.83         0.83         usted Hourly Unit         usted Hourly Unit         usted Hourly Fleet	LCY Source (CAT HB (1 shift/day multiplier Production: Production: Production:	gh clay (80% - 90 Site 2 ) y) 247.85 205.72 205.72	%) 0.850 Altitude: <u>6000</u> LCY/Hour LCY/Hour LCY/Hour	feet	
Adjusted Capacity: <u>Job Condition Correction Fa</u> <u>Job Efficiency:</u> <u>Net Correction:</u> <u>Unadji</u> <u>Adju</u> <u>Job Efficiency:</u> <u>Job Efficiency:</u> <u>Job Efficiency:</u> <u>Job TIME AND COST</u>	1.33       actors       1.00       0.83       0.83       usted Hourly Unit       usted Hourly Unit       isted Hourly Fleet	Aard, tou, LCY Source (CAT HB (1 shift/da multiplier Production: Production: Production:	gh clay (80% - 90 Site 4 ) y) 247.85 205.72 205.72	%) 0.850 Altitude: <u>6000</u> LCY/Hour LCY/Hour LCY/Hour	feet	
Adjusted Capacity: Job Condition Correction Factories Altitude Adj: Job Efficiency: Net Correction: Unadju Adju Adju JOB TIME AND COST Fleet size:1	1.33         actors         1.00         0.83         0.83         usted Hourly Unit         usted Hourly Unit         isted Hourly Fleet         Letter         Excavator	Aard, tou LCY Source (CAT HB (1 shift/da multiplier Production: Production: Production: Production:	gh clay (80% - 90 Site 2 ) y) 247.85 205.72 205.72 tal job time:	%) 0.850 Altitude: <u>6000</u> LCY/Hour LCY/Hour LCY/Hour LCY/Hour	feet	Hours

### HYDRAULIC EXCAVATOR WORK

Task description:	Regrade West V	alley Fill Div	version		
Elk Creek Mine	Per	mit Action:	SI1	Permit/Job	#: <u>C1981022</u>
PROJECT IDENTIFI	<b>CATION</b>				
Task #:         069           Date:         11/18/2021           User:         LDS	State: County:	Colorado Delta		Abbreviation: Filename:	None 022-069
Agency or organ	nization name: DF	RMS			
HOURLY EQUIPME	NT COST				
Basic Machine: Attachment 1:	Cat 336D L 10'-6" ROPS Cab	Stick	N	Horsepower: Weight (MT): Shift Basis: Data Source:	268 29.30 per day (CRG)
Cost Breakdown:		1			
Ownership Cost/F	Hour: \$83.4	42	NA		
Operating Cost/H	Hour: \$74.	14	100	_	
Operator Cost/H	Hour: \$37.	32	NA	_	
Total Unit Cost/H	Hour: \$194	.88			
Total Fleet Cost/	Hour: \$194	.88			
MATERIAL QUANT	ITIES				
Initial volume:33Loose volume:37	32 74	CCY LCY	Swell facto	or: 1.125	
Source of	of estimated volume:	Map E-32	211		
Source of est	timated swell factor:	Cat Hand	book		
HOURLY PRODUCT	TION				
Excavator Cycle Time (lo	ad bucket, swing loa	ided, dump h	ucket, swing emp	tv):	
<u>Encurator Opere Time (10</u>	ad bucket, 5 ming for	Dagia Jah C	andition Description		
	Secondary Job Co	Dasic Job C	in Basic Descripti	ion: AVERAGE	
			Cycle Time Val	lue: 0.321	minutes
Load Bucket Capacity					
				Bucket Size Class:	Small
Rated Capacity	: 1.56	_ LCY (hea	aped)		
Bucket Fill Factor	: 0.850	Hard, tou	gh clay (80% - 90	1%) 0.850	
Adjusted Capacity	- 1.00				
Job Condition Correction	Factors		Site	Altitude: <u>6300</u> feet	
	1.00	Source			
Antitude Adj:	0.83	(UAT HE (1 shift/da	$(\mathbf{v})$		
Net Correction:	0.83	multinlier	<u>.</u>		
	1	Dent	047.05		
Una A	ajusted Hourly Unit	Production:	247.85	_ LCY/Hour	
A	ljusted Hourly Fleet	Production:	205.72	LCY/Hour	
JOB TIME AND COS	<u>ST</u>			_	
Fleet size: 1	Excavat	or To	otal job time:	1.82	Hours
Unit cost: \$0.0			Total ich cost:	\$251	
οmi cost. <u></u>	/+/ /LUI		Total job cost:	<b>ФЭЭ</b> 4	

Task description:	Remo	ve Sewage Leach Field	l		
Elk Creek Mine		Permit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDEN	TIFICATIO	<u>DN</u>			
Task #· 071		State: Colorado		Abbreviation.	None
Date: $\frac{071}{11/18}$	2021	County: Delta		Filename:	022-071
User: LDS	2021			i nonume.	022 071
Agency or	organization r	name: DRMS			
		<u></u>			
Desis Mashirat		10511			
Horsepower:	574	1050			
Blade Type:	Semi-Unive	real			
Attachment:	NA	1541			
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cent Dreal 1					
Cost Breakdown:			Litilization 0/		
Ownershin Cost/U	our.	\$160.60	NA		
Operating Cost/H	our.	\$166 Q/	100		
Ripper own Cost/H	our.	\$100.94	NA NA		
Ripper own. Cost/H	our:	\$0.00	0		
	041.	\$0.00	0		
Operator Cost/H	our	\$41.30	NΛ		
Operator Cost/He Total unit Cost/Hou Total Fleet Cost/Hou	our:	\$41.30 34 34	NA		
Operator Cost/Ho Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume:	our:	\$41.30 34 34	NA		
Operator Cost/He Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume:	our:	\$41.30 34 34	NA		
MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated	our:	\$41.30 34 34 34 34 34 34 34 34 34 34 34 34 34	NA		
Operator Cost/Ho Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	our:	\$41.30 34 34 34 34 34 34 34 34 34 34 34 34 34			
Operator Cost/How Total unit Cost/How Total Fleet Cost/How MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	our:	\$41.30 34 34 34 34 34 34 34 34 34 34 34 34 34	NA		
Operator Cost/Ho Total unit Cost/Hou Total Fleet Cost/Hou <u>MATERIAL QU</u> Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated <u>HOURLY PROD</u> Average push distan	our:	\$41.30 4 4 4 Map E-3207R Cat Handbook 100 feet			
Operator Cost/Ho Operator Cost/Ho Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p	our:	\$41.30 34 34 34 34 34 34 34 34 34 34	NA		
Operator Cost/How Total unit Cost/How Total Fleet Cost/How MATERIAL QU/ Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p	our:	\$41.30 34 34 34 34 34 34 34 34 34 34			
MATERIAL QU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         Average push distan         Unadjusted hourly p         Materials consistence	our:	\$41.30 4 4 Map E-3207R Cat Handbook 100 feet 1,718.9 LCY/hr Compacted fill or e			
Mapper op. cost/H         Operator Cost/Ho         Total unit Cost/Hou         Total Fleet Cost/Hou         Total Fleet Cost/Hou         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         Average push distan         Unadjusted hourly p         Materials consistence         Average site altitude	our:	\$41.30 34 34 34 34 34 34 34 34 34 34			
Operator Cost/Ho Operator Cost/Ho Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average site altitude Material weight:	our:	\$41.30 4 4 Map E-3207R Cat Handbook 100 feet 1,718.9 LCY/hr Compacted fill or e feet lbs/LCY			
Operator Cost/Ho Operator Cost/Ho Total unit Cost/Hou Total Fleet Cost/Hou Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description:	our:	\$41.30 34 34 34 34 34 34 34 34 34 34			
Mapper op. Coorner         Operator Cost/Hor         Total unit Cost/Hor         MATERIAL QU.         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         MATERIAL PROD         Average push distan         Unadjusted hourly p         Materials consistence         Average site altitude         Material weight:         Weight description:         Job Condition Corree	our:	\$41.30 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4			
MATERIAL QU.         Total unit Cost/Hour         Total Fleet Cost/Hour         Total Fleet Cost/Hour         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         MOURLY PROD         Average push distan         Unadjusted hourly p         Materials consistence         Average site altitude         Material weight:         Weight description:         Job Condition Corree         Oper	our:	\$41.30 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4	NA		
MAPPer op. Coorner         Operator Cost/Hor         Total unit Cost/Hor         Total Fleet Cost/Hor         MATERIAL QU.         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         Average push distan         Unadjusted hourly p         Materials consistence         Average site altitude         Material weight:         Weight description:         Job Condition Corree         Oper         Material co	our:	\$41.30 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4			
MAPPer op. Coorner         Operator Cost/Hor         Total unit Cost/Hor         Total Fleet Cost/Hor         MATERIAL QU.         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         MOURLY PROD         Average push distan         Unadjusted hourly p         Materials consistence         Average site altitude         Material weight:         Weight description:         Job Condition Corree         Oper         Material co         Dozin	our:	\$41.30 4 4 4 Map E-3207R Cat Handbook 100 feet 1,718.9 LCY/hr Compacted fill or e feet lbs/LCY nposed rock - 50% Rock 0.750 0.900 1.000			

Job efficient	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 0.786	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 0.793	(CAT HB)
Blade typ	pe: 1.000	(PAT)
Net correction	on: 0.2794	
Adjusted unit production:	480.26 LCY/hr	
Adjusted fleet production:	480.26 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.787/LCY
Total ich time	0 61 Hours

l'otal job time:	<b>0.61</b> Hours
Total job cost:	\$229

Task description:	Regrade P	ond A			
Elk Creek Mine		Permit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDEN	<b>TIFICATION</b>				
Task # 072		State: Colorado		Abbreviation.	None
Date: $\frac{072}{11/18}$	/2021 Co	unty: Delta		Filename:	022-072
User: LDS		<u> </u>		i nonunie.	022 012
Agency or	organization name	DRMS			
HOURLY EQUE	PMENT COST				
Basic Machine:	Cat D10T - 10SU	J			
Horsepower:	574				
Blade Type:	Semi-Universal				
Attachment:	NA				
Shift Basis:	l per day				
Data Source:	(CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/H	our:	\$169.60	NA		
Operating Cost/H	our:	\$166.94	100		
Ripper own. Cost/H	our:	\$0.00	NA	<u> </u>	
Dimmon cr. Cast/II	our:	\$0.00	0		
Ripper op. Cost/H	-				
Operator Cost/H	our:	\$41.30	NA		
Operator Cost/H	our:	\$41.30	NA		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou	our: r: \$377.84 ur: <b>\$377.84</b>	\$41.30	NA		
Material Volume:	our:	\$41.30	NA		
Material Volume:	our: r: \$377.84 ur: <b>\$377.84</b> <b>ANTITIES</b> 400 1165	\$41.30	NA		
Material Volume: Swell factor: Loose volume:	our: r: \$377.84 ur: <b>\$377.84</b> <b>ANTITIES</b> 400 1.165 466 LCX	\$41.30	NA		
Material Volume: Swell factor: Loose volume:	our: r: \$377.84 ur: <b>\$377.84</b> <b>ANTITIES</b> 400 1.165 <b>466</b> LCY	\$41.30	NA		
Material Volume: Swell factor: Loose volume: Source of estimated	our: r: \$377.84 ur: <b>\$377.84</b> <b>ANTITIES</b> 400 1.165 <b>466</b> LCY volume: <u>Ma</u>	\$41.30	NA		
Apper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	our: r: \$377.84 ur: <b>\$377.84</b> ANTITIES 400 1.165 466 LCY volume: Ma swell factor: Ca	\$41.30 	NA		
Apper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	our:	\$41.30 	NA		
Apper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan	our:	\$41.30 	NA		
Apper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p	our:       \$377.84         ur:       \$377.84         ANTITIES         400         1.165         466 LCY         volume:       Massell factor:         Case         DUCTION         acce:       50 fe         production:       2,743	\$41.30 \$41.30 ap S-040 t Handbook eet 8.7 LCY/hr	NA		
Aipper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push distan Unadjusted hourly p Materials consistence	our:       \$377.84         ur:       \$377.84         ANTITIES         400         1.165         466 LCY         volume:       Maswell factor:         Cale         DUCTION         ace:       50 fe         production:       2,743         cy description:       0	\$41.30 \$41.30 ap S-040 t Handbook et 8.7 LCY/hr Compacted fill or e	 		
Average push gradie Average push gradie Average push gradie Average push gradie Average push gradie Average site altitude	our:       \$377.84         ur:       \$377.84         ANTITIES $400$ 1.165         466 LCY         volume:       Mail         swell factor:       Ca         DUCTION         ace:       50 fe         production:       2,743         cy description:       0         ent:       10 %         e:       6,400 feet	\$41.30 \$41.30 \$41.30 \$ ap S-040 t Handbook set 8.7 LCY/hr Compacted fill or e	 		
Apper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight:	our:       \$377.84         r:       \$377.84         ANTITIES       400         400       1.165         466 LCY       466 LCY         volume:       Massell factor:         Carroduction:       50 fe         pucction:       2,743         extreme description:       6,400 feet         2,900 lbs/L	\$41.30 \$41.30 \$41.30 \$ \$ ap S-040 t Handbook \$ set \$.7 LCY/hr Compacted fill or e \$ CY			
Average push distan Unadjusted hourly p Materials consistence Average site altitude Material weight: Weight description:	our:	\$41.30  \$41.30  \$41.30  \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			
Apper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre	our: $\_$ r: $\$377.84$ ur: $\$377.84$ ANTITIES 400 1.165 466 LCY volume: $Ma$ swell factor: Ca PUCTION ace: 50 fe production: 2,743 ey description: 0 ent: 10 % e: 6,400 feet 2,900 lbs/L Decompose ection Factor	\$41.30 \$41.30 \$41.30 \$41.30 \$ ap S-040 t Handbook set \$.7 LCY/hr Compacted fill or e CY \$ d rock - 50% Rock			
Apper op. Cost/H Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average push gradie Average site altitude Material weight: Weight description: Job Condition Corree Oper	our: $3377.84$ ur: $3377.84$ ur: $3377.84$ ANTITIES 400 1.165 466 LCY volume: Ma swell factor: Ca PUCTION ace: 50 fe production: 2,743 cy description: 0 ent: 10 % e: 6,400 feet 2,900 lbs/L Decompose extion Factor rator Skill:	\$41.30 \$41.30 \$41.30 \$ \$ ap S-040 t Handbook eet 8.7 LCY/hr Compacted fill or e CY \$ cy \$ cy \$ cy \$ cy \$ code code code code code code code code			
Average push distan Unadjusted hourly p Material weight: Weight description: Job Condition Corre Oper Material con	our: $3377.84$ ur: $3377.84$ ANTITIES 400 1.165 466 LCY volume: Ma swell factor: Ca PUCTION ace: 50 fe production: 2,748 cy description: 0 ent: 10 % e: 6,400 feet 2,900 lbs/L Decompose extion Factor rator Skill:	\$41.30 \$41.30 \$41.30 \$41.30 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			
Average push distan Unadjusted hourly p Material weight: Weight description: Job Condition Corre Oper Material co Dozin	our: $377.84$ ur: $377.84$ ANTITIES 400 1.165 466 LCY volume: Ma swell factor: Ca OUCTION ace: 50 fe production: 2,743 cy description: 6 ent: 10 % c: 6,400 feet 2,900 lbs/L Decompose extion Factor rator Skill: 5 onsistency: 10 g method: 5 377.84	\$41.30 \$41.30 \$41.30 \$41.30 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			

Job efficiency:		0.830	(1 SHIFT/DAY)
Spoil pile:		0.800	(FND-RF)
Push gradie	Push gradient:		(CAT HB)
Altitud	de:	1.000	(CAT HB)
Material Weig	Material Weight:		(CAT HB)
Blade type:		1.000	(PAT)
Net correction	on:	0.2794	
Adjusted unit production:	76	7.99 LCY/hr	
Adjusted fleet production:	76	7.99 LCY/hr	
	-		

Fleet size:	1 Dozer(s)
Unit cost:	\$0.492/LCY
Total job times	0 61 Hours

l'otal job time:	<b>0.61</b> Hours
Total job cost:	\$229

Task description:	Regra				
Elk Creek Mine	9	Permit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDEN	NTIFICATIO	<u>DN</u>			
Task # 073		State: Colorado	)	Abbreviation.	None
Date: $\frac{073}{11/18}$	3/2021	County: Delta	,	Filename:	022-073
User: LDS					
Agency of	r organization 1	name: DRMS			
HOURLY EQUI	IPMENT CO	<u>ST</u>			
Basic Machine:	Cat D10T -	10SU			
Horsepower:	574				
Blade Type:	Semi-Unive	rsal			
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/H	Iour:	\$169.60	NA		
Operating Cost/H	Iour:	\$166.94	100		
Ripper own. Cost/H	Iour:	\$0.00	NA		
Ripper op. Cost/H	Hour:	\$0.00	0	<u></u>	
•					
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou	Hour: ur: \$377.8 pur: <b>\$377.8</b>	\$41.30 34 34	NA		
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL OL Initial Volume:	Hour:	\$41.30 34 34	NA		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor:	Hour: 11: \$377.8 5000 \$ <b>377.8</b> <b>3377.8</b> <b>3377.8</b> <b>3377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>377.8</b> <b>3</b>	\$41.30 34 <b>34</b>	NA		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL OU Initial Volume: Swell factor: Loose volume:	Hour: ar: \$377.8 bur: <b>\$377.8</b> JANTITIES 11,333 1.165 <b>13,203</b> LCY	\$41.30 34 34 	NA		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI	Hour: Jur: \$377.8 JANTITIES 11,333 1.165 13,203 LCY 1 volume: 1 swell factor: DUCTION	\$41.30 34 34 34 34 34 34 34 34 34 34	ntion, Mining & Safety		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly	Hour:       \$377.8         JANTITIES       \$377.8         JANTITIES       11,333         1.165       13,203 LCY         I volume:       1         I swell factor:       DUCTION         nce:          production:	\$41.30 34 34 34 Division of Reclama Cat Handbook 175 feet 1,074.3 LCY/hr	ntion, Mining & Safety		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten	Hour:       \$377.8         Jur:       \$377.8         DANTITIES       \$377.8         11,333       1.165         13,203 LCY       13,203 LCY         1 volume:       1 swell factor:         DUCTION       nce:         production:          cy description:	\$41.30 34 34 34 34 34 34 34 34 34 34	tion, Mining & Safety		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud	Hour:       \$377.8         JANTITIES         11,333         1.165         13,203 LCY         I volume:         I swell factor:         DUCTION         nce:         production:            cy description:         ient:          6,100	\$41.30 34 34 34 34 34 34 34 34 34 34	ttion, Mining & Safety		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated HOURLY PROJ Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight:	Hour:       \$377.8         JANTITIES       \$377.8         JANTITIES       11,333         1.165       13,203 LCY         I volume:       1 swell factor:         DUCTION       nce:         production:          cy description:          tent:	\$41.30 34 34 34 34 34 34 34 34 34 34	NA		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description	Hour:       \$377.8         JANTITIES       11,333         11,333       1.165         13,203 LCY       13,203 LCY         I volume:       14,000         production:          ient:              ient:	\$41.30 34 34 34 34 34 34 34 34 34 34	NA		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou Total Fleet Cost/Hou Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description Job Condition Corr	Hour:       \$377.8         JANTITIES       11,333         11,333       1.165         13,203 LCY       13,203 LCY         I volume:       14,000         I production:       2,900         I e:       0,100         I = 0,000       000         I = 0,000       0000	\$41.30 34 34 34 34 34 34 34 34 34 34	<pre>NA NA N</pre>		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated Muterials consisten Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description Job Condition Corr Ope	Hour:       \$377.8         JANTITIES       \$377.8         JANTITIES       11,333         1.165       13,203 LCY         I volume:       13,203 LCY         I volume:       swell factor:         DUCTION	\$41.30 34 34 34 34 34 34 34 34 34 34	NA NA NA NA NA NA Safety k, 50% Earth Source (AVG.)		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated Muterials consisten Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description Job Condition Corr Ope	Hour:       \$377.8         JANTITIES       \$377.8         JUANTITIES       11,333         1.165       13,203 LCY         I volume:       1 swell factor:         DUCTION	\$41.30 34 34 34 34 34 34 34 34 34 34	NA		
Operator Cost/H Total unit Cost/Hou Total Fleet Cost/Hou Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated Mourly PROJ Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description Job Condition Corr Ope Material c	Hour:       \$377.8         JANTITIES       \$377.8         JI,333       1.165         13,203 LCY       13,203 LCY         I volume:       2,900         :	\$41.30 34 34 34 34 34 34 34 34 34 34	NA		

Job efficience	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 1.329	(CAT HB)
Altitu	de: 1.000	(CAT HB)
Material Weig	ht: 0.793	(CAT HB)
Blade typ	pe: 1.000	(PAT)
Net correction	on: 0.4724	
Adjusted unit production:	507.50 LCY/hr	
Adjusted fleet production:	507.5 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.745/LCY

Total job time:	<b>26.02</b> Hours
Total job cost:	\$9,830

Task description:	Regrade	Pond E				
Elk Creek Mine		Pern	nit Action:	SI1	Permit/Job#:	C1981022
PROJECT IDENT	<b>TIFICATION</b>					
Task #:         075           Date:         11/18/2           User:         LDS	2021	State: County:	Colorado Delta		Abbreviation: Filename:	None 022-075
Agency or c	organization nan	ne: DR	MS			
<u>HOURLY EQUIP</u>	MENT COST	-				
Basic Machine:	Cat D10T - 105	SU				
Horsepower:	574					
Blade Type:	Semi-Universa					
Attachment:	NA 1 man days					
Shift Basis:	1 per day					
Data Source:	(CKG)					
Cost Breakdown:						
				Utilization %	<u>.</u>	
Ownership Cost/Ho	ur:		\$169.60	NA		
Operating Cost/Ho	ur:		\$166.94	100		
Ripper own. Cost/Ho	ur:		\$0.00	NA		
Ripper op. Cost/Ho	ur:		\$0.00	0		
Operator Cost/Ho	ur:		\$41.30	NA		
MATERIAL QUA	ANTITIES 2 300					
Swell factor:	1.165 2 680 L C X					
	2,000 LC 1					
Source of estimated v Source of estimated s	volume:	Division H Cat Handł	Estimate book			
HOURLY PRODU	UCTION					
Average push distanc	e: <u>10</u>	) feet				
Average push distanc Unadjusted hourly pr	e: $10$ oduction: $1,7$	0 feet 18.9 LCY	/hr			
Average push distanc Unadjusted hourly pr Materials consistency	$\frac{10}{0}$ oduction: $\frac{10}{1,7}$ oduction: $\frac{1}{1,7}$	) feet 18.9 LCY Compac	//hr eted fill or en	mbankment 0.9		
Average push distanc Unadjusted hourly pr Materials consistency Average push gradier Average site altitude:	$\begin{array}{c} 10\\ \text{oduction:} & 10\\ 0\\ \text{oduction:} & 1,7\\ \text{odescription:}\\ \text{odescription:}\\ 11\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12\\ 12$	) feet 18.9 LCY Compac	//hr eted fill or en	mbankment 0.9		
Average push distanc Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight:	$\begin{array}{c} 10\\ \text{oduction:} & 10\\ \hline 1,7\\ \text{oduction:} & 1,7\\ \text{odescription:}\\ \text{odescription:}\\ 11: & 0 \%\\ \hline 6,000 \text{ fee}\\ \hline 2,900 \text{ lbs}, \end{array}$	) feet 18.9 LCY Compac	//hr eted fill or en	mbankment 0.9		
Average push distanc Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight: Weight description:	re:       10         oduction:       1,7         oduction:       1,7         odescription:       1         nt:       0 %	) feet 18.9 LCY Compac : : LCY sed rock -	7/hr 2.ted fill or en    			
Average push distanc Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight: Weight description: Job Condition Correc	$\begin{array}{c} 10\\ \text{oduction:} & 10\\ \hline 1,7\\ \text{oduction:} & 1,7\\ \text{oduction:} \\ \hline 0 & 6\\ \hline 6,000 \text{ fee}\\ \hline 2,900 \text{ lbs},\\ \hline 0 \text{ becomposition Factor} \end{array}$	) feet 18.9 LCY Compace t LCY sed rock	//hr eted fill or en 	 mbankment 0.9 , 50% Earth Source		
Average push distanc Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight: Weight description: Job Condition Correc Opera	$\frac{10}{\text{oduction:}} = \frac{10}{1,7}$ $\frac{10}{1,7}$ $\frac{10}{1$	D feet 18.9 LCY Compace t LCY sed rock - 0.7	Z/hr eted fill or en  - 50% Rock.			
Average push distanc Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight: Weight description: Job Condition Correc Opera Material con	re: 10 oduction: $1,7$ oduction: $1,7$ oduction: 1,7 oduction: 0% 6,000 fee 2,900 lbs, Decompo retion Factor ator Skill: misistency:	0 feet 18.9 LCY Compac t LCY sed rock - 0.7 0.9	<ul> <li>Z/hr</li> <li>cted fill or en</li> <li></li></ul>		<u>2</u> ) B))	
Average push distanc Unadjusted hourly pr Materials consistency Average push gradier Average site altitude: Material weight: Weight description: Job Condition Correc Opera Material cor Dozing	e:10 oduction:1,7 oduction: description:   	0 feet 18.9 LCY Compac t LCY sed rock - 0.3 0.5 1.0	Z/hr eted fill or en 50% Rock 500 000 000		2 ) B)) )	

Task # 075

cy: 0.830	(1 SHIFT/DAY)
le: 0.800	(FND-RF)
nt: 1.000	(CAT HB)
le: 1.000	(CAT HB)
ht: 0.793	(CAT HB)
be: 1.000	(PAT)
on: 0.3554	
610.90 LCY/hr	
610.9 LCY/hr	
	cy:       0.830         le:       0.800         nt:       1.000         le:       1.000         ht:       0.793         be:       1.000         on:       0.3554         610.90 LCY/hr         610.9 LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$0.619/LCY

Total job time:	4.39 Hours
Total job cost:	\$1,657

	Regrau				
Elk Creek Mine		Permit Action	: <u>SI1</u>	Permit/Job#:	C1981022
PROJECT IDEN	<b>TIFICATIO</b>	N			
Task #: 077		State: Colorado	0	Abbreviation:	None
Date: $11/18$	3/2021	County: Delta		Filename:	022-077
User: LDS		J		-	
Agency or	organization na	ame: DRMS			
HOURLY EQUI	PMENT COS	<u>ST</u>			
Basic Machine:	Cat D10T - 1	0SU			
Horsepower:	574				
Blade Type:	Semi-Univers	sal			
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:					
_			Utilization %		
Ownership Cost/H	lour:	\$169.60	NA		
Operating Cost/H	lour:	\$166.94	100		
Ripper own. Cost/H	lour:	\$0.00	NA		
Ripper op. Cost/H	Iour:	\$0.00	0		
Operator Cost/H	Iour:	\$41.30	NA		
Total Fleet Cost/Hot	$\begin{array}{rc} & & $377.84\\ \text{our:} & & $377.84 \\ \end{array}$	- 			
Total Fleet Cost/Hot MATERIAL QU	ur: <u>\$377.84</u> pur: <u>\$377.84</u> J <u>ANTITIES</u>	L			
Total Fleet Cost/Hot MATERIAL QU Initial Volume:	ur: <u>\$377.84</u> our: <u>\$377.84</u> J <u>ANTITIES</u> 1,020	kk			
MATERIAL QU Initial Volume: Swell factor:	ur: <u>\$377.84</u> bur: <u>\$377.84</u> JANTITIES <u>1,020</u> 1.330	kk			
MATERIAL OU Initial Volume: Swell factor: Loose volume:	II: \$377.84 DUI: \$377.84 JANTITIES 1,020 1.330 1,357 LCY	L			
Initial unit Cost/Hot         Total Fleet Cost/Hot         MATERIAL QU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated	ur:       \$377.84         yar:       \$377.84         JANTITIES         1,020         1.330         1,357 LCY         volume:         swell factor:	Map 2.05-M5J; Div Cat Handbook	ision Estimate		
Initial Unit Cost/Hot         Total Fleet Cost/Hot         MATERIAL QU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         HOURLY PROI	IT:	Map 2.05-M5J; Div Cat Handbook	ision Estimate		
Initial Unit Cost/Hot         Total Fleet Cost/Hot         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         HOURLY PROI         Average push distar         Unadjusted hourly to	IT: <u>\$377.84</u> DUT: <u>\$377.84</u> <u>ANTITIES</u> <u>1,020</u> <u>1.330</u> <u>1,357 LCY</u> Volume: Swell factor: <u>-</u> <u>DUCTION</u> nce: <u>9</u> production: <u>1</u>	Map 2.05-M5J; Div Cat Handbook	ision Estimate		
Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         Average push distar         Unadjusted hourly p         Materials consistence	II: <u>\$377.84</u> DUI: <u>\$377.84</u> <u>ANTITIES</u> <u>1,020</u> <u>1.330</u> <u>1,357 LCY</u> Volume: <u></u> swell factor: <u></u> <u>DUCTION</u> nce: <u>9</u> production: <u>1</u> cy description:	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or	ision Estimate		
MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distar Unadjusted hourly p Materials consistence	Image: 1.3377.84         ANTITIES         1,020         1.330         1,357 LCY         volume:         swell factor:         DUCTION         nce:       9         production:       1         cy description:	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or	ision Estimate		
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distar Unadjusted hourly p Materials consistence Average push gradia	\$377.84         yar: $$377.84$ <b>ANTITIES</b> 1,020         1.330         1,357 LCY         volume:         swell factor:         swell factor:         0         production:         1         cy description:         e: $5%$ e: $6,300$ fe	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or	ision Estimate		
MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distan Unadjusted hourly p Materials consistend Average push gradid Average site altitud	\$377.84         yur: $$377.84$ yur: $1,020$ 1,020 $1,330$ 1,330 $1,357$ LCY         volume: $9$ your: $9$ production: $1$ cy description: $9$ ent: $5%$ $6,300$ fe $2,900$ lb $2,900$ lb	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or eet ps/LCY	ision Estimate		
Initial Unit Cost/Hot         Total Fleet Cost/Hot         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         Source of estimated         Average push distar         Unadjusted hourly p         Materials consistend         Average push gradid         Average site altitude         Material weight:         Weight description:	\$377.84         yur: $$377.84$ yur: $$1,020$ 1,020 $$1,330$ 1,357 LCY       yur:         your: $$1,330$ 1,357 LCY       yur:         yur: $$1,357$ LCY         yur:	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or eet posed rock - 50% Roc	ision Estimate embankment 0.9		
MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distar Unadjusted hourly p Materials consistence Average push gradin Average site altitud Material weight: Weight description: Job Condition Correct	377.84         yur: $377.84$ yar: $1,020$ yar: $1,330$ yar: $1,357$	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or eet  posed rock - 50% Roc	ision Estimate embankment 0.9		
Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         MATERIAL QU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         MATERIAL QU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         MOURLY PROI         Average push distar         Unadjusted hourly p         Materials consistend         Average push gradid         Average site altitude         Material weight:         Weight description:         Job Condition Correct         Ope	377.84         yur: $377.84$ yar: $378.30$ yar: $378.30$ yar: $378.30$ yar: $379.30$ yar: <t< td=""><td>Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or eet ps/LCY posed rock - 50% Roc 0.750</td><td>ision Estimate</td><td></td><td></td></t<>	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or eet ps/LCY posed rock - 50% Roc 0.750	ision Estimate		
Initial Cost/Hot         MATERIAL QU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         MOURLY PROI         Average push distar         Unadjusted hourly p         Materials consistence         Average push gradia         Average site altitude         Material weight:         Weight description:         Job Condition Correct         Ope         Material consistence	Ir:       \$377.84         JANTITIES         1,020         1.330         1,357 LCY         volume:         swell factor:         swell factor:         DUCTION         nce:       9         production:       1         cy description:         e:       6,300 fe         2,900 lt         crator Skill:         onsistency:	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or eet ps/LCY posed rock - 50% Roc 0.750 0.900	ision Estimate embankment 0.9 ck, 50% Earth Source (AVG.) (CAT HB))		
Initial Cost/Hot         MATERIAL OU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         Source of estimated         MATERIAL OU         Initial Volume:         Swell factor:         Loose volume:         Source of estimated         Source of estimated         Average push distar         Unadjusted hourly p         Materials consistend         Average push gradid         Average site altitude         Material weight:         Weight description:         Job Condition Correst         Ope         Material consistent	II:	Map 2.05-M5J; Div Cat Handbook 0 feet ,873.5 LCY/hr Compacted fill or compacted fill or eet os/LCY posed rock - 50% Roc 0.750 0.900 1.000	ision Estimate embankment 0.9 ck, 50% Earth Source (AVG.) (CAT HB)) (GEN.)		

Job efficience	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 0.903	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weight	ht: 0.793	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correction	on: 0.3209	
Adjusted unit production:	601.21 LCY/hr	
Adjusted fleet production:	601.21 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.628/LCY
Total ich time	2 26 Hours

Fotal job time:	2.26 Hours
Total job cost:	\$853

## SCRAPER TEAM WORK

Site: Elk Creek Mine		Permit Action:	SI1	Perr	nit/Job#: <u>C198</u>	1022
PROJECT IDEN	<b>TIFICATION</b>					
Task #: 090	S	tate: Colorado		Abbrey	viation: None	
Date: $11/18/2$	2021 Cou	inty: Delta		File	ename: 022-09	0
User: LDS						
Agency or o	organization name:	DRMS				
HOURLY EQUIP	MENT		COSTS	hift basis: <u>1 per d</u>	ay	
		Equipme	ent Description			
	-S	craper: Cat 637	G w/push-pull			
Suppor	- rt Equipment -Load	Dozer: NA				
Suppo	-Dump	Area: NA				
Road Mar	intenance – Motor (	Grader: NA				
	-Water	Truck: NA				
Cost Breakdown:	Scraper Wor	k Team	Support Equi	oment	Maintenance	Equipment
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Ti
%Utilization-machine:	100	NA	NA	NA	NA	
Ownership cost/hour:	\$223.48	NA	NA	NA	NA	
Operating cost/hour:	\$193.77	NA	NA	NA	NA	
%Utilization-ripper:	NA	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	NA	NA	NA	NA	
Ripper op. cost/hour:	NA	NA	NA	NA	NA	
Operator cost/hour:	\$30.90	NA	NA	NA	NA	
Unit Subtotals:	\$448.15	NA	NA	NA	NA	
Number of Units:	2	0	0	0	0	
Group Subtotals:	Work:	\$896.30	Support:	\$0.00	Maint:	\$0.00
Total work team cost	/hour: <b>\$896.30</b>					
MATERIAL OUA	NTITIES					
Initial volume:	1.500	CCY	Swell fact	tor: 1.125		
Loose volume:	1,688	LCY				
Sou	rce of estimated vo	lume: Operator	Estimate			
Source of	of estimated swell f	actor: Cat Hand	lbook			
HOURI V PRODI	TCTION					
HOUKETTKOD			Some P	oud (volumo) Doo		
			Scraper Bo	<u>owi (voiume) Basi</u>	<u> </u>	
Material weight:	2,650 lbs/LCY	250/ Dool	Struck	Volume: $24.00$	L	CY CY
waterial description:	75% Earth	x - 23% KUCK,	пеарей	volume. 54.00	L	
Rated Payload:	81,600 pounds		Average	Volume: 29.00	L	CY
Pavload Canacity	30 79 I CY		Adjusted (	Consoitur 20.00	т	CV

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6200 feet

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

Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	-12.50	5.00	-7.50	1628	0.61

Haul Time: **0.61** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	12.50	5.00	17.50	832	0.98

Return Time:	0.98	minutes
Total Scraper team cycle time:	3.19	minutes
Adjusted for job conditions:	905.45	LCY/Hour
Selected Number of Scrapers:	2	Scraper(s)
Adjusted single scraper team (unit) hourly production:	905.45	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	905.45	LCY/Hour
Unadjusted unit production /hours 1 000 01 ICV/IIour		

Unadjusted unit production/hour: 1,090.91 LCY/Hour Optimal Number of Scrapers per push dozer:

Fleet size:	1	Team(s)	Total job time:	1.86	Hours
Unit cost:	\$0.990	/LCY	Total job cost:	\$1,670	

## SCRAPER TEAM WORK

ite: Elk Creek Mine		Permit	Action:	SI1	Perr	nit/Job#: <u>C1981</u>	022
PROJECT IDENT	<b>IFICATION</b>						
Task #: 092	St	ate: C	Colorado		Abbrev	viation: None	
Date: 11/18/2	.021 Cour	nty: I	Delta		File	ename: 022-092	2
User: LDS							
Agency or o	rganization name:	DRM	S				
HOURLY EQUIP	<u>MENT</u>			COSTS	hift basis: <u>1 per d</u>	ay	
			Equipme	ent Description			
	-Sc	raper:	Cat 637	G w/push-pull			
Suppo	rt Equipment -Load	Area:	NA				
	-Dump	Area:	NA				
Road Mai	Intenance – Motor G	rader:	NA NA				
		TUCK.	11A				
Cost Breakdown:	Scraper Work	k Team		Support Equi	oment	Maintenance	Equipmer
	Scraper	Doz	zer	Load Area	Dump Area	Motor Grader	Water'
%Utilization-machine:	100		NA	NA	NA	NA	
Ownership cost/hour:	\$223.48		NA	NA	NA	NA	
Operating cost/hour:	\$193.77		NA	NA	NA	NA	
%Utilization-ripper:	NA		NA	NA	NA	NA	
Ripper own. cost/hour:	NA		NA	NA	NA	NA	
Ripper op. cost/hour:	NA		NA	NA	NA	NA	
Operator cost/hour:	\$30.90		NA	NA	NA	NA	
Unit Subtotals:	\$448.15		NA	NA	NA	NA	
Number of Units:	2	<b>000</b>	0	0	0	0	¢0.
Group Subtotals:	Work:	\$896	.30	Support:	\$0.00	Maint:	\$0.0
Total work team cost/	/hour: <u><b>\$896.30</b></u>						
MATERIAL QUA	<u>NTITIES</u>		~ ~ ~ ~	~ ~ ~ ~			
Initial volume:	3,500		LCY	Swell fact	or: <u>1.125</u>		
Loose ( oranie)			<u></u>	070			
Source c	of estimated swell fa	ctor:	Cat Hand	lbook			
		·					
HOURLY PRODU	<u>JCTION</u>						
				Scraper B	owl (volume) Basi	<u>s:</u>	
Material weight:	2,550 lbs/LCY			Struck	Volume: 24.00	L	CY
		1		Usanad	$V_{\text{olumon}} = \frac{21.00}{24.00}$		$\gamma \mathbf{v}$
Material description:	Earth - Dry packed	1		пеарец	volume:54.00		

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6200 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	10.00	5.00	15.00	589	1.71

Haul Time: **1.71** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	-10.00	5.00	-5.00	2972	0.41
				Return Time:	0.41	minutes
			Total Scrape	r team cycle time:	3.72	minutes
			Adjusted	for job conditions:	776.45	LCY/Hour
			Selected Nu	imber of Scrapers:	2	Scraper(s)
	Adjuste	d single scrap	per team (unit) h	nourly production:	776.45	LCY/Hour
	Adjusted n	nultiple scrap	er team (fleet) l	nourly production:	776.45	LCY/Hour
Optima	Unadjusted unit pro al Number of Scrapers pe	duction/hour r push dozer	935.48	LCY/Hour		
JOB T	IME AND COST					
Flee	t size: 1	Team(s)	Т	otal job time:	5.07	Hours

Unit cost: \_\_\_\_\_\$1.154 /LCY

Total job cost: \_\_\_\_\_\_\$4,545

## SCRAPER TEAM WORK

Site: Elk Creek Mine		Permi	t Action:	SI1	Peri	nit/Job#:	C19810	022
PROJECT IDEN	<b>TIFICATION</b>							
Task #: 093	Sta	ate:	Colorado		Abbrey	viation:	None	
Date: 11/18/	2021 Cour	nty:	Delta		Fil	ename:	022-093	3
User: LDS		<u> </u>				_		
Agency or	organization name:	DRM	IS					
HOURLY EQUI	PMENT_			COSTS	hift basis: <u>1 per d</u>	ay		
			Equipme	ent Description				
	-Sci	raper:	Cat 637	'G w/push-pull				
Suppo	-L	Aroo:	NA NA					
Suppo	-Dump	Area:	NA					
Road Ma	intenance – Motor G	rader:	NA					
	-Water T	ruck:	NA					
Cost Brookdown	Scroper Work	Toom		Support Equi	nmont	Moint	ononco I	Fauinmar
Cost breakdown:	Scraper	Do	zer	Load Area	Dump Area	Motor C	rader	Water'
%Utilization-machine:	100	_ 0	NΔ	NΔ	ν Δ		NΔ	
Ownership cost/hour:	\$223.48		NA	NA	NA		NA	
Operating cost/hour:	\$193.77		NA	NA	NA		NA	
%Utilization-ripper:	NA		NA	NA	NA		NA	
Ripper own. cost/hour:	NA		NA	NA	NA		NA	
Ripper op. cost/hour:	NA		NA	NA	NA		NA	
Operator cost/hour:	\$30.90		NA	NA	NA		NA	
Unit Subtotals:	\$448.15		NA	NA	NA		NA	
Number of Units:	2		0	0	0		0	
Group Subtotals:	Work:	\$89	6.30	Support:	\$0.00	I	Maint:	\$0.
Total work team cost	t/hour: <u>\$896.30</u>							
Initial volume: Loose volume:	<u>18,300</u> <b>20,588</b>		CCY LCY	Swell fac	tor: <u>1.125</u>			
Sou	rce of estimated volu	ime.	Division	of Reclamation	Mining & Safety			
Source	of estimated swell fac	ctor:	Cat Hand	dbook				
HOURLY PROD	UCTION							
				Scraper B	owl (volume) Basi	is:		
Material weight:	2,550 lbs/LCY			Struck	Volume: 24.00		LC	CY
Material description:	Earth - Dry packed	l		Heaped	Volume: 34.00		LC	CY
Rated Payload:	81,600 pounds			Average	Volume: 29.00		LC	CY
Payload Capacity:	32.00 LCY			Adjusted C	Capacity: <b>29.00</b>		LC	CΥ

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6200 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2350.00	-1.00	5.00	4.00	2394	1.21

Haul Time: **1.21** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2350.00	1.00	5.00	6.00	2638	1.06
				Return Time:	<u>1.06</u> r	ninutes
			Total Scrape	r team cycle time:	3.87	minutes
			Adjusted f	for job conditions:	746.36	LCY/Hour
			Selected Nu	mber of Scrapers:	2	Scraper(s)
	Adjuste	d single scra	per team (unit) h	nourly production:	746.36	LCY/Hour
	Adjusted n	nultiple scrap	er team (fleet) h	nourly production:	746.36	LCY/Hour
Optima	Unadjusted unit pro Number of Scrapers pe					
JOB TI	ME AND COST					
Fleet	size: 1	Team(s)	Т	otal job time:	27.58	Hours

Unit cost: \$1.201 /LCY

Total job cost: \_\_\_\_\_\$24,724

## SCRAPER TEAM WORK

Site: Elk Creek Mine		Permit Action:	SI1	Peri	mit/Job#: <u>C1981</u>	022
PROJECT IDEN	<b>TIFICATION</b>					
Task #: 094	S	tate: Colorado		Abbrev	viation: None	
Date: 11/18/2	2021 Cou	nty: Delta		Fil	ename: 022-09	4
User: LDS						
Agency or	organization name:	DRMS				
HOURLY EQUIE	PMENT		COSTS	hift basis: <u>1 per d</u>	<u>ay</u>	
		Equipme	ent Description			
	-Se	craper: Cat 637	'G w/push-pull			
Suppo	-	Dozer: NA				
Suppo	-Dumr	Area: NA				
Road Ma	intenance – Motor C	Grader: NA				
	-Water	Truck: NA				
Cost Breekdown•	Scraper Wor	k Team	Support Faui	nment	Maintenance	Fauinme
<u>Cost Dicakdown</u> .	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water
%Utilization-machine:	100	NA	NA	NA	NA	
Ownership cost/hour:	\$223.48	NA	NA	NA	NA	
Operating cost/hour:	\$193.77	NA	NA	NA	NA	
%Utilization-ripper:	NA	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	NA	NA	NA	NA	
Ripper op. cost/hour:	NA	NA	NA	NA	NA	
Operator cost/hour:	\$30.90	NA	NA	NA	NA	
Unit Subtotals:	\$448.15	NA	NA	NA	NA	
Number of Units:	2	0	0	0	0	
Group Subtotals:	Work:	\$896.30	Support:	\$0.00	Maint:	\$0.
Total work team cost <u>MATERIAL QUA</u> Initial volume: Loose volume: Source	t/hour: <u>\$896.30</u> ANTITIES 4,650 5,231 arce of estimated swell for	CCY LCY ume: Division	Swell fact of Reclamation, 1	tor: <u>1.125</u> Mining & Safety		
HOURLY PROD	UCTION		Scrapar D	ow] (volume) Reg	ic.	
Motorial waishes	2 550 lbs/I CV		Scraper D	Volume: 24.00	1 <u>0.</u> T 4	$\gamma \mathbf{v}$
Material weight: Material description:	2,550 IDS/LCY Earth - Dry packe	d	Struck Heaped	Volume: 24.00 Volume: 34.00	L0	CY
Rated Payload:	81,600 pounds	<u>.</u>	Average	Volume: 29.00		CY
Payload Capacity:	32.00 LCY		Adjusted (	apacity: 29.00	T (	$\gamma v$

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6300 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	10.00	5.00	15.00	589	1.28

Haul Time: **1.28** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	750.00	-10.00	5.00	-5.00	2972	0.32
				Return Time:	0.32	ninutes
			Total Scraper	team cycle time:	3.20	minutes
			Adjusted for	or job conditions:	902.63	LCY/Hour
			Selected Nu	mber of Scrapers:	2	Scraper(s)
	Adjuste	d single scrap	er team (unit) h	ourly production:	902.63	LCY/Hour
	Adjusted m	ultiple scrap	er team (fleet) h	ourly production:	902.63	LCY/Hour
Optimal	Unadjusted unit pro-	duction/hour: r push dozer:	1,087.50	LCY/Hour		
JOB TI	ME AND COST					

Fleet size:	1	Team(s)	Total job time:	5.80	Hours
Unit cost:	\$0.993	/LCY	Total job cost:	\$5,195	_

## SCRAPER TEAM WORK

		Permit	t Action:	SI1	Perr	mit/Job#:	C1981	022
PROJECT IDEN	<b>TIFICATION</b>							
Task #: 095	St	ate: (	Colorado		Abbrev	viation:	None	
Date: 11/18/	2021 Cour	nty:	Delta		Fil	ename:	022-09	5
User: LDS								
Agency or	organization name:	DRM	IS					
HOURLY EQUI	PMENT			COSTS	hift basis: <u>1 per d</u>	ay		
			Equipme	nt Description				
	-Sc	raper:	Cat 637	G w/push-pull				
<u> </u>	-l	Jozer:	NA					
Suppo	Drt Equipment -Load	Area:	NA NA					
Road Ma	aintenance – Motor G	rader:	NA					
	-Water	Fruck:	NA					
Cost Breakdown:	Scraper Work	c Team		Support Equi	pment	Main	itenance	Equipm
	Scraper	Do	zer	Load Area	Dump Area	Motor (	Grader	Wate
%Utilization-machine:	100		NA	NA	NA		NA	
Ownership cost/hour:	\$223.48		NA	NA	NA		NA	
Operating cost/hour:	\$193.77		NA	NA	NA		NA	
%Utilization-ripper:	NA		NA	NA	NA		NA	
Ripper own. cost/hour:	NA		NA	NA	NA		NA	
Ripper op. cost/hour:	NA		NA	NA	NA		NA	
Operator cost/hour:	\$30.90		NA	NA	NA		NA	
Unit Subtotals:	\$448.15		NA	NA	NA		NA	
Number of Units:	2		0	0	0		0	
Group Subtotals:	Work:	\$896	5.30	Support:	\$0.00		Maint:	\$(
Total work team cos	t/hour: <u>\$896.30</u>							
	<u>ANIIIES</u>		COV	0 11 0	1 1 2 5			
Loose volume:	1,000		LCY	Swell fact	lor: <u>1.125</u>			
0	urce of estimated vol	umo.	Division	of Reclamation	Mining & Safety			
Not	of estimated swell fa	ctor:	Cat Hand	book	winning & Safety			
Source								
Source HOURLY PROD	<b>UCTION</b>							
Source	<u>UCTION</u>			Scraper Be	owl (volume) Basi	is:		
Source Source <u>HOURLY PROD</u> Material weight:	<u>UCTION</u> 2,550 lbs/LCY			<u>Scraper Bo</u> Struck	owl (volume) Basi Volume:24.00	<u>is:</u>	L0	CY
Source <u>HOURLY PROD</u> Material weight: Material description:	<u>2,550 lbs/LCY</u> Earth - Dry packed	1		Scraper Bo Struck Heaped	$\frac{\text{owl (volume) Basis}}{\text{Volume:}} \frac{24.00}{34.00}$	<u>is:</u>		CY CY

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6300 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	4.00	5.00	9.00	1042	0.81

Haul Time: **0.81** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	-4.00	5.00	1.00	2963	0.39
				Return Time:	0.39	ninutes
			Total Scraper	team cycle time:	2.80	minutes
			Adjusted for	or job conditions:	1,031.57	LCY/Hour
			Selected Nur	nber of Scrapers:	2	Scraper(s)
	Adjusted	a single scrap	er team (unit) he	ourly production:	1,031.57	LCY/Hour
	Adjusted m	ultiple scrap	er team (fleet) he	ourly production:	1,031.57	LCY/Hour
Optimal	Unadjusted unit prov Number of Scrapers pe					
JOB TI	ME AND COST					

Fleet size:	1	Team(s)	Total job time:	1.09	Hours
Unit cost:	\$0.869	/LCY	Total job cost:	\$977	

Elk Creek Mine	Permit Action:	SI1	Permit/Job#:	C1981022
<b>PROJECT IDENTIFICA</b>	ATION			
Task #: 096	State: Colorado		Abbreviation:	None
Date: $\frac{11/18}{2021}$	County: Delta		Filename:	022.096
User: LDS	Dena		T nename.	022 070
Agency or organiza	tion name: DRMS			
rigency of organiza				
HOURLY EQUIPMENT	<u>COST</u>			
Basic Machine: Cat D1	0T - 10SU	_		
Horsepower: 574	<b>T</b> • 1	_		
Blade Type: <u>Semi-U</u>	Jniversal	-		
Attachment: NA		_		
Shift Basis: 1 per d	ay	_		
Data Source: (CRG)		_		
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$169.60	NA		
Operating Cost/Hour:	\$166.94	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$41.30	NA		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI	377.84 1,133.53 IES			
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250	377.84 1 <b>,133.53</b> IES			
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125	377.84 1,133.53 IES			
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY	377.84 <b>1,133.53</b> IES Y			
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:	377.84 <b>1,133.53</b> <b>IES</b> <u>Y</u> Division of Reclamatio	n. Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:       Swell factor	377.84 <b>1,133.53</b> <b>IES</b> <u>Y</u> <u>Division of Reclamatio</u> ctor: <u>Cat Handbook</u>	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor	377.84 <b>1,133.53</b> <b>IES</b> <u>Y</u> Externed to the set of	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         HOURLY PRODUCTIO	377.84 <b>1,133.53</b> <b>IES</b> Y Y Cor: Division of Reclamation Cat Handbook <b>DN</b>	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         HOURLY PRODUCTIO         Average push distance:	377.84 <b>1,133.53</b> <b>IES</b> <u>Y</u> <u>Division of Reclamation</u> Cat Handbook <u>100 feet</u> <u>100 feet</u>	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production	377.84 <b>1,133.53</b> <b>IES</b> <u>Y</u> <u>Y</u> <u>Division of Reclamation</u> <u>Cat Handbook</u> <u><b>DN</b></u> <u>100 feet</u> <u>1,718.9 LCY/hr</u>	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency description	377.84         1,133.53         IES         Y         Y         ON         100 feet         n:       1,718.9 LCY/hr         otion:      Consolidated stockpi	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency description         Average push gradient:       5	377.84         1,133.53         IES         Y         Y         Etor:       Division of Reclamation         Cat Handbook         DN         n:       100 feet         1,718.9 LCY/hr         otion:       Consolidated stockpi         %         500 fm	 n, Mining & Safety   le 1.0		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency descript         Average push gradient:       5         Average site altitude:       7	377.84         1,133.53         IES         Y         Y         ON         100 feet         n:       100 feet         1,718.9 LCY/hr         otion:       Consolidated stockpi         %         ,500 feet	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency descript         Average site altitude:       7         Average site altitude:       7         Material weight:       2	377.84         1,133.53         IES         Y         Y         Division of Reclamation         ctor:            Division of Reclamation         ctor:            Division of Reclamation         ctor:            Division of Reclamation         Cat Handbook         DN         100 feet         1,718.9 LCY/hr         otion:      Consolidated stockping         %         ,500 feet         ,550 lbs/LCY	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency descript         Average site altitude:       7.         Material weight:       2.         Weight description:       E	377.84         1,133.53         IES         Y         Y         Y         On Cat Handbook         DN         100 feet         1,718.9 LCY/hr         otion:       Consolidated stockpi         %         ,500 feet         ,550 lbs/LCY         arth - Dry packed	 n, Mining & Safety   le 1.0		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency descript         Average site altitude:       7.         Material weight:       2.         Weight description:       E         Ob Condition Correction Factor       0	$\frac{377.84}{1,133.53}$ $\frac{IES}{Y}$ $\frac{Division of Reclamation}{Cat Handbook}$ $\frac{I00 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{100 \text{ feet}}{550 \text{ lbs/LCY}}$ $\frac{3550 \text{ lbs/LCY}}{2 \text{ arth - Dry packed}}$	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated volume:         Source of estimated swell fac         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency descript         Average site altitude:       7         Average hush gradient:       5         Average site altitude:       7         Material weight:       2         Weight description:       E         Operator Skill       0	$\frac{377.84}{1,133.53}$ $\frac{IES}{Y}$ $\frac{Division of Reclamation Cat Handbook}{ON}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{100 \text{ feet}}{550 \text{ lbs/LCY}}$ $\frac{550 \text{ lbs/LCY}}{550 \text{ lbs/LCY}}$ $\frac{100 \text{ feet}}{1,750}$	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:       3         Source of estimated swell factor:       5         HOURLY PRODUCTIO       Average push distance:         Junadjusted hourly production       4         Average push gradient:       5         Average site altitude:       7         Average site altitude:       2         Veight description:       E         Operator Skill       Material consistency	$\frac{377.84}{1,133.53}$ $\frac{IES}{Y}$ $\frac{Division of Reclamation Cat Handbook}{ON}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{100 \text{ feet}}{550 \text{ lbs/LCY}}$ $\frac{550 \text{ lbs/LCY}}{550 \text{ lbs/LCY}}$ $\frac{100 \text{ feet}}{1,000}$	n, Mining & Safety		
Fotal unit Cost/Hour:       \$         Fotal Fleet Cost/Hour:       \$         MATERIAL QUANTITI         Initial Volume:       250         Swell factor:       1.125         Loose volume:       281 LCY         Source of estimated volume:         Source of estimated swell factor:         Gource of estimated swell factor:         HOURLY PRODUCTIO         Average push distance:         Jnadjusted hourly production         Materials consistency descript         Average site altitude:       7.         Average site altitude:       7.         Material weight:       2.         Veight description:       E         Operator Skil       Material consistency         Material consistency       Dozing method	$\frac{377.84}{1,133.53}$ $\frac{IES}{Y}$ $\frac{Division of Reclamation Cat Handbook}{DN}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{100 \text{ feet}}{1,718.9 \text{ LCY/hr}}$ $\frac{500 \text{ feet}}{550 \text{ lbs/LCY}}$ $\frac{3550 \text{ lbs/LCY}}{3 \text{ arth - Dry packed}}$ $\frac{2000 \text{ feet}}{1,000 \text{ feet}}$ $\frac{1000 \text{ feet}}{1,000 \text{ feet}}$	n, Mining & Safety		

Task # 096

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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4056	
Adjusted unit production: 69	97.19 LCY/hr	
Adjusted fleet production: 20	91.57 LCY/hr	

Fleet size:	3 Dozer(s)
Unit cost:	\$0.542/LCY

Total job time:	<b>0.13</b> Hours
Total job cost:	\$152

## SCRAPER TEAM WORK

Site: Elk Creek Mine	Peri	mit Action:	SI1	Perm	nit/Job#: <u>C</u>	1981022	
PROJECT IDEN	<b><u><b>TIFICATION</b></u></b>						
Task #: 098	State:	Colorado		Abbrev	viation: No	one	
Date: 11/18/2	2021 County:	Delta		File	ename: 02	2-098	
User: LDS							
Agency or	organization name:	RMS					_
HOURLY EQUIE	PMENT		COSTSI	nift basis: <u>1 per da</u>	ay		
	Sarapar	Equipme	ent Description				_
	-Scraper -Dozer	$\therefore \text{ Cat } 057$	G w/pusii-puii				_
Suppo	ort Equipment -Load Area	: NA					_
	-Dump Area	: NA					_
Road Ma	intenance – Motor Grader	: NA					_
	-Water Truck	: NA					_
Cost Breakdown•	Scraper Work Tea	m	Support Fauir	ment	Mainten	ance Equ	inment
<u>cost Dreakdown</u> .	Scraper I	Dozer	Load Area	Dump Area	Motor Grad	der W	/ater T
%Utilization-machine:	100	NA	NA	NA	]	NA	
Ownership cost/hour:	\$223.48	NA	NA	NA	l	NA	
Operating cost/hour:	\$193.77	NA	NA	NA	l	NA	
%Utilization-ripper:	NA	NA	NA	NA	l	NA	
Ripper own. cost/hour:	NA	NA	NA	NA	l	NA	
Ripper op. cost/hour:	NA	NA	NA	NA	l	NA	
Operator cost/hour:	\$30.90	NA	NA	NA	]	NA	
Unit Subtotals:	\$448.15	NA	NA	NA	l	NA	
Number of Units:	2	0	0	0		0	
Group Subtotals:	Work: \$8	396.30	Support:	\$0.00	Ma	int:	\$0.0
Total work team cost MATERIAL QUA Initial volume: Loose volume:	t/hour: <u>\$896.30</u> ANTITIES 13,400 15,075	_ CCY _ LCY	Swell fact	or: <u>1.125</u>			
Sou	rce of estimated volume:	Operator	Estimate				_
Source	of estimated swell factor:	Cat Han	dbook				_
HOURLY PROD	<u>UCTION</u>						
			Scraper Bo	owl (volume) Basi	<u>s:</u>		
Material weight:	2,550 lbs/LCY		Struck V	Volume: 24.00		LCY	
Material description:	Earth - Dry packed		Heaped V	Volume: 34.00		LCY	
Rated Payload:	81,600 pounds		Average V	Volume: 29.00		_ LCY	
Payload Capacity:	32.00 LCY		Adjusted C	apacity: <b>29.00</b>		LCY	

<u>1.00</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 6200 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 2" tire penetration 5.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	-10.00	5.00	-5.00	2972	0.56

Haul Time: **0.56** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1500.00	10.00	5.00	15.00	1047	1.46
				Return Time:	<b>1.46</b> r	ninutes
			Total Scraper	team cycle time:	3.62	minutes
			Adjusted for	or job conditions:	797.90	LCY/Hour
			Selected Nur	nber of Scrapers:	2	Scraper(s)
	Adjusted	l single scrap	er team (unit) ho	ourly production:	797.90	LCY/Hour
	Adjusted m	ultiple scrap	er team (fleet) ho	ourly production:	797.90	LCY/Hour
Optimal	Unadjusted unit prod Number of Scrapers pe	duction/hour: r push dozer:	961.33	LCY/Hour		

Fleet size:	1	Team(s)	Total job time:	18.89	Hours
Unit cost:	\$1.123	/LCY	Total job cost:	\$16,934	

		Replace Topsoil from Stockpile to Pond F, Ditches and Plunge					
Elk Creek Mine		Per	mit Action:	SI1	Permit/Job#:	C1981022	
PROJECT IDEN	TIFICATIO	DN					
Task # 103		State:	Colorado		Abbreviation:	None	
Date: $\frac{103}{11/18/}$	2021	County.	Delta		Filename:	022-103	
User: LDS	2021	County.	Delta			022 105	
	organization	nama: DE	oms				
Agency of	organization i						
HOURLY EQUI	PMENT CO	<u>ST</u>					
Basic Machine:	Cat D10T -	10SU					
Horsepower:	574	1					
Blade Type:	Semi-Unive	rsal		_			
Attachment:	NA 1 and 1						
Shift Basis:	1 per day			_			
Data Source:	(CKG)						
Cost Breakdown:							
				Utilization %			
Ownership Cost/Ho	our:		\$169.60	NA			
Operating Cost/Ho	our:		\$166.94	100			
Ripper own. Cost/Ho	our:		\$0.00	NA			
Ripper op. Cost/Ho	our:		\$0.00	0			
Operator Cost/Ho	our:		\$41.30	NA			
<u>MATERIAL QUA</u> Initial Volume:	ANTITIES 1.300						
MATERIAL QUA Initial Volume: Swell factor:	ANTITIES 1,300 1.125						
MATERIAL QUA Initial Volume: Swell factor: Loose volume:	ANTITIES 1,300 1.125 1,463 LCY						
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated	ANTITIES 1,300 1.125 1,463 LCY volume:	Map 2.05	  j-M4 (Sheet '	5 of 5): Map 2.05-M5	I		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor:	Map 2.05 Cat Hand		5 of 5); Map 2.05-M5	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated a Source of estimated a	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor:	Map 2.05 Cat Hand		5 of 5); Map 2.05-M5	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor: UCTION	Map 2.05 Cat Hand	  j-M4 (Sheet 5 lbook	5 of 5); Map 2.05-M5	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor: UCTION	Map 2.05 Cat Hand		5 of 5); Map 2.05-M5 	J		
MATERIAL QUA Initial Volume:	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor: UCTION ce:	Map 2.05 Cat Hand		5 of 5); Map 2.05-M5 	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated a Source of estimated a HOURLY PROD Average push distand Jnadjusted hourly produced and a statements of the sta	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor: UCTION ce: roduction:	Map 2.05 Cat Hand 125 feet 1,450.0 LC		5 of 5); Map 2.05-M5 	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distance Jnadjusted hourly pu	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor: UCTION ce: roduction: y description:	Map 2.05 Cat Hand 125 feet 1,450.0 LC Consol	 j-M4 (Sheet 5 book Y/hr idated stockp	5 of 5); Map 2.05-M5   ile 1.0	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push distand Unadjusted hourly provider in the second Vaterials consistence	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor: UCTION ce: roduction: y description:	<u>Map 2.05</u> Cat Hand 125 feet 1,450.0 LC <u>Consol</u>		5 of 5); Map 2.05-M5 	<u>J</u>		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated MOURLY PROD Average push distand Unadjusted hourly put vlaterials consistence	ANTITIES 1,300 1.125 1,463 LCY volume: swell factor: UCTION ce: roduction: y description: ent: 10%	Map 2.05 Cat Hand 125 feet 1,450.0 LC Consol		5 of 5); Map 2.05-M5 	<u>J</u>		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated HOURLY PROD Average push distand Unadjusted hourly provided Vaterials consistence Average push gradie Average site altitude	ANTITIES         1,300         1.125         1,463 LCY         volume:         swell factor:         UCTION         ce:         roduction:         y description:         ent:       10 %         ::       6,400	Map 2.05 Cat Hand 125 feet 1,450.0 LC Consol feet		5 of 5); Map 2.05-M5	<u>J</u>		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated is Source of estimated is Source of estimated is HOURLY PROD Average push distand Unadjusted hourly provide the second Vaterials consistency Average push gradie Average site altitude	ANTITIES         1,300         1.125         1,463 LCY         volume:         swell factor:         UCTION         ce:         roduction:         y description:         ent:       10 %         2,550	Map 2.05 Cat Hand 125 feet 1,450.0 LC Consol feet		5 of 5); Map 2.05-M5	<u>J</u>		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated MOURLY PROD Average push distand Inadjusted hourly provided Average push gradie Average push gradie Average site altitude Material weight: Weight description:	ANTITIES         1,300         1.125         1,463 LCY         volume:         swell factor:         UCTION         ce:         roduction:         y description:         ent:       10 %         2,550         Earth -	Map 2.05 Cat Hand 125 feet 1,450.0 LC Consol feet lbs/LCY Dry packed	 5-M4 (Sheet f lbook Y/hr idated stockp  d	5 of 5); Map 2.05-M5   ile 1.0	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Average push distand Unadjusted hourly pu Vaterials consistence Average push gradie Average site altitude Vaterial weight: Weight description: Ob Condition Correct	ANTITIES         1,300         1.125         1,463 LCY         volume:         swell factor:         UCTION         ce:         roduction:         y description:         ent:       10 %         2,550         Earth -         ction Factor	Map 2.05 Cat Hand 125 feet 1,450.0 LC Consol feet lbs/LCY Dry packed		5 of 5); Map 2.05-M5	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Average push distand Unadjusted hourly push vaterials consistence Average push gradie Average site altitude Vaterial weight: Weight description: Oper	ANTITIES          1,300         1,125         1,463 LCY         volume:         swell factor:         UCTION         ce:         roduction:         y description:         ent:       10 %         ce:       2,550 %         Earth -         ction Factor         rator Skill:	Map 2.05 Cat Hand 125 feet 1,450.0 LC Consol feet lbs/LCY Dry packed 0.	 j-M4 (Sheet 5 book Y/hr idated stockp  d 750	5 of 5); Map 2.05-M5	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated MURLY PROD Average push distand Unadjusted hourly provided Vaterials consistence Average push gradie Average site altitude Vaterial weight: Weight description: Ob Condition Correa Oper Material co	ANTITIES          1,300         1,125         1,463 LCY         volume:         swell factor:         UCTION         ce:         roduction:         y description:         ent:       10 %         ce:       2,550 %         Earth -         ction Factor         rator Skill:	<u>Map 2.05</u> Cat Hand <u>125 feet</u> 1,450.0 LC <u>Consol</u> feet lbs/LCY Dry packed 0. 1.		5 of 5); Map 2.05-M5	J		
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated Source of estimated MOURLY PROD Average push distand Unadjusted hourly provided Average push gradie Average push gradie Average site altitude Material weight: Weight description: <u>ob Condition Corree</u> Oper Material co Dozin	ANTITIES          1,300         1,125         1,463 LCY         volume:         swell factor:         UCTION         ce:         roduction:         y description:         ent:         10 %         ::         2,550         Earth -         ction Factor         ator Skill:         nsistency:         g method:	<u>Map 2.05</u> Cat Hand <u>125 feet</u> <u>1,450.0 LC</u> <u>Consol</u> feet <u>lbs/LCY</u> Dry packed 0. <u>1.</u> 1.		5 of 5); Map 2.05-M5	J		

Job efficiency	0.830	(1 SHIFT/DAY)
Spoil pile	e: 0.800	(FND-RF)
Push gradien	t: 0.786	(CAT HB)
Altitude	2: 1.000	(CAT HB)
Material Weight	t: 0.902	(CAT HB)
Blade type	e: 1.000	(PAT)
Net correction	n:0.3531	
Adjusted unit production:	512.00 LCY/hr	
Adjusted fleet production:	<b>512</b> LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.738/LCY

Total job time:	<b>2.86</b> Hours
Total job cost:	\$1,079

## **REVEGETATION WORK**

ite: Elk Cre	ek Mine	Permit Action:	SI1	Permit/Job	o#: <u>C1981022</u>
PROJECT	<b>IDENTIFIC</b>	CATION State: Colorado		Abbraviation	Nono
	120	State. Colorado		Filename:	C022-120
Date:	11/18/2021	County: Delta			

## **FERTILIZING**

#### Materials

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

## Application

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

## **TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$290.40

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	1.00	3.26	\$11.73
Bitterbrush, Antelope	1.50	0.46	\$29.25
Aster, Engleman's	0.13	0.60	\$24.44
Mountain Brome - Bromar	1.50	2.41	\$5.70
Great Basin Wildrye - Magnar	0.50	2.03	\$5.78
Sandberg Bluegrass - VNS	0.12	2.55	\$1.01
Sheep Fescue - Covar	1.00	15.61	\$6.10
Milk Vetch, Cicer - Lutana	2.00	6.66	\$16.40
Sainfoin - Remont	2.00	0.87	\$6.32
Thickspike Wheatgrass - Critana	0.25	0.88	\$1.72

Western Wheatgrass - Arriba	0.50	1.26	\$3.25
Rabbitbrush, Rubber	0.50	7.45	\$32.15
Needlegrass, Green - Lodorm	0.50	2.08	\$5.89
Sage, Fringed	0.06	5.01	\$2.46
Sagebrush, Mountain or Big	0.12	6.34	\$2.37
Flax, Lewis Blue	0.66	4.38	\$10.89
Sagebrush, Silver	0.12	2.33	\$3.72
Penstemon, Palmer	0.25	5.53	\$13.63
Penstemon, Rocky Mountain	0.50	7.84	\$14.75
Yarrow, Western	0.06	3.65	\$2.51
Totals Seed Mix	13.27	81.20	\$200.05

#### Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

### **MULCHING and MISCELLANEOUS**

#### Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	0.05	ACRE	\$7.78	\$0.39
Herbicide - Escort @ 1.0 pt/ac	0.05	ACRE	\$194.52	\$9.73
<b>Total Mulch Materials Cost/Acre</b>				\$10.12

Application

	\$
Mulch Application Cost/Acre	\$0.00
	l Mulch Application Cost/Acre

### NURSERY STOCK PLANTING

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

Estimate *Selected Replantin	No. of Acres: ed Failure Rate: ng Work Items:	108.25 10% SEEDING	Cost /Acre: Cost /Acre*:	\$767.79 \$467.27
Initial Job Cost: Reseeding Job Cost: Total Job Cost: Job Hours:	\$83,113.27 \$5,058.20 \$88,171 216.50		- - -	

## **REVEGETATION WORK**

Task description:Re-seed Drill Pads, MR's and TR's, 46.23 acres @ 2% failure						
Site:	Elk Creel	k Mine	Permit Act	ion: <u>SI1</u>	Permit/Jol	o#: <u>C1981022</u>
<u>P</u> ]	ROJECT	IDENTIFIC	ATION	- 1-		News
	Date:	121	County: Delta	100	Abbreviation: Filename:	022-121
	User:	LDS				
	Age	ency or organiz	zation name: DRMS			

## **FERTILIZING**

#### Materials

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

## Application

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

## **TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$290.40

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	1.50	4.89	\$17.59
Indian Ricegrass - Native	0.50	1.62	\$3.25
Mountain Brome - Bromar	2.00	3.21	\$7.60
Sandberg Bluegrass - VNS	1.50	31.85	\$12.60
Coreopsis, Lance Leafed	0.15	3.84	\$4.28
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Prairie Junegrass	0.25	13.29	\$6.50
Penstemon, Rocky Mountain	0.15	2.35	\$4.43
Yarrow, White	0.05	3.18	\$2.00

Totals Seed Mix	8.10	69.28	\$71.25	
			+	

#### Application

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

### **MULCHING and MISCELLANEOUS**

#### Materials

	Units /		~	~
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	2.00	ACRE	\$7.78	\$15.56
Herbicide - Escort @ 1.0 pt/ac	2.00	ACRE	\$194.52	\$389.04
<b>Total Mulch Materials Cost/Acre</b>				\$404.60

Application

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

## NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 1	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres: Estimated Failure Rate: *Selected Replanting Work Items:	1 0% NONE	Cost /Acre: Cost /Acre*:	\$1,033.47 \$0.00
Initial Job Cost:       \$1,033.47         Reseeding Job Cost:       \$0.00         Total Job Cost:       \$1,033         Job Hours:       46.23		-	

## **REVEGETATION WORK**

Task description:		Re-seed Light-Use Roads, MR's and TR's, 35.59 acres @ 2% fai				
ite: Elk Creek Mine		Permit Action: SI1		Permit/Job#: <u>C1981022</u>		
PROJECT	IDENTIFIC	<u>ATION</u>				
Task #:	122	State: Colorado		Abbreviation:	None	
Date:	11/18/2021	County: Delta		Filename:	022-122	

## **FERTILIZING**

#### Materials

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

## Application

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

## **TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$290.40

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Beardless Wheatgrass - Whitmar	1.50	4.89	\$17.59
Indian Ricegrass - Native	0.50	1.62	\$3.25
Mountain Brome - Bromar	2.00	3.21	\$7.60
Sandberg Bluegrass - VNS	1.50	31.85	\$12.60
Coreopsis, Lance Leafed	0.15	3.84	\$4.28
Western Wheatgrass - Arriba	2.00	5.05	\$13.00
Prairie Junegrass	0.25	13.29	\$6.50
Penstemon, Rocky Mountain	0.15	2.35	\$4.43
Yarrow, White	0.05	3.18	\$2.00

Totals Seed Mix	8.10	69.28	\$71.25	_
	0.20		φ	

#### Application

Description		Cost /Acre
Broadcast seeding [DMG]		\$267.22
	Total Seed Application Cost/Acre	\$267.22

### **MULCHING and MISCELLANEOUS**

#### Materials

	Units /		~	~
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	2.00	ACRE	\$7.78	\$15.56
Herbicide - Escort @ 1.0 pt/ac	2.00	ACRE	\$194.52	\$389.04
<b>Total Mulch Materials Cost/Acre</b>				\$404.60

Application

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

## NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 1	Nursery Stoc	k Cost / Acre	\$0.00

Estimated	No. of Acres: I Failure Rate:	1 0%	Cost /Acre: Cost /Acre*:	\$1,033.47 \$0.00
*Selected Replanting	g Work Items:	NONE		
Initial Job Cost:	\$1,033.47			
Reseeding Job Cost:	\$0.00			
Total Job Cost:	\$1,033			
Job Hours:	35.59			
#### **DEMOLITION WORK**

Т	Task description:	Demolish and Remove All	Mine Facilities		
Site:	Elk Creek Mine	Permit Action:	SI1	Permit/J	Job#: <u>C1981022</u>
ROJEO	CT IDENTIFICATI	<u>ON</u>			
Task #:	130	State: Colorado		Abbreviation:	None
Date	11/18/2021	County: Delta		Filename:	022-130
Dale.	11/10/2021				

Quantity

**Demolition Menu** 

Selection

Conveyor, Horizontal

Bldg. (MN) demo./on-

Belt 24" Belt, 61.5'

site disposal in excavated pit - Max.

Length

#### **UNIT COSTS**

- Pad

Tank

**Overland Conveyors** 

- Transfer Towers (3)

Structure or Item

Description

Dimensions

2,400 LF

10'x20'x25'

#### 15,000.00 Elk Creek Fan 15'x10'x50' Bldg. (MN) demo./on-CF \$3,285.00 \$0.22 site disposal in existing Structures pit or cut - Max. 10,000 ft. haul - Pads 18'x60'x6" Demo. and on-site 2,160.00 SF \$1.00 \$2,162.16 disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul 25'x25'x20' Bldg. (MN) demo./on-12,500.00 CF \$0.22 Substation No. 4 \$2,737.50 site disposal in existing pit or cut - Max. 10,000 ft. haul SF 25'x25'x6" Demo. and on-site 625.00 \$1.00 \$625.63 disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul 100.00 LF - Fencing 100 LF Fencing, chain link, \$3.08 \$308.00 including posts and fabric - 8 ft. to 10 ft. high NON-PCB Transformer - Transformer NA 1.00 EA \$2.238.20 \$2.238.20 Removal 200.000 Gallon Water 200.000 Bldg. (MN) demo./on-28,510.00 CF \$0.24 \$6.728.36 Gallons site disposal in excavated pit - Max. 10,000 ft. haul Rock Dust Tanks (2) 20'x15' Bldg. (MN) demo./on-7,069.00 CF \$0.24 \$1,668.28 Diameter site disposal in excavated pit - Max. 10,000 ft. haul - Pads 256.00 SF 16'x8'x8" Demo. and on-site \$1.33 \$341.50 disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul 8@8.75'x2' Demo. and on-site 24.00 LF \$12.01 \$288.24 - Footings disposal in existing pit, 2.0 ft. x 3 ft. - Max. 10,000 ft. haul

40.00

15,000.00

EA

CF

\$3,125.00

\$0.24

\$125,000.00

\$3,540.00

# Location adjustment: 91.30 %

**Total Cost** 

Unit

Cost

Unit

		10,000 ft. haul				
- Pads	10'x20'x12"	Demo. and on-site	600.00	SF	\$2.00	\$1,201.20
		disposal in existing pit,				
		12 in. thick - Max.				
		10,000 ft. haul				
Powerlines	3,100 LF	Utility Poles, Wood 35' -	30.00	EA	\$292.00	\$8,760.00
		45' high (each pole)				
Elk Creek Culvert	300 LF x 9' D	Pipe, corrugated metal	300.00	LF	\$51.18	\$15,352.80
		(CMP) - 108 in.				
		diameter pipe				
Substation No. 1	NA	NON-PCB Transformer	3.00	EA	\$2,238.20	\$6,714.60
Transformers (3)		Removal				
- Equipment	6'x8'x6'	Bldg. (SN) demo./on-	288.00	CF	\$0.22	\$61.92
		site disposal in				
		excavated pit - Max.				
		10,000 ft. haul				
- Pad	25'x25'x6"	Demo. and on-site	625.00	SF	\$1.00	\$625.63
		disposal in existing pit, 6				
		in. thick - Max. 10,000				
		ft. haul				
- Fence	100 LF	Fencing, chain link,	100.00	LF	\$3.08	\$308.00
		including posts and				
		fabric - 8 ft. to 10 ft.				
E alasi ya Masa ing	201 251 101	high	10,000,00	OF	¢0.22	¢2 150 00
Explosives Magazine	20 x 25 x 10°	Bldg. (SN) demo./on-	10,000.00	CF	\$0.22	\$2,150.00
		site disposal in				
		10 000 ft houl				
Dump Station	$140'_{\rm W}40'_{\rm W}12'$	Pldg (MN) dame (on	67 200 00	CE	\$0.24	\$15 850 20
Dump Station	140 440 412	site disposal in	07,200.00	CI	φ <b>0.</b> 24	\$13,839.20
		excepted pit Max				
		10 000 ft haul				
- Pad	140'x40'x6"	Demo and on-site	5 600 00	SF	\$1.00	\$5 605 60
1 400	1101110110	disposal in existing pit. 6	2,000.00	~	<i>Q</i>	40,000.000
		in. thick - Max. 10.000				
		ft. haul				
- Footing	1'x2'x360 LF	Demo. and on-site	360.00	LF	\$4.00	\$1,440.00
		disposal in existing pit,				
		1.0 ft. x 2 ft Max.				
		10,000 ft. haul				
125 and 500 Ton	NA	Bldg. (MN) demo./on-	21,094.00	CF	\$0.24	\$4,978.18
Steel Bins		site disposal in				
		excavated pit - Max.				
		10,000 ft. haul				
Truck Scale Pad	10'x60'x12"	Demo. and on-site	600.00	SF	\$2.00	\$1,201.20
		disposal in existing pit,				
		12 in. thick - Max.				
		10,000 ft. haul	2 000 00		¢0.22	¢ < 4 5 00
- Building	Assume 5'	Bldg. (SN) demo./on-	3,000.00	CF	\$0.22	\$645.00
	Deep	site disposal in				
		10 000 ft houl				
- Footing	1 5'x 2'x 1/0 I E	Demo, and on site	140.00	IE	\$9.01	\$1.261.40
- rooting	1.J AJ A140 LF	disposal in existing pit	140.00	LF	φ <b>7.</b> 01	φ1,201.40
		15  ft  x 3  ft  - Max				
		10000ft haul				
Tipple Structure	30'x50'x50'	Bldg. (MN) demo /on-	75,000.00	CF	\$0.24	\$17,700.00
Tippie Structure	20120120	site disposal in	, 2,000.00		Ψ0·2 Ι	<i>,,00.00</i>
		excavated pit - Max.				
	1	r r r r r r r r r r r r r r r r r r r			1	

		10,000 ft. haul				
- Pad	30'x50'x12"	Demo. and on-site	1,500.00	SF	\$2.00	\$3,003.00
		disposal in existing pit,				
		12 in. thick - Max.				
		10,000 ft. haul				
- Footing	1.5'x3'x160 LF	Demo. and on-site	on-site 160.00 LF		\$9.01	\$1,441.60
		disposal in existing pit,				
		1.5 ft. x 3 ft Max.				
		10,000 ft. haul				
Coal Screening	35'x35'x55'	Bldg. (MN) demo./on-	67,375.00	CF	\$0.24	\$15,900.50
Facility		site disposal in				
		excavated pit - Max.				
	0.51.551.401	10,000 ft. haul	1.005.00		<b>**</b>	<u> </u>
- Pad	35'x55'x12"	Demo. and on-site	1,225.00	SF	\$2.00	\$2,452.45
		disposal in existing pit,				
		12 in. thick - Max.				
		10,000 ft. haul	1.40.00	I F	<b>#0.01</b>	¢1.0<1.40
- Footing	1.5'x3'x140 LF	Demo. and on-site	140.00	LF	\$9.01	\$1,261.40
		disposal in existing pit,				
		1.5 ft. x 3 ft Max.				
	14015		2.00	E A	¢2 125 00	¢< 250.00
Dump Station/Truck	140 LF	Conveyor, Horizontai	2.00	EA	\$5,125.00	\$6,250.00
Scale Conveyors		Belt 24 <sup>°</sup> Belt, 61.5 <sup>°</sup>				
Crucher/Teeder	160 L E	Conveyor Herizontel	2.00	EA	\$2,125,00	\$6.250.00
Crusher/Feeder Conveyor	100 LF	Polt 24" Polt 61 5'	2.00	EA	\$5,125.00	\$0,230.00
Conveyor		Longth				
Crucher Durace	200 I E	Convoyor Horizontal	2.00	E۸	\$2,125,00	\$0.275.00
Crusher Bypass	200 LF	Rolt 24" Rolt 61 5'	5.00	EA	\$5,125.00	\$9,575.00
Conveyor		Length				
Silo Feeder Conveyor	380 I F	Conveyor Horizontal	6.00	FΔ	\$3 125 00	\$18 750 00
Sho i ceder conveyor	500 LI	Belt 24" Belt 61 5'	0.00		\$5,125.00	\$10,750.00
		Length				
Loadout Feeder	350 L F	Conveyor Horizontal	6.00	ΕA	\$3 125 00	\$18 750 00
Conveyor	550 EI	Belt 24" Belt 61 5'	0.00		\$3,125.00	<i>\\</i> 10,750.00
conveyor		Length				
Coal Storage Silo	140'x70'	Explosive demolition.	539.000.00	CF	\$0.32	\$172,480.00
	Diameter	large projects - Concrete			+ • • • • -	+,
		structures				
- Headhouse	20'x20'x10'	Bldg. (MN) demo./on-	4,000.00	CF	\$0.24	\$944.00
		site disposal in				
		excavated pit - Max.				
		10,000 ft. haul				
- Pad	12"x70'	Demo. and on-site	3,848.00	SF	\$2.00	\$7,703.70
	Diameter	disposal in existing pit,				
		12 in. thick - Max.				
		10,000 ft. haul				
- Footing	2'x3'x220 LF	Demo. and on-site	220.00	LF	\$12.01	\$2,642.20
		disposal in existing pit,				
		2.0 ft. x 3 ft Max.				
		10,000 ft. haul				
Batch-Weigh Loadout	27'x27'x100'	Bldg. (MN) demo./on-	72,900.00	CF	\$0.24	\$17,204.40
		site disposal in				
		excavated pit - Max.				
	271 271 12"	10,000 ft. haul	700.00	05	<b>#2</b> .00	¢1.450.45
- Pad	27x27x12"	Demo. and on-site	729.00	SF	\$2.00	\$1,459.46
		uisposai in existing pit,				
		12 III. UIICK - MAX.				
		10,000 It. naul				

- Footing	1.5'x3'x108 LF	Demo. and on-site	108.00	LF	\$9.01	\$973.08
		1.5 ft. x 3 ft Max.				
Surgo and Woigh	300 and 120	Ridg (MN) dame (on	14 175 00	CE	\$0.24	\$3 345 30
- Surge and weight	Tons	site disposal in	14,175.00	Cr	<b>\$0.24</b>	\$5,545.50
DIIIS	10115	excavated pit - Max				
		10 000 ft haul				
- Transfer Chutes	40'x36'x18'	Bldg. (MN) demo./on-	25.920.00	CF	\$0.24	\$6.117.12
	10 110 0 1110	site disposal in	20,720100	01	ФО <b>П</b> .	\$\$\$,117 <b>11</b>
		excavated pit - Max.				
		10,000 ft. haul				
- Discharge Chute	40'x36'x6"	Demo. and on-site	1,440.00	SF	\$1.00	\$1,441.44
		disposal in existing pit, 6				
		in. thick - Max. 10,000				
		ft. haul	10.000.00	~~~	***	* * * * * * *
Woman's Change	45'x30'x14'	Bldg. (SN) demo./on-	18,900.00	CF	\$0.22	\$4,063.50
House		site disposal in				
		10 000 ft houl				
- Pad	15'x30'x6"	Demo and on-site	1 350 00	SE	\$1.00	\$1 351 35
- 1 au	45 850 80	disposal in existing pit 6	1,550.00	51	φ1.00	ψ1,551.55
		in. thick - Max. 10.000				
		ft. haul				
Waste Barrel Storage	10'x20';	Bldg. (SN) demo./on-	13,200.00	CF	\$0.22	\$2,838.00
Structure	30'x30'x12'	site disposal in				
		excavated pit - Max.				
		10,000 ft. haul				
- Pads	10'x20';	Demo. and on-site	1,100.00	SF	\$1.00	\$1,101.10
	30'x30'x6''	disposal in existing pit, 6				
		in. thick - Max. 10,000				
Office Sentic Tank	1 500 Gallons	Excepte and load tank	1.00	FΔ	\$614.00	\$614.00
Office Septie Talk	1,500 Ganons	onto trailer non-leaking	1.00	LA	ψ014.00	φ <b>014.00</b>
		- 3.000 gal. to 5.000				
		gal.				
- Remove Septic	Assume 500	Remove sludge, water,	1.00	EA	\$238.00	\$238.00
Tank Sludge	Gals	and rem. product from				
		tank - 3,000 to 5,000				
		gal.				
- Dispose of Sludge	Assume 500	Dispose of tank sludge	500.00	GAL	\$6.80	\$3,400.00
Off-Site	Gals	off-site - Average	1.00	<b></b>	¢7.000	<b>Ф7</b> со оо
- Haul Lank to	1,500 Gallons	Haul tank to certified	1.00	EA	\$760.00	\$760.00
Certified Dump		5 000 gal tank				
Metal Storage	30'x60'x12'	Bldg (SN) demo /on-	21 600 00	CF	\$0.22	\$4 644 00
Building	50 X00 X12	site disposal in	21,000.00	CI	ψ0.22	\$1,011.00
		excavated pit - Max.				
		10,000 ft. haul				
- Pad	30'x60'x6"	Demo. and on-site	1,800.00	SF	\$1.00	\$1,801.80
		disposal in existing pit, 6				
		in. thick - Max. 10,000				
	12 000 0 1	ft. haul	• • • •		<i><b>ф1 0 50 00</b></i>	<b>**</b> 100.00
Train Car Antifreeze	12,000 Gallons	Excavate and load tank	2.00	EA	\$1,050.00	\$2,100.00
1  anks (2)		onto trailer, non-leaking $0.000$ gal to 12 000				
		- 2,000 gai. 10 12,000 gal				
- Remove Sludge	Assume 2.400	Remove sludge, water	2.00	EA	\$397.00	\$794.00
from Tank Bottom	Gals	and rem. product from			+	+ / 2

		tank - 9,000 to 12,000				
Dispose of Sludge	A ssume 2 400	gal.	2 400 00	GAI	\$6.80	\$16.220.00
- Dispose of Studge	Assume 2,400	off site Average	2,400.00	GAL	<i>ф</i> 0.80	\$10,520.00
- Haul Tank to	12 000 Gallons	Haul tank to certified	2.00	EA	\$1,050,00	\$2,100,00
Certified Dump	12,000 Guilons	salvage dump - 9,000 to 12,000 gal, tank	2.00	LIX	\$1,000.00	φ2,100.00
Train Car Antifreeze Tank	6,000 Gallons	Excavate and load tank onto trailer, non-leaking	1.00	EA	\$880.00	\$880.00
- Remove Sludge	Assume 600	- 0,000 gal. to 0,000 gal.	1.00	FΔ	\$298.00	\$298.00
from Tank Bottom	Gals	and rem. product from tank - 6,000 to 8,000 gal.	1.00	LA	\$298.00	\$276.00
- Dispose of Sludge	Assume 600	Dispose of tank sludge	600.00	GAL	\$6.80	\$4.080.00
Off-Site	Gals	off-site - Average				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
- Haul Tank to Certified Dump	6,000 Gallons	Haul tank to certified salvage dump - 6,000 to 8,000 gal. tank	1.00	EA	\$880.00	\$880.00
Main Septic Tank	3,000 Gallons	Excavate and load tank onto trailer, non-leaking - 3,000 gal. to 5,000 gal.	1.00	EA	\$614.00	\$614.00
- Remove Sludge from Tank Bottom	Assume 500 Gals	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$238.00	\$238.00
- Dispose of Sludge Off-Site	Assume 500 Gals	Dispose of tank sludge off-site - Average	500.00	GAL	\$6.80	\$3,400.00
- Haul Tank to	3,000 Gallons	Haul tank to certified	1.00	EA	\$760.00	\$760.00
Certified Dump	, ,	salvage dump - 3,000 to 5,000 gal. tank				
Compressor House	30'x54'x16'	Bldg. (MN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	25,920.00	CF	\$0.24	\$6,117.12
- Footers	1'x2'x168 LF	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 10.000 ft. haul	168.00	LF	\$4.00	\$672.00
Office	62,424 CF	Bldg. (MN) demo./on- site disposal in excavated pit - Max. 10.000 ft, haul	62,424.00	CF	\$0.24	\$14,732.06
- Pad	5,400 SF	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	5,400.00	SF	\$1.00	\$5,405.40
- Footers	1'x2'x315 LF	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft Max. 10,000 ft. haul	315.00	LF	\$4.00	\$1,260.00
Bath House	100'x110'x18'	Bldg. (MN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	185,850.00	CF	\$0.24	\$43,860.60
- Pad	100'x110'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max, 10.000	11,000.00	SF	\$1.00	\$11,011.00

		ft. haul				
- Footers	2'x3'x420 LF	Demo. and on-site disposal in existing pit, 2.0 ft. x 3 ft Max.	420.00	LF	\$12.01	\$5,044.20
		10,000 ft. haul				
Concrete Dams	14'x155'x2'	Wall, concrete, demolition only, average reinforcing - 24 in. thick	2,170.00	SF	\$4.45	\$9,656.50
- Dam Base	15'x155'x2'	Pavement, concrete, demolition only, 7 in. to 24 in thick Beinforced	172.00	CY	\$133.50	\$22,962.00
Culvert IIW-4	12"x100 LF	Pipe, corrugated metal (CMP) - 12 in. diameter	100.00	LF	\$4.10	\$409.70
Culvert IIW-5	12"x100 LF	Pipe, corrugated metal (CMP) - 12 in. diameter	100.00	LF	\$4.10	\$409.70
Tank Containment Walls	16'x44'x4' (8")	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul	485.00	SF	\$3.08	\$1,493.80
Covered Oil Storage	25'x16'x20'	Bldg. (MN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	6,400.00	CF	\$0.24	\$1,510.40
Water Treatment Room	10'x20'x20'	Bldg. (MN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	4,000.00	CF	\$0.24	\$944.00
Sump	39.3'x14'x4' (8")	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 10,000 ft haul	Demo. and on-site 426.00 SF \$3.08 disposal in existing pit, 8 in. thick - Max. 10,000		\$3.08	\$1,312.08
Clean Oil/Water/Mud out of Sump	12,000 Gallons	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$397.00	\$397.00
- Dispose of Sludge Off-Site	Assume 2,000 Gals	Dispose of tank sludge off-site - Average	2,000.00	GAL	\$6.80	\$13,600.00
Sanborn Substation No. 2 Transformers	NA	NON-PCB Transformer Removal	3.00	EA	\$2,238.20	\$6,714.60
- Equipment Removal	6'x8'x6'	Bldg. (MN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	288.00	CF	\$0.24	\$67.97
- Pad	25'x25'x12"	Demo. and on-site disposal in existing pit, 12 in. thick - Max. 10,000 ft. haul	625.00	SF	\$2.00	\$1,251.25
- Fence	100 LF	Fencing, chain link, including posts and fabric - 8 ft. to 10 ft. high	100.00 LF \$3.08		\$308.00	
Sanborn Overland Conveyor	1500LF	Conveyor, Horizontal Belt 24" Belt, 61.5'	24.00	EA	\$3,125.00	\$75,000.00
- Transfer Buildings (4)	10'x20'x25'	Bldg. (MN) demo./on- site disposal in excavated pit - Max.	20,000.00	CF	\$0.24	\$4,720.00

		10,000 ft. haul				
- Pads (4)	10'x20'x12"	Demo. and on-site	800.00	SF	\$2.00	\$1,601.60
		disposal in existing pit,				
		12 in. thick - Max.				
		10,000 ft. haul				
- Equipment	10'x20'x25'	Bldg. (MN) demo./on-	1,000.00	CF	\$0.24	\$236.00
Removal		site disposal in				
		excavated pit - Max.				
		10,000 ft. haul				
Air Compressor	30'x30'x16'	Bldg. (MN) demo./on-	14,400.00	CF	\$0.24	\$3,398.40
Building #2		site disposal in				
		excavated pit - Max.				
		10,000 ft. haul				
- Pad	30'x30'x6"	Demo. and on-site	900.00	SF	\$1.00	\$900.90
		disposal in existing pit, 6				
		in. thick - Max. 10,000				
		ft. haul				

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
Job Hours:	600.00	(unadjusted):	\$818,804.28	location):	\$747,568.31

#### BOREHOLE SEALING WORK

1	Fask description:	Plug and Se	al 7 Monitoring	g wells		
Site:	Elk Creek Mine		Permit Action:	SI1	Permit/J	ob#: <u>C1981022</u>
<u>PROJE</u>	CT IDENTIFICATION	<u>N</u>				
Task #:	131	State:	Colorado		Abbreviation:	None
Date:	11/18/2021	County:	Delta		Filename:	022-131
User:	LDS					
	Agency or organization	tion name:	DRMS			

# **UNIT COSTS**

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit	Total Cost
4" Holes (7)	PVC plug - 4 in. diameter borehole	4"	NA	7.00	EA	\$33.98	\$237.86
- Fill Holes with Cement	Portland cement grout ( Bag, material cost only94 lb. bag)	4"	50' EA	15.00	bag	\$19.95	\$299.25
- Cut Casing at Surface	Exposed casing removal - Calculate Circumference in Linear Feet	4"	NA	7.00	LF	\$3.26	\$22.82
- Borehole Marker	Borehole location/identification marker (EA, material cost only)	NA	NA	7.00	EA	\$37.50	\$262.50
- Drill Rig Time	ATLAS COPCO ROC D7-11,4.0 in.	NA	NA	42.00	EA	\$176.95	\$7,431.90
Water Truck Time - ALLHoles	Water Tanker, 5,000 Gal.	NA	NA	42.00	EA	\$75.41	\$3,167.22

 Job Hours:
 42.00
 Total Cost:
 \$11,422.00

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Mo	bilize/Demobilize	Equipment for	r Initial	Reclamation		
Elk Creek Mine	9	Permit	Permit Action: SI1			Permit/Job#: <u>C1</u>	981022
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: 140		State: Co	olorado		Abbre	eviation: None	
Date: 11/18 User: LDS	8/2021	County: De	elta		Fi	lename: 022-1	40
Agency or	organization	n name: DRMS					
EQUIPMENT TH	RANSPOR	<u>T RIG COST</u>					
					Shift ba	sis: <u>1 per da</u>	<u>y</u>
					Cost Data Sour	rce: CRG Da	ta
Truck	Fractor Desc	ription: GENE	RIC ON-HIGH	WAY TR	UCK TRACTO	DR, 6X4, DIESEL	POWERED,
				400 H	P (2ND HALF,	2006)	
Truck	Trailer Desc	ription: G	ENERIC FOLD	ING GO	OSENECK, DF	KOP DECK EQU	IPMENT
				KAILEI	K (251, 501, Af	ND 1001)	
Cost Breakdown:							
Available Rig Ca	pacities	0-25 Tons	26-50 Tons	51	l+ Tons		
Ownership (	Cost/Hour:	\$21.28	\$37.94		\$47.67		
Operating (	Cost/Hour:	\$26.55	\$50.48		\$56.21		
Operator (	Cost/Hour:	\$20.54	\$20.54	9	\$20.54		
Helper (	Cost/Hour:	\$0.00	\$23.53	9	\$23.53		
Total Unit C	Cost/Hour:	\$68.37	\$132.49	\$	147.95		
NON ROADABL	<u>E EQUIPN</u>	MENT:					
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
-	(TONS)		t		fleet		
CAT 815F	22.88	\$91.25	\$68.37	1	\$159.62	\$68.37	\$250.00
Cat D10T - 10SU	84.53	\$169.60	\$147.95	3	\$952.65	\$443.85	\$750.00
ATLAS COPCO	0.00	\$94.21	\$68.37	1	\$162.58	\$68.37	\$250.00
ROC D7-11,4.0 in.							
Cat 336D L 10'-6"	32.23	\$83.42	\$132.49	1	\$215.91	\$132.49	\$250.00
Stick	22.55		ф.со. <b>27</b>	1		¢ < 0.27	<b>\$250.00</b>
CAT 14M	23.57	\$85.80	\$68.37	1	\$154.17	\$68.37	\$250.00
Cat 63'/G w/push-	59.59	\$223.48	\$147.95	2	\$742.86	\$295.90	\$500.00
pull Drill/Procederast	25.00	\$7.09	\$69.27	1	\$76.25	\$69.27	\$250.00
Seeder with	23.00	\$1.90	Φ00.57	1	\$70.33	φ <b>00.</b> 37	\$230.00
Seeder with			1		1	1	1

Subtotals: \$2,464.14 \$1,145.72 \$2,500.00

#### **ROADABLE EQUIPMENT:**

Tractor

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 3,500 Gal.	\$46.35	1	\$46.35	\$46.35
Fuel Tanker, 6x4, 210 HP	\$46.35	1	\$46.35	\$46.35
Lube Truck, 6x4, 250 HP	\$46.35	1	\$46.35	\$46.35

Flatbed Truck, 6x4, 45K GVW	\$49.15	1	\$49.15	\$49.15
Light Duty Pickup, 4x4, 1 T.	\$20.51	1	\$20.51	\$20.51
Crew				
		Subtotals:	\$208.71	\$208.71

1

#### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	GRAND JUNCTION	
Total one-way travel distance:	80.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$24,367.72	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$834.84	_

Transportation Cycle Time:

Non-	
Roadable	Roadable
Equipment	Equipment
2.00	2.00
2.00	2.00
0.50	NA
0.50	NA
5.00	4.00
	Non-           Roadable           Equipment           2.00           0.50           0.50           5.00

#### JOB TIME AND COST

Total job time: **10.00** Hours

Total job cost: **\$25,203** 

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Mo	bilize/Demobilize	Equipment for	r Pond Re	moval			
e: Elk Creek Min	ie	Permit	Action: SI1		]	Permit/Job#	#: <u>C19</u>	981022
PROJECT IDEN	TIFICAT	ION						
Task #: 141		State: Co	olorado		Abbre	eviation:	None	
Date: 11/1	8/2021	County: De	lta		Fi	ilename:	022-14	1
User: LDS	5							
Agency o	r organizatio	n name: DRMS						
<u>EQUIPMENT T</u>	RANSPOR	<u>T RIG COST</u>						
					Shift ba	sis: 1	per day	
				C	Cost Data Sour	rce: CH	RG Data	ı
Truck	Tractor Desc	cription: GENE	RIC ON-HIGH	WAY TRU 400 HP	JCK TRACTO (2ND HALF,	DR, 6X4, D 2006)	DIESEL	POWERED,
Truck	Trailer Desc	cription: Gl	ENERIC FOLD	ING GOO	SENECK, DF	ROP DECK	EQUI	PMENT
			]	RAILER	(25T, 50T, AN	ND 100T)		
Cost Breakdown:								
Available Rig Ca	pacities	0-25 Tons	26-50 Tons	51+	Tons			
Ownership	Cost/Hour:	\$21.28	\$37.94	\$4	7.67			
Operating	Cost/Hour:	\$26.55	\$50.48	\$5	6.21			
Operator	Cost/Hour:	\$20.54	\$20.54	\$2	20.54			
Helper	Cost/Hour:	\$0.00	\$23.53	\$2	23.53			
Total Unit	Cost/Hour:	\$68.37	\$132.49	\$14	47.95			
NON ROADABI	LE EQUIPI	MENT:						
Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return T	rip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/	fleet	Cost/ fleet
I. I.	(TONS)		t	-	fleet			
Cat D10T - 10SU	84.53	\$169.60	\$147.95	1	\$317.55	\$147.95		\$250.00
Cat 623G	41.35	\$207.90	\$132.49	1	\$340.39	\$132.49		\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$7.98	\$68.37	1	\$76.35	\$68.37		\$250.00

Subtotals: \$734.29 \$348.81 \$750.00

# **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	\$49.15	1	\$49.15	\$49.15
		Subtotals:	\$49.15	\$49.15

#### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	DELTA	
Total one-way travel distance:	45.00	miles
Average Travel Speed:	35.00	mph
Total Non-Roadable Mob/Demob Cost *	\$5,753.69	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$126.39	

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.29	1.29
Return Time (Hours):	1.29	1.29
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.57	2.57

#### JOB TIME AND COST

Total job time: 7.14 Hours

Total job cost: \$5,880

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Elk Creek Min	e	Permit	Action: SI1		]	Permit/Job#: <u>C1</u>	981022
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: 142		State: Co	olorado		Abbre	eviation: None	
Date: 11/1	8/2021	County: De	elta		Fi	ilename: 022-1	42
User: LDS							
Agency of	r organization	name: DRMS					
EQUIPMENT T	RANSPOR'	<u>T RIG COST</u>					
					Shift ba	sis: 1 per da	у
				C	Cost Data Sour	rce: CRG Da	ta
Truck	Tractor Desci	ription: GENE	RIC ON-HIGHV	WAY TRU	CK TRACT(	DR. 6X4. DIESEL	POWERED.
Truck	Tractor Desci	ription: GENE	RIC ON-HIGHV	WAY TRU 400 HP (	CK TRACTO (2ND HALF,	OR, 6X4, DIESEL 2006)	L POWERED,
Truck Truck	Tractor Descr Trailer Descr	ription: GENE	RIC ON-HIGHV	WAY TRU 400 HP ING GOOS	CK TRACT( (2ND HALF, SENECK, DF	DR, 6X4, DIESEL 2006) ROP DECK EQUI	POWERED,
Truck	Tractor Descr Trailer Descr	ription: GENE	RIC ON-HIGHV ENERIC FOLD T	WAY TRU 400 HP ( ING GOO: TRAILER (	CK TRACTO (2ND HALF, SENECK, DF (25T, 50T, AN	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	L POWERED,
Truck Truck <u>Cost Breakdown:</u>	Tractor Descr	ription: GENE	RIC ON-HIGHV ENERIC FOLD 1	WAY TRU 400 HP ( ING GOOS TRAILER (	CK TRACTO (2ND HALF, SENECK, DF (25T, 50T, AN	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	POWERED,
Truck Truck <u>Cost Breakdown:</u> Available Rig Ca	Tractor Descr Trailer Descr pacities	ription: GENE ription: G	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons	WAY TRU 400 HP ( ING GOOS TRAILER ( 51+	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN Tons	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	, POWERED,
Truck Truck <u>Cost Breakdown:</u> Available Rig Ca Ownership	Tractor Descr Trailer Descr pacities Cost/Hour:	ription: GENE ription: G	RIC ON-HIGHV ENERIC FOLD 1 26-50 Tons \$37.94	WAY TRU 400 HP ( ING GOOS TRAILER ( 51+ \$4	CK TRACTO (2ND HALF, SENECK, DF (25T, 50T, AN (25T, 50T, AN) (25T, 50T, A) (25T, 50T,	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	. POWERED, IPMENT
Truck Truck <u>Cost Breakdown:</u> <u>Available Rig Ca</u> Ownership Operating	Tractor Descr Trailer Descr pacities Cost/Hour: Cost/Hour:	ription: GENE ription: G	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48	WAY TRU 400 HP ( ING GOO) TRAILER ( 51+ \$4 \$5	CK TRACTO (2ND HALF, SENECK, DF (25T, 50T, AN) Tons 7.67 6.21	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	POWERED,
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator	Tractor Descr Trailer Descr pacities Cost/Hour: Cost/Hour: Cost/Hour:	ription: GENE ription: G 0-25 Tons \$21.28 \$26.55 \$20.54	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54	WAY TRU 400 HP ( ING GOO) TRAILER ( 51+ \$4 \$5 \$2	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN 7.67 6.21 0.54	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	POWERED,
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper	Tractor Descr Trailer Descr pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	o-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53	WAY TRU 400 HP ( ING GOO) TRAILER ( 51+ \$4 \$5 \$2 \$2 \$2	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN 7.67 6.21 0.54 3.53	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	POWERED,
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit	Tractor Descr Trailer Descr pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	o-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49	WAY TRU 400 HP ( ING GOO: TRAILER ( 51+ \$4 \$5 \$2 \$2 \$2 \$14	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN 7.67 6.21 0.54 3.53 47.95	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	POWERED,
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit	Tractor Descr Trailer Descr pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	o-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$22.53 \$132.49	WAY TRU 400 HP ( ING GOO) TRAILER ( 51+ \$4 \$5 \$2 \$2 \$2 \$2 \$14	CK TRACTO (2ND HALF, SENECK, DF (25T, 50T, AN) 7.67 6.21 0.54 3.53 47.95	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	POWERED,
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADABI	Tractor Descr Trailer Descr Describes Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	ription: GENE ription: Gi 0-25 Tons \$21.28 \$26.55 \$20.54 \$0.00 \$68.37 <b>IENT:</b>	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49	WAY TRU 400 HP ( ING GOO) TRAILER ( 51+ \$4 \$5 \$2 \$2 \$2 \$14	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN 7.67 6.21 0.54 3.53 47.95	DR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T)	POWERED,
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit	Tractor Descr Trailer Descr Describes Cost/Hour: Cost/H	ciption:     GENE       ription:     G       0-25 Tons     \$21.28       \$21.28     \$26.55       \$20.54     \$0.00       \$68.37     \$68.37       IENT:     Owner ship	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49 Haul Rig	WAY TRU 400 HP ( ING GOO: TRAILER ( 51+ \$4 \$5 \$2 \$2 \$2 \$14 Fleet	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN 7.67 6.21 0.54 3.53 47.95 Haul Trip	OR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T) Return Trip	DOT Permit
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADABI Machine Description	Tractor Descr Trailer Descr Describes Cost/Hour: Cost/Cost/Cost/Cost/Cost/Cost/Cost/Cost/	o-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37           IENT:           Owner ship           Cost/hr/ unit	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49 Haul Rig Cost/hr/uni	WAY TRU 400 HP ( ING GOO: TRAILER ( 51+ \$4 \$5 \$2 \$2 \$14 Fleet Size	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN 7.67 6.21 0.54 3.53 47.95 Haul Trip Cost/hr/	OR, 6X4, DIESEL 2006) ROP DECK EQUIND 100T) ND 100T) Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADABI Machine Description	Tractor Descr Trailer Descr Describes Cost/Hour: Cost/Cost/Cost/Cost/Cost/Cost/Cost/Cost/	oription:         GENE           0-25 Tons         \$21.28           \$21.28         \$26.55           \$20.54         \$0.00           \$68.37         \$68.37 <b>MENT:</b> Owner ship Cost/hr/ unit	RIC ON-HIGHV ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49 Haul Rig Cost/hr/uni t	WAY TRU 400 HP ( ING GOO: TRAILER ( 51+ \$4 \$5 \$2 \$2 \$14 Fleet Size	CK TRACTO (2ND HALF, SENECK, DF (25T, 50T, AN 7.67 6.21 0.54 3.53 47.95 Haul Trip Cost/hr/ fleet	OR, 6X4, DIESEL 2006) ROP DECK EQUI ND 100T) Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Truck Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADABI Machine Description Cat D3K XL - 3P	Tractor Descr Trailer Descr Describes Cost/Hour: Cost/Pour: Cost/P	ciption:         GENE           ription:         G           0-25 Tons         \$21.28           \$26.55         \$20.54           \$0.00         \$68.37           MENT:         Owner ship           Cost/hr/ unit         \$27.67	RIC ON-HIGHV ENERIC FOLD T \$37.94 \$50.48 \$20.54 \$23.53 \$132.49 Haul Rig Cost/hr/uni t \$68.37	WAY TRU 400 HP ( ING GOO) TRAILER ( 51+ \$4 \$5 \$2 \$2 \$2 \$14 Fleet Size 10	CK TRACTO (2ND HALF, SENECK, DF 25T, 50T, AN 7.67 6.21 0.54 3.53 47.95 Haul Trip Cost/hr/ fleet \$960.40	DR, 6X4, DIESEL 2006) ROP DECK EQUIND 100T) Return Trip Cost/hr/ fleet \$683.70	DOT Permit Cost/ fleet \$0.00

# **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	\$49.15	10	\$491.50	\$491.50
		Subtotals:	\$491.50	\$491.50

#### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	DELTA	
Total one-way travel distance:	45.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$12,892.20	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$983.00	

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.00	1.00
Return Time (Hours):	1.00	1.00
Loading Time (Hours):	2.50	NA
Unloading Time (Hours):	2.50	NA
Subtotals:	7.00	2.00

#### JOB TIME AND COST

Total job time: 14.00 Hours

Total job cost: \_\_\_\_\_\_\$13,875

#### SITE MAINTENANCE

	Task description:	Yearly site	maintenance			
Site:	Elk Creek Mine		Permit Action:	SI1	Permit/.	Job#: <u>C1981022</u>
ROJE	<u>CT IDENTIFICATI</u>	<u>ON</u>				
Task #:	: 150	State:	Colorado		Abbreviation:	None
Date:	11/18/2021	County:	Delta		Filename:	022-150
Llaam	IDC					

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Pond Cleaning	10.00	Cat 307D 7'-3" Stick	100.00	EA	\$86.23	\$8,623.00
Elk Creek Stream	2.00	Cat D3K XL - 3P	20.00	EA	\$96.36	\$1,927.20
Channel Maintenance						
Elk Creek Ditch	2.00	Cat 307D 7'-3" Stick	20.00	EA	\$86.23	\$1,724.60
Maintenance						

Job Hours: 140.00

Total Cost: \$12,274.80