COST SUMMARY WORK

]	Fask descrip	otion:	Permit Renewal	No. 9 Recla	mation Cost Summary		
Site:	McClane	Canyon Mine	e Pe	rmit Action:	RN9	Permit/Jol	o#: <u>C1980004</u>
P	ROJECT	IDENTIFIC	ATION				
	Task #:	00A	State:	Colorado		Abbreviation:	None
	Date:	3/2/2021	County:	Garfield		Filename:	C004-00A
	User:	CCW					

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Tagle		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
01A	Regrade Mine Bench Areas and Reconstruct Ephemeral Drainages	DOZER	1	165.52	\$56,549
02A	Regrade Steep Slope Area South of Shop	EXCAVATE	1	15.74	\$2,234
03A	Recontour East Salt Creek Bridge Area	EXCAVATE] 1	0.16	\$24
05A	Regrade Construction Material Stockpile	DOZER] 1	2.98	\$1,017
06A	Spread and Compact Uncompacted Refuse Coal Mine Waste Pile	COMPACT	1	6.18	\$968
07A	Place Three Feet of Cover on Coal Mine Waste Pile	SCRAPER1	1	24.97	\$7,254
08A	Rip Backfilled and Rough Graded Areas	RIPPER	1	9.63	\$3,391
09A	Rip CmClane to Munger Haul Road	RIPPER	1	0.69	\$243
10A	Rip Construction Material Stockpile	RIPPER	1	0.79	\$278
11A	Pull Main Haul Road Fill Material to Base of Cut Slope Bench	EXCAVATE	1	20.19	\$2,866
12A	Recontour Main Haul Road Surfaces	DOZER	1	32.12	\$10,974
13A	Recontour Main Haul Road Surfaces	DOZER	1	16.06	\$5,487
14A	Finish Grade All Backfilled Areas	GRADER] 1	4.69	\$474
15A	Stream Channel Erosion Protection	NA	1	24.00	\$60,329
16A	Backfill and Regrade Sediment Pond, Drying Area and Office	DOZER	1	12.52	\$4,279
17A	Regrade Diversion Ditches	EXCAVATE	1	0.71	\$101
18A	Regrade Coal Mine Waste Pile Pond	DOZER	1	12.04	\$4,112
19A	Replace Topsoil from Stockpile to Mine Bench Area	SCRAPER1	1	5.90	\$1,715
20A	Replace Topsoil from Stockpile to Sediment Pond and Office	SCRAPER1	1	2.33	\$677
21A	Replace Topsoil from Stockpile toRoad from McClane to Munger	SCRAPER1] 1	4.92	\$1,430
22A	Replace Topsoil from Stockpile toCoal Mine Waste Pile	SCRAPER1	1	25.32	\$7,356
23A	Replace Topsoil from Stockpile to Coal Mine Waste Pile Pond	DOZER	1	3.58	\$1,222
25A	Replace Topsoil from Stockpile to Light Use Road	DOZER	1	4.46	\$1,524
26A	Seal and Backfill Portals	MINESEAL	1	160.00	\$28,576
27A	Seal Monitoring Well GW-1	BOREHOLE	1	6.00	\$1,014
28A	Demolish and Remove All Structures	DEMOLISH	1	330.00	\$82,906
29A	Juniper Woodland Seed Mix	REVEGE	1	5.00	\$5,924
30A	Shadescale Shrubland Seed Mix	REVEGE	1	3.00	\$2,954
31A	Greasewood Shrubland Seed Mix	REVEGE	1	10.00	\$11,089

32A	Reseed Coal Mine Waste Pile	REVEGE	1	9.50	\$10,534
33A	Reseed Coal Mine Waste Pile Pond	REVEGE	1	2.00	\$2,218
35A	Weed Spraying (Assume 1/3 of the Area 2 Times)	REVEGE] 1	24.00	\$1,011
36A	Mobilize/Demobilize Equipment for Initial Reclamation	MOBILIZE	1	5.55	\$8,197
37A	Mobilize/Demobilize Equipment for Pond Removal	MOBILIZE	1	4.55	\$2,495
38A	Mobilize/Demobilize Equipment for Site Maintenance	MOBILIZE	1	9.55	\$9,100
39A	10 year site maintenance	SITEMAINT ENANCE	1	0.00	\$38,532
		<u>SUBTO</u>	TALS:	964.65	\$379,054

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$7,657
Performance bond:	1.05	Total =	\$3,980
Job superintendent:	482.32	Total =	\$33,545
Profit:	10.00	Total =	\$37,905
		TOTAL O & P =	\$83,088
		CONTRACT AMOUNT (direct + O & P) = $($	\$462,142

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation: Reclamation management and/or administration:	\$500 6.59 4.89	Total = Total =	\$500 \$30,455 \$22,599
CONTINGENCY:	0.00	Total =	\$0
	TOTAL I	NDIRECT COST =	\$136,642
TOTAL BO	ND AMOUNT (lirect + indirect) =	\$515,696

CIRCES Cost Estimating Software

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BULLDOZER WORK

Task description:	Regrade Mine Be	nch Areas a	and Reconstruct Ephe	emeral Drainages	
e: McClane Canyon Min	ne Pern	nit Action:	RN9	Permit/Jo	b#: <u>C1980004</u>
PROJECT IDENTIFI	<u>CATION</u>				
Task #: 01A Date: 3/2/2021 User: CCW		Colorado Garfield		Abbreviation: Filename:	None C004-01A
Agency or organ	ization name:DRM	/IS			
HOURLY EQUIPMEN	NT COST				
Horsepower: 405 Blade Type: Sen Attachment: 3-sl	ni-Universal hank ripper er day		- - - -		
Cost Breakdown:		1			
Ownership Cost/Hour:		\$156.88	<u>Utilization %</u> NA		
Operating Cost/Hour:		\$127.87	100		
Ripper own.		\$15.59	NA		
Cost/Hour: Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 41,8 Swell factor: 1.16 Loose volume: 48,7	10	-			
Source of estimated volu Source of estimated swel factor:			on, Mining & Safety		
HOURLY PRODUCT	ION				
Average push distance: Unadjusted hourly production:	<u>100 feet</u> 1,243.2 LCY	/hr			
Materials consistency dea	scription: <u>Compact</u>	ed fill or en	nbankment 0.9		
Average push gradient:	15 %				
	-	_			
Average site altitude:	5,600 feet	_			
Average site altitude: Material weight:	5,600 feet 2,900 lbs/LCY	_			
-			50% Earth	_	

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.2367

Adjusted unit production:	294.27 LCY/hr
Adjusted fleet production:	294.27 LCY/hr

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$1.161/LCY

Total job time:	165.52 Hours
Total job cost:	\$56,549

HYDRAULIC EXCAVATOR WORK

Task description: Reg	grade Steep Slope Are	a South of Shop		
e: McClane Canyon Mine	Permit Actio	on: RN9	Perm	it/Job#: <u>C1980004</u>
PROJECT IDENTIFICATI	<u>ON</u>			
Task #: 02A Date: 3/2/2021 User: CCW	State: <u>Colorac</u> County: <u>Garfield</u>		Abbreviati Filena	
Agency or organization	n name: DRMS			
HOURLY EQUIPMENT C	<u>OST</u>			
Basic Machine: Cat 3 Attachment 1: ROPS	24D L 9'-8" Stick S Cab	W	Horsepower: /eight (MT): Shift Basis: Data Source:	194 24.85 1 per day (CRG)
Cost Breakdown:				
Ownership Cost/Hour: Operating Cost/Hour: Operator Cost/Hour: Total Unit Cost/Hour:	\$50.59 \$54.04 \$37.32 \$141.95	Utilization % NA 100 NA	-	
Total Fleet Cost/Hour:	\$141.95	_		
MATERIAL QUANTITIES Initial volume: 4,125 Loose volume: 5,156 Source of estimated	CCY LCY ated volume: Division	Swell facto on of Reclamation, 1 andbook		-
HOURLY PRODUCTION Excavator Cycle Time (load buck Secon	-	Condition Description	on: BELOW AV on: AVERAGE	ERAGE
Load Bucket Capacity				
Rated Capacity: Bucket Fill Factor: Adjusted Capacity:		heaped) and gravel (95% - 10	Bucket Size Class:	Medium
Job Condition Correction Factors	<u>5</u>	Site	Altitude: 5600 feet	
Job Efficiency:	Sour1.00(CAT0.83(1 shift0.83multiplHourly Unit Productio	HB) /day) ier	LCY/Hour	
Adjusted Adjusted	Hourly Unit Productio Hourly Fleet Productio	n: 327.57	LCY/Hour LCY/Hour	
JOB TIME AND COST				
Fleet size: 1	Excavator	Total job time:	15.74	Hours
Unit cost: \$0.433	/LCY	Total job cost:	\$2,234	

HYDRAULIC EXCAVATOR WORK

Task description:	Reco	ntour East	Salt Creek	Bridge Area			
: _McClane Canyon	Mine	Per	mit Action:	RN9		Permit/Jol	b#: <u>C198000</u>
PROJECT IDENTI	FICATIO	<u>N</u>					
Task #: $03A$ Date: $3/2/202$ User:CCW	1	State: County:	Colorado Garfield			eviation: Filename:	None C004-03A
Agency or or	ganization r	ame: DR	RMS				
HOURLY EQUIPM	IENT CO	<u>ST</u>					
Basic Machine Attachment 1		DL 9'-8" S Cab	Stick	W	Horsepower: 'eight (MT): Shift Basis: Data Source:	2 1 p	194 24.85 per day CRG)
Cost Breakdown:			1				
Ownership Co Operating Co Operator Co Total Unit Co	ost/Hour:	\$50.5 \$54.0 \$37.3 \$141.)4 32	Utilization % NA 100 NA	-		
Total Fleet Co	ost/Hour:	\$141	.95				
MATERIAL QUAN Initial volume: Loose volume:	NTITIES 50 63		CCY LCY	Swell factor	r: <u>1.250</u>		
	te of estimat estimated s		Division Cat Hand	of Reclamation, N lbook	Aining & Safe	ety	
HOURLY PRODU	CTION						
Excavator Cycle Time	(load bucke	t, swing load	ded, dump b	ucket, swing emp	<u>ty):</u>		
				ndition Description			
	Second	ary Job Con	dition withi	n Basic Descriptic Cycle Time Valu		AGE	minutes
Load Bucket Capacity				-			
Rated Capa Bucket Fill Fa		2.26 0.975	LCY (hes Sand and		Bucket Size C 0%) 0.975	lass: <u>M</u>	edium
Adjusted Capa		2.20	LCY	<u>8</u>			
Job Condition Correcti	on Factors			Site	Altitude: <u>5600</u>	<u>)</u> feet	
Altituda Adi	. 1	00	Source))			
Altitude Adj Job Efficiency			(CAT HE (1 shift/da				
Net Correction			multiplier	<u> </u>			
U		ourly Unit l	Production:	<u>451.23</u> <u>374.52</u>	LCY/Hour LCY/Hour		
	Adjusted H	ourly Fleet I	Production:	374.52	_ LCY/Hour		
JOB TIME AND C		D		tal ich time	A 44	7	11
Fleet size:	1	Excavato	л 10	otal job time:	0.17	1	Hours
Unit cost:	\$0.379	/LCY		Total job cost:	\$24		_

BULLDOZER WORK

Task description:	Regr	ade Constr	uction Mater	ial Stockpile		
Site: McClane Canyo	n Mine	Pe	rmit Action:	RN9	Permit/Jo	b#: <u>C1980004</u>
PROJECT IDENT	TIFICATIO	<u>N</u>				
Task #: $05A$ Date: $3/3/20$ User:CCW)21	State: County:	Colorado Garfield		Abbreviation: Filename:	None C004-05A
	organization r		RMS			
HOURLY EQUIP						
Basic Machine: Horsepower:	Cat D9T - 9 405	SU		-		
Blade Type:	Semi-Unive	ersal		-		
Attachment:	3-shank rip			-		
Shift Basis:	1 per day			-		
Data Source:	(CRG)			-		
Cost Breakdown:						
				Utilization %		
Ownership Cost/He			\$156.88	NA 100		
Operating Cost/He Ripper o			\$127.87	100		
Cost/He			\$15.59	NA		
Ripper op. Cost/He			\$0.00	0		
Operator Cost/He			\$41.30	NA		
MATERIAL QUA Initial Volume: Swell factor: Loose volume:	NTITIES 1,700 1.165 1,981 LCY					
Source of estimated Source of estimated factor:	volume:	Division Cat Hand		on, Mining & Safety		
HOURLY PRODU	UCTION					
Average push distar Unadjusted hourly production:	nce:	60 feet 1,872.0 LC	Y/hr			
Materials consisten	cy description	: <u>Compa</u>	cted fill or en	nbankment 0.9		
Average push gradient: Average site altitud	0 % e: 5,600	feet				
Material weight:	2,900	lbs/LCY				
Weight description:	Decon	nposed rock	- 50% Rock,	50% Earth		
Job Condition Correc	tion Factor			Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(SSD-AC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit production:	665.31 LCY/hr
Adjusted fleet production:	665.31 LCY/hr

JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.513/LCY

Total job time:	2.98 Hours
Total job cost:	\$1,017

COMPACTION WORK

Task description:	opreud und eo	inpact cheomp	acteu Kelu	se Coal Mine Wa	iste Plie	
e: <u>McClane Canyon M</u>	l ine P	ermit Action:	RN9		Permit/Jol	b#: <u>C1980004</u>
PROJECT IDENTIF	ICATION					
Task #: 06A	State:	Colorado		Abbr	eviation:	None
Date: 3/3/2021	County:				ilename:	C004-06A
User: CCW						
Agency or orga	nization name: <u> </u>	ORMS				
HOURLY EQUIPME	ENT COST					
Basic Machin	e: CAT 815F			Horsepower:		240
Compactor Typ		foot		Shift Basis:		ber day
- I ····· JI				Data Source:		CRG)
Cost Breakdown:				-		
0		¢(2) (2	,	Utilization %		
	ership Cost/Hour: rating Cost/Hour:	\$63.43 \$67.04		<u>NA</u> 100		
	erator Cost/Hour:	\$26.02		 NA		
-	1 Unit Cost/Hour:	\$156.4		1111		
	-					
Total	Fleet Cost/Hour:	\$156.4	9			
MATERIAL QUANT	TITIES					
Loose volu	me: 5,	000	LCY	Shri	nkage fac	tor: 0.870
Compacted volum	me: 4,	350	CCY		C	
Sol	urce of estimated vo	lume [.] Divisio	on of Reclan	nation, Mining &	Safety	
	stimated shrinkage f		ndbook		Surety	
	FION		T	. 11	· (N)	
HOURLY PRODUCT			-	ed hourly product	10n = (W)	x S x L x C) / P
	nnooted width nor n					
	npacted width per p		6.50	feet		
	erage Compactor Sp	eed (S):	4.00	mph		
	erage Compactor Sp ed thickness of each	eed (S):	4.00 10.00	mph inches	110:00/27	6.)
Compacto	erage Compactor Sp ed thickness of each Conversion Cons	eed (S):	4.00 10.00 16.3	mph inches (5,280ft	./12in./270	cu.ft.)
Compactor Required nut	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa	eed (S):	4.00 10.00 16.3 5	mph inches (5,280ft passes		cu.ft.)
Compacto Required nur Unadjus	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro	eed (S):	4.00 10.00 16.3 5 847.60	mph inches (5,280ft		cu.ft.)
Compactor Required nut	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro	eed (S):	4.00 10.00 16.3 5 847.60	mph inches (5,280ft passes CCY/ho		cu.ft.)
Compacto Required nur Unadjus Job Condition Correction	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro	eed (S): lift (L): tant (C): sses (P): duction: Source	4.00 10.00 16.3 5 847.60	mph inches (5,280ft passes CCY/ho		cu.ft.)
Compacto Required nur Unadjus	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro	eed (S):	4.00 10.00 16.3 5 847.60 Site Altit	mph inches (5,280ft passes CCY/ho		cu.ft.)
Compacto Required nur Unadjust Job Condition Correction Altitude Adj:	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro Factors 1.00	eed (S): lift (L): tant (C): sses (P): duction: Source (CAT HB)	4.00 10.00 16.3 5 847.60 Site Altit	mph inches (5,280ft passes CCY/ho		cu.ft.)
Compact Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction:	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro <u>a Factors</u> <u>1.00</u> 0.83 0.8300	eed (S): lift (L): tant (C): sses (P): duction: CAT HB) (1 shift/day) multiplier	4.00 10.00 16.3 5 847.60 Site Altit	mph inches (5,280ft passes CCY/ho ude: <u>5,600</u> feet		cu.ft.)
Compact Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: A	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro <u>a Factors</u> <u>1.00</u> 0.83 0.8300 adjusted Hourly Uni	eed (S): lift (L): tant (C): sses (P): duction: duction: (CAT HB) (1 shift/day) multiplier t Production:	4.00 10.00 16.3 5 847.60 Site Altit	mph inches (5,280ft passes CCY/ho ude: <u>5,600</u> feet		cu.ft.)
Compact Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: A A	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro <u>Factors</u> <u>1.00</u> 0.83 0.8300 adjusted Hourly Uni djusted Hourly Flee	eed (S): lift (L): tant (C): sses (P): duction: duction: (CAT HB) (1 shift/day) multiplier t Production:	4.00 10.00 16.3 5 847.60 Site Altit	mph inches (5,280ft passes CCY/ho ude: <u>5,600</u> feet		cu.ft.)
Compact Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: A JOB TIME AND COS	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro <u>Factors</u> <u>1.00</u> 0.83 0.8300 djusted Hourly Uni djusted Hourly Flee <u>ST</u>	eed (S):	4.00 10.00 16.3 5 847.60 Site Altit 703.51 703.51	mph inches (5,280ft passes CCY/ho ude: <u>5,600</u> feet	ur	
Compact Required nur Unadjus Job Condition Correction Altitude Adj: Job Efficiency: Net Correction: A JOB TIME AND COS	erage Compactor Sp ed thickness of each Conversion Cons mber of machine pa ted Hourly Unit Pro <u>Factors</u> <u>1.00</u> 0.83 0.8300 adjusted Hourly Uni djusted Hourly Flee	eed (S):	4.00 10.00 16.3 5 847.60 Site Altit 703.51 703.51	mph inches (5,280ft passes CCY/ho ude: <u>5,600</u> feet		cu.ft.) Hours

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SCRAPER TEAM WORK

Site: McClane Canyon	Mine Per	rmit Action:	RN9	P	ermit/Job#: <u>C</u>	1980004
PROJECT IDENT	IFICATION					
Task #: 07A	State:	Colorado		Abbroy	viation: None	
Date: $3/3/202$		Garfield			ename: C004	
User: CCW	<u>County</u> .	Garnela		111		0/11
Agency or o	rganization name: DF	RMS				
			~~~~		_	
HOURLY EQUIP	<u>MENT</u>		COSTS	Shift basis: <u>1 per</u>	<u>day</u>	
	<b>C</b>		nt Description			
	-Scraper -Dozer		G			
Suppor	t Equipment -Load Area					
	-Dump Area	: NA				
Road Mai	ntenance – Motor Grader					
	-Water Truck	: NA				
Cost Breakdown:	Scraper Work Tear	n	Support Equi	pment	Maintenar	nce Equipmen
		Dozer	Load Area	Dump Area	Motor Grader	
%Utilization-machine:	100	NA	NA	NA	NA	
Ownership cost/hour:	\$109.10	NA	NA	NA	NA	
Operating cost/hour:	\$150.55	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:	\$290.54	NA	NA	NA	NA	
Number of Units:	1	0	0	0	0	
Group Subtotals:	Work: \$2	90.54	Support:	\$0.00	Maint:	\$0.00
Total work team cost/	hour: <u><b>\$290.54</b></u>					
MATERIAL QUA	NTITIES					
Initial volume:	7,500	CCY	Swell fact	tor: 1.250		
Loose volume:	9,375	LCY				
Sour	ce of estimated volume:	Division	of Reclamation.	Mining & Safety	1	
	f estimated swell factor:	Cat Hand				
HOURLY PRODU	<u>CTION</u>					
			<u>Scraper B</u>	owl (volume) Ba	sis:	
Material weight:	2,650 lbs/LCY		Struck	Volume: 15.70		LCY
Material description:	Decomposed rock - 25 75% Earth	% Rock,		Volume: 22.00		LCY
Rated Payload:	52,800 pounds		Average			LCY
Payload Capacity:	19.92 LCY		Adjusted C	Capacity: 18.85		LCY

### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

### Job Condition Correction:

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

#### Travel Time:

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

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	5.00	3.00	8.00	1381	0.79

Haul Time: 0.79 minutes

Site Altitude: 5600 feet

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	-5.00	3.00	-2.00	2938	0.41

Return Time:	0.41	minutes
Total Scraper team cycle time:	2.50	minutes
Adjusted for job conditions:	375.49	LCY/Hour
Selected Number of Scrapers:	1	Scraper(s)
Adjusted single scraper team (unit) hourly production:	375.49	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	375.49	LCY/Hour
Unadjusted unit production/hour: 452.40 LCY/Hour		

Unadjusted unit production/hour: 452.40 LCY/Hour Optimal Number of Scrapers per push dozer:

#### JOB TIME AND COST

Fleet size:	1	Team(s)	Total job time:	24.97	Hours
Unit cost:	\$0.774	/LCY	Total job cost:	\$7,254	

<u>0.70</u> Minutes

0.60 Minutes

# BULLDOZER RIPPING WORK

	<b>Rip Backfilled and Roug</b>	I Graueu Areas				
Site: McClane Canyo	on Mine Permit Actio	on: <u>RN9</u>		Permit/Job#:	C1980004	1
PROJECT IDEN	<b>TIFICATION</b>					
Task #: $08A$ Date: $3/3/20$	State: Colorad				one 004-08A	
$\frac{\text{Date:}}{\text{User:}} \frac{3/3/2}{\text{CCW}}$		1	F	ilename: <u>C</u>	004-08A	
	organization name: DRMS					
HOURLY EQUI	PMENT COST					
Basic Ma			Horsepower:	405	i	
Ripper Attach			Shift Basis:	1 per c	day	
			Data Source:	(CRC	j)	
Cost Breakdown:			Utilization %			
(	Ownership Cost/Hour:	\$156.88	NA			
	Operating Cost/Hour:	\$127.87	100			
	Ownership Cost/Hour:	\$15.59	NA			
Ripper	Operating Cost/Hour: Operator Cost/Hour:	\$10.23 \$41.30	100 NA			
,	Total Unit Cost/Hour:	\$41.50	NA			
ľ	Fotal Fleet Cost/Hour:   \$	351.87				
MATERIAL QUA		elected estimating				_
ismic: NA Area: 6.70	Bank Volum acres Rip Depth (f		BCY Volume:	21,619	NA	BCY or CO
		·	volume.	21,017		ber of ee
	ource of estimated quantity: Ope	rator Estimate				
HOURLY PROD	<u>UCTION</u>					
<u>Seismic:</u>	Seismic Velocity:	NA	feet/sec	and		
	Seisine velocity.	INA		onu		
<u>Area:</u>						
	Avana an Dinning Donth	2 62	fact/pag	<i>.</i>		
	Average Ripping Depth:	2.63	feet/pas			
	Average Ripping Depth: Average Ripping Width: Average Ripping Length:	2.63 7.67 200.00	feet/pas feet/pas feet/pas	S		
	Average Ripping Width: Average Ripping Length: Average Dozer Speed:	7.67 200.00 88.00	feet/pas feet/pas feet/min	s s nute		
	Average Ripping Width: Average Ripping Length: Average Dozer Speed: Average Maneuver Time:	7.67 200.00 88.00 0.25	feet/pas feet/pas feet/min minutes	s s nute /pass		
	Average Ripping Width: Average Ripping Length: Average Dozer Speed:	7.67 200.00 88.00	feet/pas feet/pas feet/min	s s nute /pass		
Job Condition Correc	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:	7.67 200.00 88.00 0.25	feet/pas feet/pas feet/min minutes	s s nute /pass		
	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:	7.67 200.00 88.00 0.25	feet/pas feet/pas feet/min minutes	s s nute /pass our		
	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:         ction Factors         usted Hourly Unit Production:         Site Altitude:	7.67 200.00 88.00 0.25 0.838 0.838 5,600	feet/pas feet/pas feet/pas feet/min minutes acres/ho feet	s s nute /pass our r		
	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:         ction Factors         usted Hourly Unit Production:         Site Altitude:         Altitude Adj:	7.67 200.00 88.00 0.25 0.838 0.838 5,600 1.00	feet/pas feet/pas feet/pas feet/min minutes acres/ho feet (CAT H	s s nute //pass our r IB)		
	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:         ction Factors         usted Hourly Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:	7.67 200.00 88.00 0.25 0.838 0.838 5,600 1.00 0.83	feet/pas feet/pas feet/min minutes acres/ho Acres/h feet (CAT F (1 shift/	s s nute //pass our r IB) (day)		
	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:         ction Factors         usted Hourly Unit Production:         Site Altitude:         Altitude Adj:	7.67 200.00 88.00 0.25 0.838 0.838 5,600 1.00 0.83 0.83 0.83 n: 0.70	feet/pas feet/pas feet/pas feet/min minutes acres/ho feet (CAT H	s s nute //pass our r IB) (day)		
Unadjı	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:         Ction Factors         usted Hourly Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:         Net Correction:         Adjusted Hourly Unit Productio         Adjusted Hourly Unit Productio	7.67 200.00 88.00 0.25 0.838 0.838 5,600 1.00 0.83 0.83 0.83 n: 0.70	feet/pas feet/pas feet/pas feet/min minutes acres/ho Acres/h feet (CAT F (1 shift/ multipli Acres/hr	s s nute //pass our r IB) (day)		
	Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:         Production per unit area:         Ction Factors         usted Hourly Unit Production:         Site Altitude:         Altitude Adj:         Job Efficiency:         Net Correction:         Adjusted Hourly Unit Productio         Adjusted Hourly Unit Productio	7.67 200.00 88.00 0.25 0.838 0.838 5,600 1.00 0.83 0.83 0.83 n: 0.70	feet/pas feet/pas feet/pas feet/min minutes acres/ho Acres/h feet (CAT H (1 shift/ multipli Acres/hr Acres/hr	s s nute //pass our r IB) (day)	Hours	

CIRCES Cost Estimating Software

# BULLDOZER RIPPING WORK

Task description	: Кір	McClane to Munger H					
te: McClane Car	iyon Mine	Permit Action	: <u>RN9</u>		Permit/Job	o#: <u>C19800</u>	004
PROJECT IDE	<b>ENTIFICATIO</b>	<u>ON</u>					
Task #: 09	A	State: Colorado		Abb	reviation:	None	
	4/2021	County: Garfield			Filename:	C004-09A	
User: CC	CW	·					
Agency	or organization	name: DRMS					
HOURLY EQU	•						
		t D9T - 9SU		Uorgonouvar		405	
Ripper Att		Shank Ripper		Horsepower: Shift Basis:		er day	
Ripper Au				Data Source:		CRG)	
Cost Breakdown:						)	_
Cost Breakdown:			1	Utilization %			
	Ownership Co	ost/Hour:	\$156.88	NA			
	Operating Co		\$127.87	100	=		
Rippe	er Ownership Co		\$15.59	NA	_		
Ripp	er Operating Co	ost/Hour:	\$10.23	100	_		
	Operator Co	ost/Hour:	\$41.30	NA	_		
	Total Unit Co	ost/Hour:	\$351.87				
	Total Fleet Co	ost/Hour \$34	51.87				
		`					
Alternate Methous	S:						
Alternate Methods ic: <u>NA</u>	<u>s:</u>	Bank Volume		BCY		NA	
	acres	Bank Volume Rip Depth (ft)		BCY Volume:	1,549	NA	BCY or
ic: NA	acres		2.00	Volume:	1,549	NA	BCY or
ic: NA ea: 0.48	acres Source of estin	Rip Depth (ft)	2.00	Volume:	1,549	NA	BCY or
ic: <u>NA</u> ea: <u>0.48</u> HOURLY PRO	acres Source of estin	Rip Depth (ft)	2.00	Volume:	1,549	NA	_ BCY or
ic: NA ea: 0.48	acres Source of estin DUCTION	Rip Depth (ft) nated quantity: <u>Figur</u>	2.00 e 2-2-2; Operato	Volume: or Estimate		NA	BCY or
ic: <u>NA</u> ea: <u>0.48</u> <u><b>HOURLY PRO</b> <u>Seismic:</u></u>	acres Source of estin DUCTION	Rip Depth (ft)	2.00	Volume:		NA	BCY or
ic: <u>NA</u> ea: <u>0.48</u> HOURLY PRO	acres Source of estin	Rip Depth (ft) nated quantity: <u>Figur</u> Seismic Velocity:	2.00 2-2-2; Operato NA	Volume: or Estimate feet/sec	cond	NA	BCY or
ic: <u>NA</u> ea: <u>0.48</u> <u><b>HOURLY PRO</b> <u>Seismic:</u></u>	acres Source of estin DUCTION S Average	Rip Depth (ft) nated quantity: <u>Figur</u> Seismic Velocity: e Ripping Depth:	2.00 e 2-2-2; Operato NA 2.63	Volume: or Estimate feet/sec feet/pas	cond	NA	_ BCY or
ic: <u>NA</u> ea: <u>0.48</u> <u><b>HOURLY PRO</b> <u>Seismic:</u></u>	acres Source of estin DUCTION S Average Average	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	2.00 e 2-2-2; Operato NA 2.63 7.67	Volume: or Estimate feet/sec feet/pas feet/pas	cond ss ss	NA	_ BCY or
ic: <u>NA</u> ea: <u>0.48</u> <u><b>HOURLY PRO</b> <u>Seismic:</u></u>	acres Source of estin DUCTION S Average Average Average	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	2.00 e 2-2-2; Operato NA 2.63 7.67 200.00	Volume: or Estimate feet/sec feet/pas feet/pas feet/pas feet/pas	cond ss ss ss	NA	_ BCY or
ic: <u>NA</u> ea: <u>0.48</u> <u><b>HOURLY PRO</b> <u>Seismic:</u></u>	acres Source of estin DUCTION S Average Average Average Average Average	Rip Depth (ft)         nated quantity:          Seismic Velocity:          e Ripping Depth:          e Ripping Width:          Ripping Length:          age Dozer Speed:	2.00 e 2-2-2; Operato NA 2.63 7.67	Volume: pr Estimate feet/sec feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas	cond ss ss ss nute	NA	_ BCY or
ic: <u>NA</u> ea: <u>0.48</u> <u><b>HOURLY PRO</b> <u>Seismic:</u></u>	acres Source of estin DUCTION S Average Average Average Average Average	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	2.00 e 2-2-2; Operato NA 2.63 7.67 200.00 88.00	Volume: or Estimate feet/sec feet/pas feet/pas feet/pas feet/pas	cond ss ss ss nute s/pass	NA	BCY or
ic: <u>NA</u> ea: <u>0.48</u> <u><b>HOURLY PRO</b> <u>Seismic:</u></u>	acres Source of estin DUCTION S Average Average Average Average Average Product	Rip Depth (ft)         nated quantity:       Figur         Geismic Velocity:	<ul> <li>2.00</li> <li>2-2-2; Operator</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> </ul>	Volume: pr Estimate  feet/sec  feet/pas feet/pas feet/pas feet/pas feet/mi feet/mi feet/mi	cond ss ss ss nute s/pass	NA	_ BCY or
ic: <u>NA</u> ba: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con	acres Source of estin DUCTION S Average Average Average Average Product	Rip Depth (ft)         nated quantity:       Figur         Geismic Velocity:	<ul> <li>2.00</li> <li>2-2-2; Operator</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> </ul>	Volume: pr Estimate  feet/sec  feet/pas feet/pas feet/pas feet/pas feet/mi feet/mi feet/mi	cond ss ss ss nute s/pass our	NA	_ BCY or
ic: <u>NA</u> ba: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con	acres Source of estin DUCTION S Average Average Average Average Product	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	<ul> <li>2.00</li> <li>2-2-2; Operator</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> <li>0.838</li> <li>0.838</li> </ul>	Volume: or Estimate feet/sec feet/pas feet/pas feet/pas feet/mi feet/mi acres/h Acres/h	cond ss ss ss nute s/pass our	NA	_ BCY or
ic: <u>NA</u> ba: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con	acres Source of estin DUCTION S Average Average Average Average Product	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	2.00 e 2-2-2; Operato NA 2.63 7.67 200.00 88.00 0.25 0.838 0.838 5,600	Volume: or Estimate  feet/sec  feet/pas feet/pas feet/pas feet/mi feet/mi acres/h feet feet feet	cond ss ss ss nute s/pass our nr	NA	_ BCY or
ic: <u>NA</u> ba: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con	acres Source of estin DUCTION S Average Average Average Average Product	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	<ul> <li>2.00</li> <li>2-2-2; Operator</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> <li>0.838</li> <li>0.838</li> </ul>	Volume: or Estimate feet/sec feet/pas feet/pas feet/pas feet/mi feet/mi acres/h Acres/h	cond ss ss ss nute s/pass our nr HB)	NA	_ BCY or
ic: <u>NA</u> ba: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con	acres Source of estin DUCTION S Average Average Average Average Product	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	<ul> <li>2.00</li> <li>2-2-2; Operato</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> <li>0.838</li> <li>0.838</li> <li>5,600</li> <li>1.00</li> </ul>	Volume: or Estimate  feet/pas feet/pas feet/pas feet/pas feet/pas feet/mi minutes Acres/h feet CAT H	cond ss ss ss nute s/pass our nr HB) /day)	NA	_ BCY or
ic: <u>NA</u> ba: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con	acres Source of estin DUCTION S Average Average Average Average Product rrection Factors adjusted Hourly	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	<ul> <li>2.00</li> <li>2.2-2-2; Operato</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> <li>0.838</li> <li>0.838</li> <li>5,600</li> <li>1.00</li> <li>0.83</li> <li>0.83</li> <li>0.83</li> <li>0.70</li> </ul>	Volume: or Estimate feet/sec feet/pas feet/pas feet/pas feet/mi feet/mi acres/h Acres/h feet (CAT H (1 shift	cond ss ss ss nute s/pass our nr HB) /day)	NA	_ BCY or
ic: <u>NA</u> ba: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con	acres Source of estin DUCTION S Average Average Average Product rrection Factors adjusted Hourly Adjusted I Adjusted I	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	<ul> <li>2.00</li> <li>2.2-2-2; Operato</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> <li>0.838</li> <li>0.838</li> <li>5,600</li> <li>1.00</li> <li>0.83</li> <li>0.83</li> <li>0.83</li> <li>0.70</li> </ul>	Volume: or Estimate  feet/pas feet/pas feet/pas feet/pas feet/pas feet/mi minute: acres/h  feet (CAT H (1 shift multipl Acres/hr	cond ss ss ss nute s/pass our nr HB) /day)	NA	_ BCY or 0
ic: <u>NA</u> pa: <u>0.48</u> HOURLY PRO Seismic: Area: Job Condition Con Una	acres Source of estin DUCTION S Average Average Average Product rrection Factors adjusted Hourly Adjusted I Adjusted I	Rip Depth (ft)         nated quantity:       Figur         Seismic Velocity:	<ul> <li>2.00</li> <li>2.2-2-2; Operato</li> <li>NA</li> <li>2.63</li> <li>7.67</li> <li>200.00</li> <li>88.00</li> <li>0.25</li> <li>0.838</li> <li>0.838</li> <li>5,600</li> <li>1.00</li> <li>0.83</li> <li>0.83</li> <li>0.83</li> <li>0.70</li> </ul>	Volume: or Estimate  feet/sec  feet/pas feet/pas feet/pas feet/mi minutes acres/h  Acres/h  Acres/h  Acres/h  Acres/hr	cond ss ss ss nute s/pass our nr HB) /day)	<u>NA</u>	-

CIRCES Cost Estimating Software

# BULLDOZER RIPPING WORK

Task description:	Kip C	Construction Material S	ыоскрпе				
Site: McClane Can	yon Mine	Permit Action:	RN9		Permit/Joł	o#: <u>C1980</u>	004
PROJECT IDE	NTIFICATIO	N					
Task #: 10.	A	State: Colorado		Abbi	eviation:	None	
	/2021	County: Garfield			Filename:	C004-10A	
User: CC		·					
Agency	or organization n	ame: DRMS					
HOURLY EQU	IPMENT COS	ST					
		 D9T - 9SU		Horsepower:		405	
Ripper Atta		ank Ripper		Shift Basis:	-	ber day	
11		11		Data Source:		CRG)	
Cost Breakdown:							
				Utilization %			
	Ownership Cos		\$156.88	NA	_		
	Operating Cos		\$127.87	100	-		
	r Ownership Cos		\$15.59	NA	-		
Ripp	er Operating Cos Operator Cos		\$10.23 \$41.30	100 NA	-		
	Total Unit Cos	-	\$351.87	INA	-		
	Total Fleet Cos	t/Hour: \$351	.87				
nic: NA rea: 0.50	acres	Bank Volume: Rip Depth (ft):	NA 2.00	BCY Volume:	1,613	NA	BCY or
			2.00		1,613	NA	BCY or
	Source of estima	Rip Depth (ft):	2.00		1,613	NA	_ BCY or
rea: 0.50	Source of estima	Rip Depth (ft): ated quantity: <u>Figure</u>	2.00	Volume:		NA	BCY or
ea: 0.50	Source of estima	Rip Depth (ft):	2.00			NA	_ BCY or
ea: 0.50	Source of estima	Rip Depth (ft): ated quantity: <u>Figure</u>	2.00	Volume:		NA	BCY or
rea: 0.50 HOURLY PRO Seismic:	Source of estima DUCTION Se Average	Rip Depth (ft): ated quantity: <u>Figure</u> sismic Velocity: Ripping Depth:	2.00 2.2-3 NA 2.63	Volume: feet/sec feet/pas	ond	NA	BCY or
rea: 0.50 HOURLY PRO Seismic:	Source of estima DUCTION Se Average Average	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67	Volume: feet/sec feet/pas feet/pas	ond ss ss	NA	BCY or
rea: 0.50 HOURLY PRO Seismic:	Source of estima DUCTION Se Average Average Average F	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00	Volume: feet/sec feet/pas feet/pas feet/pas	ond ss ss ss	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic:	Source of estima DUCTION Se Average Average Average F Averag	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00	Volume: feet/sec feet/pas feet/pas feet/pas feet/min	ond ss ss ss nute	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic:	Source of estima DUCTION Se Average Average F Average R Average Average N	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00	Volume: feet/sec feet/pas feet/pas feet/pas	ond ss ss ss nute s/pass	NA	BCY or
rea: 0.50 HOURLY PRO Seismic:	Source of estima DUCTION Se Average Average Average F Average Average M Production	Rip Depth (ft):         ated quantity:       Figure         dismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25	feet/pas feet/pas feet/pas feet/pas feet/min minutes	ond ss ss ss nute s/pass	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: <u>Area:</u> Job Condition Cor	Source of estima DUCTION Se Average Average Average F Average Average M Production	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25	feet/pas feet/pas feet/pas feet/pas feet/min minutes	ond ss ss ss nute s/pass our	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: <u>Area:</u> Job Condition Cor	Source of estima DUCTION Se Average Average Average R Average M Production rection Factors	Rip Depth (ft):         ated quantity:       Figure         Ripping Depth:       Figure         Ripping Length:       Figure         aneuver Time:       Figure         on per unit area:       Figure         Unit Production:       Figure	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25 0.762 0.762	Volume: feet/sec feet/pas feet/pas feet/pas feet/min minutes acres/he Acres/h	ond ss ss ss nute s/pass our	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: <u>Area:</u> Job Condition Cor	Source of estima DUCTION Se Average Average Average R Average M Production rection Factors	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00           2.2-3           NA           2.63           7.67           100.00           88.00           0.25           0.762	Volume: feet/sec feet/pas feet/pas feet/pas feet/pas feet/min minutes acres/he	ond ss ss ss nute s/pass our ur	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: <u>Area:</u> Job Condition Cor	Source of estima DUCTION Se Average Average T Average M Production rection Factors djusted Hourly U	Rip Depth (ft):         ated quantity:       Figure         dismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25 0.762 0.762 0.762 5,600 1.00 0.83	Volume: feet/sec feet/pas feet/pas feet/pas feet/min minutes acres/he Acres/h feet	ond ss ss ss ss nute s/pass our ur HB)	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: <u>Area:</u> Job Condition Cor	Source of estima DUCTION Se Average Average Average M Average M Production rection Factors djusted Hourly U	Rip Depth (ft):         ated quantity:       Figure         ismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25 0.762 0.762 0.762 5,600 1.00	Volume: feet/sec feet/pas feet/pas feet/pas feet/pas feet/pas feet/min minutes acres/he Acres/h feet (CAT H	oond ss ss ss nute s/pass our ur HB) /day)	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: <u>Area:</u> Job Condition Cor	Source of estima DUCTION Se Average Average Average M Production rection Factors djusted Hourly U	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25 0.762 0.762 0.762 5,600 1.00 0.83	Volume: feet/sec feet/pas feet/pas feet/pas feet/pas feet/pas feet/min minutes acres/h Acres/h feet (CAT H (1 shift)	oond ss ss ss nute s/pass our ur HB) /day)	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: <u>Area:</u> Job Condition Cor	Source of estima DUCTION Se Average Average Average M Production rection Factors djusted Hourly U Adjusted Hourly U	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25 0.762 0.762 5,600 1.00 0.83 0.83 0.83	Volume: feet/sec feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas feet/pas	oond ss ss ss nute s/pass our ur HB) /day)	NA	_ BCY or
rea: 0.50 HOURLY PRO Seismic: Area: Job Condition Cor Una	Source of estima DUCTION Se Average Average Average M Production rection Factors djusted Hourly U Adjusted Hourly U	Rip Depth (ft):         ated quantity:       Figure         sismic Velocity:	2.00 2.2-3 NA 2.63 7.67 100.00 88.00 0.25 0.762 0.762 5,600 1.00 0.83 0.83 0.83	Volume: feet/sec feet/pas feet/pas feet/pas feet/min minutes acres/he Acres/he (CAT F (1 shift, multiple Acres/hr Acres/hr	oond ss ss ss nute s/pass our ur HB) /day)	NA	

CIRCES Cost Estimating Software

CIRCES Cost Estimating Software

### HYDRAULIC EXCAVATOR WORK

Task description:	Pu	ll Main Haul	Road Fill N	Iaterial to Base of	of Cut Slope Be	nch	
e: <u>McClane Canyo</u>	on Mine	Pe	ermit Action:	RN9	H	ermit/Job	o#: <u>C198000</u> 4
PROJECT IDEN	TIFICAT	ION					
Task #:       11A         Date:       3/4/2         User:       CCW		State: County:	Colorado Garfield			viation:	None C004-11A
Agency or	organizatio	n name: D	RMS				
HOURLY EQUI	PMENT C	COST					
Basic Machi Attachmen		824D L 9'-8" S Cab	Stick	W	Horsepower: Veight (MT): Shift Basis: Data Source:	2 1 p	194 4.85 er day CRG)
Cost Breakdown:							
Ownership Operating Operator Total Unit	Cost/Hour: Cost/Hour:	\$50. \$54. \$37. \$141	04 32	Utilization % NA 100 NA			
	Cost/Hour:						
	6,050       7,563       urce of estir	nated volume: d swell factor:		Swell facto of Reclamation, 1 lbook		/	
HOURLY PROD							
Excavator Cycle Tin	ne (load bud	ket, swing loa	ided, dump b	oucket, swing emp	oty):		
				ondition Description			
	Seco	ondary Job Co	ndition with	n Basic Description Cycle Time Val		GE	minutes
Load Bucket Capaci	<u>ty</u>			- )			
Rated Ca	pacity:	2.26	LCY (he		Bucket Size Cla	ass: Me	edium
Bucket Fill	Factor:	0.975	Sand and	l gravel (95% - 10	00%) 0.975		
Adjusted Ca Job Condition Corre		2.20	LCY	Sita	Altitude: 5600	faat	
Job Condition Cone		15	Source		Annuae. <u>5000</u>	1001	
Altitude A Job Efficien Net Correcti	cy:	1.00 0.83 0.83	(CAT H) (1 shift/da multiplier	B) ay)			
	Adjuste	d Hourly Unit d Hourly Unit Hourly Fleet	Production:	451.23 374.52 <b>374.52</b>	LCY/Hour LCY/Hour LCY/Hour		
JOB TIME AND	5						
Fleet size:	1	Excavat	or Te	otal job time:	20.19		Hours
Unit cost:	\$0.379	/LCY		Total job cost:	\$2,866	5	

## BULLDOZER WORK

Task description:	Recontour Main	Haul Koad	Surfaces		
te: <u>McClane Canyon Mi</u>	ine Pe	rmit Action:	RN9	Permit/Jo	b#: <u>C1980004</u>
PROJECT IDENTIFI	CATION				
Task #:         12A           Date:         3/4/2021           User:         CCW	State: County:	Colorado Garfield		Abbreviation: Filename:	None C004-12A
Agency or organ	nization name: DF	RMS			
HOURLY EQUIPME	NT COST				
	t D9T - 9SU		_		
Horsepower: 405			_		
	mi-Universal		_		
	hank ripper		_		
	er day RG)		_		
Cost Breakdown:			_		
			Utilization %		
Ownership Cost/Hour:		\$156.88	NA		
Operating Cost/Hour:		\$127.87	100		
Ripper own. Cost/Hour:		\$15.59	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT Initial Volume: 9,57 Swell factor: 1.16	77 55				
Loose volume: 11,1	1 <b>57</b> LCY				
Source of estimated volu Source of estimated swe factor:			on, Mining & Safety		
HOURLY PRODUCT	ION				
Average push distance: Unadjusted hourly production:	100 feet 1,243.2 LC	Y/hr			
Materials consistency de	escription: <u>Compa</u>	cted fill or er	nbankment 0.9		
	10 %				
Average push gradient:					
	5,600 feet				
gradient:	5,600 feet 2,900 lbs/LCY				
gradient: Average site altitude:		- 50% Rock	, 50% Earth	_	

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.786	(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:	347.35 LCY/hr
Adjusted fleet production:	<b>347.35</b> LCY/hr

### JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.984/LCY

Total job time:	<b>32.12</b> Hours
Total job cost:	\$10,974

## BULLDOZER WORK

Task description:	<b>Recontour Main Haul Road</b>	Surfaces		
e: McClane Canyon Min	ne Permit Action:	RN9	Permit/Jo	b#: <u>C1980004</u>
PROJECT IDENTIFIC	CATION			
$\begin{array}{c} \text{Task #:} \\ \text{Date:} \\ \text{User:} \end{array} \begin{array}{c} 13\text{A} \\ \hline 3/4/2021 \\ \hline \text{CCW} \end{array}$	State:         Colorado           County:         Garfield		Abbreviation: Filename:	None C004-13A
Agency or organ	ization name: DRMS			
HOURLY EQUIPMEN	NT COST			
Basic Machine: Cat	D9T - 9SU	_		
Horsepower: 405		_		
	ni-Universal	_		
	hank ripper	_		
	er day	_		
		_		
Cost Breakdown:	1			
	\$15C 00	<u>Utilization %</u>		
Ownership Cost/Hour:	\$156.88	NA 100		
Operating Cost/Hour: Ripper own.	\$127.87	100		
Cost/Hour:	\$15.59	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$41.30	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANTI	\$341.63 <b>\$341.63</b> TIES			
Initial Volume: 5,500 Swell factor: 1.165	0			
Source of estimated volu	me: Division of Reclamation	on, Mining & Safety		
Source of estimated swel factor:	l Cat Handbook			
HOURLY PRODUCT	ION			
Average push distance: Unadjusted hourly production:	100 feet 1,243.2 LCY/hr			
Materials consistency des	scription: <u>Compacted fill or er</u>	nbankment 0.9		
Average push gradient:	5 %			
Average site altitude:	5,600 feet			
Material weight:	2,900 lbs/LCY			
Weight description:	Decomposed rock - 50% Rock,	, 50% Earth		
Job Condition Correction H	Factor	Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3209

Adjusted unit production:	398.94 LCY/hr
Adjusted fleet production:	<b>398.94</b> LCY/hr

### JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.856/LCY

Total job time:	16.06 Hours
Total job cost:	\$5,487

## MOTOR GRADER WORK

Task description:	Finish Grade All Backfille	ed Areas		
e: McClane Canyon Mine	Permit Actio	n: <u>RN9</u>	Pe	ermit/Job#: <u>C1980004</u>
PROJECT IDENTIFICA	TION			
Task #: 14A	State: Colorad	0	Abbrev	iation: None
Date: 3/4/2021	County: Garfield			ename: C004-14A
User: CCW		-		
Agency or organiza	tion name: DRMS			
HOURLY EQUIPMENT	COST			
Basic Machine:	CAT 12M		Horsepower:	158
Ripper Attachment:	Multi-Shank Ripper		Shift Basis:	1 per day
	11		Data Source:	(CRG)
<u>Cost Breakdown:</u>				
<u>Cost Diourdo uni</u>			Utilization %	
Ownershi	p Cost/Hour:	\$34.52	NA	
	g Cost/Hour:	\$35.50	100	
Ripper Ownershi		\$2.57	NA	
Ripper Operatin		\$0.00	0	
	or Cost/Hour:	\$28.56	NA	
Total Un	it Cost/Hour:	\$101.13		
	· O · /II	01.12		
Total Flee	et Cost/Hour: \$1	01.13		
MATERIAL QUANTITI Total Area to b	e graded or ripped: <u>6.09</u>			acres
Source of	estimated acreage: Oper	rator Estimate		
HOURLY PRODUCTIO	N			
Av	verage Grader Speed:	1.50	mph	
	Selected Application:	Finish	grading (0-2.5 mph)	) - 1.5
	elected Blade Angle:	30	degrees	
	ective Blade Length:	10.40	feet	
	ade overlap per pass:	2.00	feet	
<b>U</b>	pping width per pass:	8.40	feet	
Unadjusted Ho	urly Unit Production:	1.5273	acres/hour	
Job Condition Correction Fac	tors	S	ite Altitude: <u>5600</u> fe	eet
	Source	ce		
Altitude Adj:	1.00 (CAT I	HB)		
Job Efficiency:	0.85 (1sh/d, r			
Net Correction:	0.8500 multipli	ier		
٨	tad Hourly Unit Dec durtier	1 2002	oores/II.our	
	ted Hourly Unit Production		acres/Hour	
Adjust	ed Hourly Fleet Production	1. <b>1.2982</b>	acres/Hour	
JOB TIME AND COST				
Fleet size: 1	Grader(s)	Total job time	e: <u>4.69</u>	Hours
		T. (1) 1		
Unit cost: \$77.90	per acre	Total job cos	t: <b>\$474</b>	



March 4, 2021 C-1980-004

### Task 015 – Stream Channel Erosion Protection

\$60,329.00

Riprap protection for channel R-2, R-5, R-6 and R-8 require 650 cu. yrd of riprap for slope protection (from <u>RS</u> <u>Means Building Construction Cost Data, 2020 Edition</u>; Section 31 37 13.10 0200) has a cost of \$79.30/cubic yard.

 $(650 \text{ cu. yd.}) \times (\$79.30/\text{cu.yd.}) = \$51,545.00$ 

Erosion blanket protection for channels R-1, R-3, R-4, R-7 and R-12 requires 1912 sq. yd. of blanket. The cost of the blanket including installation is \$1.79/sq. yd. (from <u>RS Means Construction Cost Data, 2020 Edition;</u> Section 31 25 14.16 0020).

 $(1,912 \text{ sq. yd.}) \times (\$1.79/\text{sq. yd.}) = \$3,422.48$ 

Total erosion control = (\$51, 545.00) + (\$3, 422.48) = \$54, 967.48

Using 1 Cat 324D L Excavator for 40 hours (from <u>RS Means Construction Cost Data, 2019 Edition</u>); \$134.03 x 40hrs = \$5,361.20

Stream Channel Erosion Protection – Total Cost

(\$54,967.48) + (\$5,361.20) = \$60,328.68



Page 1 of 2

## BULLDOZER WORK

McClane Canyon Mine       Permit Action: RN9       Permit/Job#: C1980004         PROJECT IDENTIFICATION       Task #: 16A       State: Colorado       Abbreviation: None         Date:       3/4/2021       County: Garfield       Pilename: C004-16A         Date:       3/4/2021       County: Garfield       Pilename: C004-16A         User:       CCW       County: Garfield       Pilename: C004-16A         Horsepowe:       405       Horsepowe: 405       Pilename: C004-16A         Bade Type:       Semi-Universal       Anachment: 3-shank ripper       Shift Basis: 1 per day       Data Source: (CRG)         Cost Breakdown:       \$125.88       NA       Polena Variantic Source: C08(Hour: S12.87       1000         Ripper own.       \$15.59       NA       Polena Variantic Source of estimated sould: \$41.30       NA         Operator Cost/Hour:       \$341.63       Source of estimated sould: \$341.63       Polena Variantic Source of estimated sould: Cat Handbook         Initial Volume:       4.5341.63       Polena Varianted sould: Cat Handbook       Polena Varianted Sould: Cat Handbook         Iactor:       Initial Volume:       5.354 LCY       Polena Varianted Sould: Cat Handbook         Iactor:       Initial Volume:       1.00 feet       Polena Varianted Sould: Cat Handbook         Iactor:       I	Task description:	Back	fill and Re	grade Sedim	ent Pond, Drying Are	a and Office	
Task 4:       16A       State:       Colorado       Abbreviation:       None         Date:       3/4/2021       County:       Garfield       Filename:       C004-16A         Agency or organization name:       DRMS         HOURLY EQUIPMENT COST         Basic Machine:       Cat D9T - 9SU         Horsepower:       405         Blade Type:       Semi-Universal         Attachment:       3-shank ripper         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       S127.87         Ownership Cost/Hour:       \$15.59         NA       NA         Operating Cost/Hour:       \$15.59         NA       NA         Outal unit Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       100 feet         Unadjusted hourly       1.243.2 LCY/hr         Materials consistency description:       Compared fill or embankment 0.9         Average push       0 %         gra	e: McClane Canyo	n Mine	Pe	ermit Action:	RN9	Permit/Jo	b#: <u>C1980004</u>
Date:       342/2021 CCW       County:       Garfield       Filename:       C004-16A         Agency or organization name:       DRMS         HOURLY EQUIPMENT COST         Basic Machine:       Cat D9T - 98U         Horsepower:       405         Blake Type:       Semi-Universal         Anachomen:       3-shank ripper         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Villization %         Ownership Cost/Hour:       \$156.88       NA         Operating Cost/Hour:       \$15.79       NA         Ripper own.       \$15.79       NA         Ripper op. Cost/Hour:       \$341.63       NA         Total unit Cost/Hour:       \$341.63       NA         Total lett Cost/Hour:       \$341.63       NA         Source of estimated volume:       \$55341CY       Source of estimated volume:         Source of estimated wolume:       Division of Reclamation, Mining & Safety       Source of estimated wolume:         Materials consistency description:       Compacted fill or embankment 0.9       Average push distance:       Of feet         Material sonsistency description:       Compacted fill or embankment 0.9       Average site altitude:       5.600 feet	PROJECT IDENI	<b>TIFICATIO</b>	<u>N</u>				
HOURLY EQUIPMENT COST         Basic Machine:       Cat D9T - 9SU         HORSEWOR:       405         Blade Type:       Semi-Universal         Attachment:       3-shaak ripper         Shift Basis:       _pper day         Data Source:       (CRG)         Cost Breakdown:       S127.87         Owership Cost/Hour:       \$127.87         Ripper op. Cost/Hour:       \$127.87         Cost GottHour:       \$127.87         Cost Cost/Hour:       \$127.87         Operating Cost/Hour:       \$125.59         NA       CostHour:         CostHour:       \$31.63         Total unit Cost/Hour:       \$341.63         Total Fleet Cost/Hour:       \$341.63         Total Fleet Cost/Hour:       \$341.63         Total Fleet Cost/Hour:       \$341.63         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Division of Re	Date: 3/4/20	021					
Basic Machine:       Cat D9T - 9SU         Horsepower:       405         Bilde Type:       Semi-Universal         Attachment:       3-shank ripper         Shift Basis:       1 per day         Data Source:       CCRG)         Cost Breakdown:       \$156.88         Ownership Cost/Hour:       \$157.87         Operating Cost/Hour:       \$127.87         Operating Cost/Hour:       \$127.87         Cost/Hour:       \$127.87         Operator Cost/Hour:       \$127.87         Operator Cost/Hour:       \$127.87         Operator Cost/Hour:       \$127.87         Operator Cost/Hour:       \$127.87         Total Preet Cost/Hour:       \$141.63         Total Freet Cost/Hour:       \$341.63         Total Freet Cost/Hour:       \$341.63         Material Volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:	Agency or o	organization r	name: D	RMS			
Horsepower:       405         Blade Type:       Semi-Universal         Attachment:       3-shank ripper         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       (CRG)         Ownership Cost/Hour:       \$156.88       NA         Operating Cost/Hour:       \$157.9       NA         Cost Breakdown:       \$15.59       NA         Ownership Cost/Hour:       \$0.00       0         Ripper own.       \$15.59       NA         Cost Hour:       \$0.00       0         Operator Cost/Hour:       \$41.30       NA         Total unit Cost/Hour:       \$341.63       Source         Total Fleet Cost/Hour:       \$341.63       Source of estimated swell         Lose volume:       \$.534 LCY       Source of estimated swell         Source of estimated swell       Cat Handbook         factor:	HOURLY EQUIP	MENT CO	<u>ST</u>				
Blade Type:       3-shank ripper         Attachment:       3-shank ripper         Data Source:       (CRG)         Cost Breakdown:       (CRG)         Ownership Cost/Hour:       \$156.88       NA         Operating Cost/Hour:       \$155.9       NA         Cost Hora       \$15.59       NA         Cost/Hour:       \$15.59       NA         Cost/Hour:       \$30.00       0         Operator Cost/Hour:       \$341.63       NA         Total unit Cost/Hour:       \$341.63       Sate Cost/Hour:         Total unit Cost/Hour:       \$341.63       Sate Cost/Hour:         Source of estimated volume:       \$100 feet       Cat Handbook         Source of estimated volume:       Division of Reclamation, Mining & Safety       Cat Handbook         factor:       Cat Handbook       Cat Handbook       Sate Cost/Hour:         Materials consistency description:       Compacted fill or embankment 0.9       Materials consistency description:         Materials consistency description:       Compacted fill or embankment 0.9       Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth       Material weight:       2,900 lbs/LCY	Basic Machine:	Cat D9T - 9	SU				
Attachnent:       3-shank ripper         Iper day       Jeta Source:         Ownership Cost/Hour:       \$156.88         Operating Cost/Hour:       \$127.87         Operating Cost/Hour:       \$15.59         NA       NA         Operating Cost/Hour:       \$15.59         NA       NA         Cost/Hour:       \$100         Ripper op. Cost/Hour:       \$30.00         Operator Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$\$341.63         MATERIAL QUANTITIES       \$\$341.63         Initial Volume:       4.750         Swell factor:       \$\$1.165         Loose volume:       \$\$534 LCY         Source of estimated swell       Cat Handbook         factor:       100 feet         Unadjusted hourly       1.243.2 LCY/hr         production:       Compacted fill or embankment 0.9         Average push distance:       100 feet         Unadjusted hourly       1.243.2 LCY/hr         production:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       5.600 feet         Material weight:       2.900 lbs/LCY         Weight description:       Decomposed rock -	-				_		
Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$156.88       NA         Operating Cost/Hour:       \$127.87       100         Ripper own.       \$127.87       100         Ripper own.       \$15.59       NA         Cost/Hour:       \$10.00       0         Operator Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         MATERIAL QUANTITIES         Initial Volume:       4.750         Swell factor:       1.165         Loose volume:       5.534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         Materials consistency description:       Compacted fill or embankment 0.9         Materials consistency description:       Compacted fill or embankment 0.9         Average push gistance:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth					_		
Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$15.6.88       NA         Operating Cost/Hour:       \$127.87       100         Ripper own.       \$15.59       NA         Cost/Hour:       \$100       0         Operator Cost/Hour:       \$100       0         Operator Cost/Hour:       \$41.30       NA         Total unit Cost/Hour:       \$341.63			per		_		
Cost Breakdown:         Utilization %         Ownership Cost/Hour:       \$15.68       NA         Operating Cost/Hour:       \$15.59       NA         Ripper own.       \$15.59       NA         Cost/Hour:       \$0.00       0         Operating Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Total Pleet Cost/Hour:       \$341.63         MATERIAL QUANTITIES       Initial Volume:       4,750         Swell factor:       1.165         Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated volume:       Cat Handbook         factor:		<b>.</b> .			_		
Ownership Cost/Hour:       \$156.88       NA         Operating Cost/Hour:       \$127.87       100         Ripper own.       \$15.59       NA         Cost/Hour:       \$30.00       0         Operator Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         MATERIAL OUANTITIES	-				_		
Ownership Cost/Hour:       \$156.88       NA         Operating Cost/Hour:       \$127.87       100         Ripper own.       \$15.59       NA         Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$30.00       0         Operator Cost/Hour:       \$341.63       NA         Total unit Cost/Hour:       \$341.63       NA         MATERIAL QUANTITIES	Cost Breakdown:			I	TT: 11 04		
Operating Cost/Hour: $\$127.87$ 100Ripper own. $\$15.59$ NARipper oy Cost/Hour: $\$0.00$ 0Operator Cost/Hour: $\$0.00$ 0Operator Cost/Hour: $\$341.63$ Total unit Cost/Hour: $\$341.63$ Total unit Cost/Hour: $\$341.63$ Total Unit Cost/Hour: $\$341.63$ MATERIAL QUANTITIESInitial Volume: $4.750$ Swell factor: $1.165$ Loose volume: $5,534 LCY$ Source of estimated volume:Division of Reclamation, Mining & SafetySource of estimated swellCat Handbookfactor:Cat HandbookHOURLY PRODUCTIONAverage push distance:100 feetUnadjusted hourly1.243.2 LCY/hrproduction:Compacted fill or embankment 0.9Average push gradient: Average site altitude:0 %Average push gradient: 	Ownership Cost/U	our		\$156.99			
Ripper own.       \$15.59       NA         Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$341.63         Total unit Cost/Hour:       \$341.63         Total Pleet Cost/Hour:       \$341.63         MATERIAL QUANTITIES         Initial Volume:       4.750         Swell factor:       1.165         Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell factor:       Cat Handbook         factor:       100 feet         Unadjusted hourly       1,243.2 LCY/hr         Materials consistency description:       Compacted fill or embankment 0.9         Average push gradient:       0 %         Average site altitude:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth							
Cost/Hour:       \$13.39       NA         Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$341.63       NA         Total unit Cost/Hour:       \$341.63       NA         Total Unit Cost/Hour:       \$341.63       NA         MATERIAL QUANTITIES       Initial Volume:       4,750         Swell factor:       1.165       Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety       Cat Handbook         factor:       Cat Handbook       Cat Handbook       1.243.2 LCY/hr         HOURLY PRODUCTION       1.243.2 LCY/hr       NA         Average push distance:       100 feet       1.243.2 LCY/hr         Unadjusted hourly       1.243.2 LCY/hr       NA         Materials consistency description:       Compacted fill or embankment 0.9         Average push       0 %       gradient:         Average site altitude:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth							
Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$\$41.30       NA         Total unit Cost/Hour:       \$\$341.63         Total Fleet Cost/Hour:       \$\$341.63         MATERIAL OUANTITIES         Initial Volume:       4.750         Swell factor:       1.165         Loose volume:       5.534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Cat Handbook       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Cat Handbook         Average push distance:       100 feet         Unadjusted hourly       1,243.2 LCY/hr         production:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth				\$15.59	NA		
Total unit Cost/Hour:       \$341.63         Total Fleet Cost/Hour:       \$341.63         MATERIAL QUANTITIES         Initial Volume:       4,750         Swell factor:       1.165         Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION         Average push distance:       100 feet         unadjusted hourly       1,243.2 LCY/hr         production:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       Average site altitude:         Average site altitude:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth	Ripper op. Cost/Ho	our:		\$0.00	0		
Total Fleet Cost/Hour:       \$\$341.63         MATERIAL QUANTITIES         Initial Volume:       4,750         Swell factor:       1.165         Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Naterials consistency description:       100 feet         1,243.2 LCY/hr	Operator Cost/He	our:		\$41.30	NA		
Initial Volume:       4,750         Swell factor:       1.165         Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Average push distance:       100 feet         Unadjusted hourly       1,243.2 LCY/hr         production:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       5,600 feet         Average site altitude:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth	Total Fleet Cost/Ho	our: <b>\$341.0</b>					
Swell factor:       1.165         Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Unadjusted hourly       1,243.2 LCY/hr         production:							
Loose volume:       5,534 LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION         Average push distance:       100 feet         Unadjusted hourly       1,243.2 LCY/hr         production:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       0 %         Average site altitude:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth							
Source of estimated swell factor:       Cat Handbook         HOURLY PRODUCTION         Average push distance:       100 feet         Unadjusted hourly production:       1,243.2 LCY/hr         Materials consistency description:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth							
factor:	Source of estimated	volume:	Division	of Reclamati	on, Mining & Safety		
Average push distance: Unadjusted hourly production:100 feet 1,243.2 LCY/hrMaterials consistency description:Compacted fill or embankment 0.9Average push gradient: Average site altitude:0 % 5,600 feetMaterial weight:2,900 lbs/LCYWeight description:Decomposed rock - 50% Rock, 50% Earth		swell	Cat Hand	lbook			
Unadjusted hourly       1,243.2 LCY/hr         production:       1,243.2 LCY/hr         Materials consistency description:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth	HOURLY PRODU	UCTION					
Unadjusted hourly       1,243.2 LCY/hr         production:       1,243.2 LCY/hr         Materials consistency description:       Compacted fill or embankment 0.9         Average push       0 %         gradient:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth	Average push distar	nce:	100 feet				
Average push       0 %         gradient:       5,600 feet         Average site altitude:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth	Unadjusted hourly	_		CY/hr			
gradient:         Average site altitude:         5,600 feet         Material weight:         2,900 lbs/LCY         Weight description:         Decomposed rock - 50% Rock, 50% Earth	Materials consistent	cy descriptior	n: Compa	acted fill or en	mbankment 0.9		
Average site altitude:       5,600 feet         Material weight:       2,900 lbs/LCY         Weight description:       Decomposed rock - 50% Rock, 50% Earth		0 %					
Weight description: Decomposed rock - 50% Rock, 50% Earth	0	e: 5,600	feet				
	Material weight:	2,900	lbs/LCY				
Job Condition Correction Factor         Source	Weight description:	Decor	nposed rocl	k - 50% Rock	, 50% Earth		
	Job Condition Correc	tion Factor			Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit production:	441.83 LCY/hr
Adjusted fleet production:	441.83 LCY/hr

### JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.773/LCY

Total job time:	<b>12.52</b> Hours
Total job cost:	\$4,279

### HYDRAULIC EXCAVATOR WORK

e: McClane Canyon Mine		ies		
	Permit Acti	on: <u>RN9</u>	Perm	t/Job#: <u>C1980004</u>
PROJECT IDENTIFICAT	TION			
Task #: 17A	State: Colora	do	Abbreviati	on: None
Date: 3/4/2021	County: Garfie		Filenar	
User: CCW				
Agency or organization	on name: DRMS			
HOURLY EQUIPMENT	COST			
Basic Machine: Cat	324D L 9'-8" Stick	Н	lorsepower:	194
	PS Cab		eight (MT):	24.85
			Shift Basis:	1 per day
		D	ata Source:	(CRG)
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$50.59	NA		
Operating Cost/Hour:		100		
Operator Cost/Hour:		NA		
Total Unit Cost/Hour:	\$141.95			
Total Fleet Cost/Hour	: \$141.95			
MATERIAL QUANTITIE	S			
Initial volume: 175	CCY	Swell factor	: 1.330	
Loose volume: 233	LCY			
Source of esti	mated volume: Divis	ion of Declamation M	Cining & Cafaty	
Source of estimate		ion of Reclamation, M andbook	$ming \propto safety$	
HOURLY PRODUCTION	[ <u></u>			
Excavator Cycle Time (load bu	cket, swing loaded, dur	p bucket, swing empt	v).	
			<u>,,.</u>	
	-	Condition Description		FRAGE
Sec	Basic Job	Condition Description	n: <u>BELOW AVI</u>	ERAGE
Sec	-	ithin Basic Description	n: <u>BELOW AVI</u> n: <u>AVERAGE</u>	ERAGE
	Basic Job		n: <u>BELOW AVI</u> n: <u>AVERAGE</u>	
Sec Load Bucket Capacity	Basic Job	ithin Basic Description Cycle Time Valu	n: <u>BELOW AVI</u> n: <u>AVERAGE</u> e: 0.335	minutes
Load Bucket Capacity	Basic Job ondary Job Condition w	ithin Basic Description Cycle Time Valu E	n: <u>BELOW AVI</u> n: <u>AVERAGE</u>	
	Basic Job ondary Job Condition w 2.26 LCY	ithin Basic Description Cycle Time Valu E (heaped)	n: BELOW AVI n: AVERAGE e: 0.335 Bucket Size Class:	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor:	Basic Job ondary Job Condition w 2.26 LCY 0.975 Sand	ithin Basic Description Cycle Time Valu E	n: BELOW AVI n: AVERAGE e: 0.335 Bucket Size Class:	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity:	Basic Job ondary Job Condition w 2.26 LCY 0.975 Sand 2.20 LCY	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100	n: BELOW AVI n: AVERAGE e: 0.335 Bucket Size Class:	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor:	Basic Job ondary Job Condition w 2.26 LCY 0.975 Sand 2.20 LCY DIS	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A	n: BELOW AVI n: AVERAGE e: 0.335 Bucket Size Class:	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Factor	Basic Job ondary Job Condition w 2.26 LCY 0.975 Sand 2.20 LCY prs Sou	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A	n: BELOW AVI n: AVERAGE e: 0.335 Bucket Size Class:	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Factor Altitude Adj:	Basic Job           ondary Job Condition w           2.26         LCY           0.975         Sand           2.20         LCY           Drs         Sou           1.00         (CAT	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A rrce 'HB)	n: BELOW AVI n: AVERAGE e: 0.335 Bucket Size Class:	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Facto Altitude Adj: Job Efficiency:	Basic Job           ondary Job Condition w           2.26         LCY           0.975         Sand           2.20         LCY           prs         Sou           1.00         (CAT           0.83         (1 shift)	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A rrce THB) t/day)	n: BELOW AVI n: AVERAGE e: 0.335 Bucket Size Class:	minutes
Load Bucket Capacity          Rated Capacity:	Basic Job           ondary Job Condition w           2.26         LCY           0.975         Sand           2.20         LCY           prs         South           1.00         (CAT           0.83         (1 shift	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A rrce THB) t/day)	n: <u>BELOW AVI</u> n: <u>AVERAGE</u> e: <u>0.335</u> Bucket Size Class: 0%) 0.975 Altitude: <u>5600</u> feet	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Facto Altitude Adj: Job Efficiency: Net Correction: Unadjuste	Basic Job ondary Job Condition w <u>2.26</u> LCY 0.975 Sand <u>2.20</u> LCY ors Sou 1.00 (CAT 0.83 (1 shif 0.83 multip ed Hourly Unit Production	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A Site A 'HB) t/day) blier on: 394.66	n: <u>BELOW AVI</u> n: <u>AVERAGE</u> e: <u>0.335</u> Bucket Size Class: 0%) 0.975 Altitude: <u>5600</u> feet	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Facto Altitude Adj: Job Efficiency: Net Correction: Unadjuste Adjuste	Basic Job ondary Job Condition w 2.26 LCY 0.975 Sand 2.20 LCY ors Sou 1.00 (CAT 0.83 (1 shif 0.83 multip cd Hourly Unit Production cd Hourly Unit Production	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A Site A (hB) (hB) (hB) (hB) (hB) (hB) (hB) (hB)	n: <u>BELOW AVI</u> n: <u>AVERAGE</u> e: 0.335 Bucket Size Class: 0%) 0.975 Altitude: <u>5600</u> feet	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Facto Altitude Adj: Job Efficiency: Net Correction: Unadjuste Adjuste	Basic Job ondary Job Condition w <u>2.26</u> LCY 0.975 Sand <u>2.20</u> LCY ors Sou 1.00 (CAT 0.83 (1 shif 0.83 multip ed Hourly Unit Production	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A Site A (hB) (hB) (hB) (hB) (hB) (hB) (hB) (hB)	n: <u>BELOW AVI</u> n: <u>AVERAGE</u> e: <u>0.335</u> Bucket Size Class: 0%) 0.975 Altitude: <u>5600</u> feet	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Facto Altitude Adj: Job Efficiency: Net Correction: Unadjuste Adjuste	Basic Job ondary Job Condition w 2.26 LCY 0.975 Sand 2.20 LCY ors Sou 1.00 (CAT 0.83 (1 shif 0.83 multip cd Hourly Unit Production cd Hourly Unit Production	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A Site A (hB) (hB) (hB) (hB) (hB) (hB) (hB) (hB)	n: <u>BELOW AVI</u> n: <u>AVERAGE</u> e: 0.335 Bucket Size Class: 0%) 0.975 Altitude: <u>5600</u> feet	minutes
Load Bucket Capacity Rated Capacity: Bucket Fill Factor: Adjusted Capacity: Job Condition Correction Factor Altitude Adj: Job Efficiency: Net Correction: Unadjuster Adjuster	Basic Job ondary Job Condition w 2.26 LCY 0.975 Sand 2.20 LCY ors Sou 1.00 (CAT 0.83 (1 shif 0.83 multip cd Hourly Unit Production cd Hourly Unit Production	ithin Basic Description Cycle Time Valu (heaped) and gravel (95% - 100 Site A Site A (hB) (hB) (hB) (hB) (hB) (hB) (hB) (hB)	n: <u>BELOW AVI</u> n: <u>AVERAGE</u> e: 0.335 Bucket Size Class: 0%) 0.975 Altitude: <u>5600</u> feet	minutes

## BULLDOZER WORK

McClane Canyon Mine       Permit Action: RN9       Permit/Job#: C1         PROJECT IDENTIFICATION	
PROJECT IDENTIFICATION	980004
Task #:   18A   State:   Colorado   Abbreviation:   None	
Date: 3/4/2021 County: Garfield Filename: C004-	18A
User: <u>CCW</u>	
Agency or organization name: DRMS	
HOURLY EQUIPMENT COST	
Basic Machine: Cat D9T - 9SU	
Horsepower: 405	
Blade Type: Semi-Universal	
Attachment: <u>3-shank ripper</u>	
Shift Basis: <u>1 per day</u>	
Data Source: (CRG)	
Cost Breakdown:	
Utilization %	
Ownership Cost/Hour:   \$156.88   NA	
Operating Cost/Hour: \$127.87 100	
Ripper own. Cost/Hour:\$15.59NA	
Ripper op. Cost/Hour: \$0.00 0	
Operator Cost/Hour: \$41.30 NA	
MATERIAL QUANTITIES         Initial Volume:       3,500         Swell factor:       1.165         Lower dama       4.079 L CV	
Loose volume: 4,078 LCY	
Source of estimated volume:Division of Reclamation, Mining & SafetySource of estimated swellCat Handbookfactor:Image: Cat Handbook	
Source of estimated swell Cat Handbook	
Source of estimated swell Cat Handbook factor: HOURLY PRODUCTION	
Source of estimated swell Cat Handbook factor:	
Source of estimated swell       Cat Handbook         factor:	
Source of estimated swell factor:       Cat Handbook         HOURLY PRODUCTION         Average push distance:       125 feet         Unadjusted hourly production:       1,055.6 LCY/hr         Materials consistency description:       Compacted fill or embankment 0.9         Average push       5 %	
Source of estimated swell factor:       Cat Handbook         HOURLY PRODUCTION	
Source of estimated swell factor:       Cat Handbook         HOURLY PRODUCTION         Average push distance:       125 feet         Unadjusted hourly       1,055.6 LCY/hr         production:       Compacted fill or embankment 0.9         Average push       5 %         gradient:       5 %	
Source of estimated swell factor:       Cat Handbook         HOURLY PRODUCTION         Average push distance:       125 feet         Unadjusted hourly production:       1,055.6 LCY/hr         Materials consistency description:       Compacted fill or embankment 0.9         Average push       5 %         gradient:       5,600 feet	

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3209

Adjusted unit production:	338.74 LCY/hr
Adjusted fleet production:	338.74 LCY/hr

### JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$1.009/LCY

Total job time:	<b>12.04</b> Hours
Total job cost:	\$4,112

# SCRAPER TEAM WORK

Site: McClane Canyon	Mine	Permit Action:	RN9	P	ermit/Job#: <u>C1</u>	980004
PROJECT IDENT	IFICATION					
Task #:19A		tate: Colorado			viation: None	
Date: $3/4/202$ User: CCW	2 <u>1</u> Cou	nty: <u>Garfield</u>		Fil	ename: C004-	19A
	rganization name:	DRMS				
HOURLY EQUIP			COSTS	hift basis: <u>1 per</u>	dav	
<b>_</b>		Equipmo		<u> </u>	<u></u>	
	-So	craper: Cat 627	nt Description G			
Suppor	- Equipment -Load	Dozer: NA Area: NA				
	-Dump	Area: NA				
Road Main	ntenance –Motor C -Water					
	- water	TTUCK. NA				
Cost Breakdown:	Scraper Worl		Support Equi			e Equipment
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truc
%Utilization-machine:	100	NA	NA	NA	NA	N
Ownership cost/hour:	\$109.10	NA	NA	NA	NA	N
Operating cost/hour:	\$150.55	NA	NA	NA	NA	N
%Utilization-ripper:	NA	NA	NA	NA	NA	N
Ripper own. cost/hour:	NA	NA	NA	NA	NA	N
Ripper op. cost/hour:	NA	NA	NA	NA	NA	N
Operator cost/hour:	\$30.90	NA	NA	NA	NA	N
Unit Subtotals:	\$290.54	NA	NA	NA	NA	N
Number of Units:	1	0	0	0	0	
Group Subtotals:	Work:	\$290.54	Support:	\$0.00	Maint:	\$0.00
Total work team cost/h MATERIAL QUA Initial volume: Loose volume:		CCY LCY	Swell fact	or: <u>1.115</u>		
	ce of estimated vol		of Reclamation	Mining & Safety	7	
	Sestimated swell fa			winning & Salety	,	
HOURLY PRODU	<u>CTION</u>					
			Scraper B	owl (volume) Ba	<u>isis:</u>	
Material weight:	2,100 lbs/LCY		Struck	Volume: <u>15.70</u>		CY
Material description:	Earth - Loam		Heaped	Volume: 22.00	L	CY
Rated Payload:	52,800 pounds		Average			CY

<u>0.70</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5600 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	2100.00	8.30	5.00	13.30	834	2.54

Haul Time: 2.54 minutes

### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	2100.00	-8.30	5.00	-3.30	2938	0.77
				Return Time:	0.77	minutes
			Total Scrape	r team cycle time:	4.61	minutes
			Adjusted f	or job conditions:	203.63	LCY/Hour
			Selected Nu	mber of Scrapers:	1	Scraper(s)
	Adjusted	single scrap	er team (unit) h	ourly production:	203.63	LCY/Hour
	Adjusted mu	ltiple scrape	er team (fleet) h	ourly production:	203.63	LCY/Hour
Optimal	Unadjusted unit prod Number of Scrapers pe			LCY/Hour		
JOB TIN	ME AND COST					
Fleet	t size: 1	Team(s)	Т	otal iob time:	5.90	Hours

 Fleet size:
 1
 Team(s)
 Total job time:
 5.90
 Hours

 Unit cost:
 \$1.427
 /LCY
 Total job cost:
 \$1,715

# SCRAPER TEAM WORK

Site: McClane Canyor	<b>Mine</b> Perm	nit Action:	RN9	P	Permit/Job#: <u>C</u>	1980004
PROJECT IDENT	<b>IFICATION</b>					
Task #: 20A	State:	Colorado		Abbre	viation: None	
Date: 3/4/20	21 County:	Garfield		Fil	lename: C004	-20A
User: CCW						
Agency or o	organization name: DRM	MS				;
	MENT		COST	Shift heater 1 men	4	
HOURLY EQUIP	MENI_		COSTS	Shift basis: <u>1 per</u>	<u>day</u>	
	<u> </u>		ent Description			
	-Scraper: -Dozer:	Cat 627 NA	G			
Suppor	rt Equipment -Load Area:	NA				
	-Dump Area:	NA				
Road Mai	ntenance – Motor Grader: -Water Truck:	NA NA				
	-water fluck.	INA				
Cost Breakdown:	Scraper Work Team		Support Equ	ipment		ce Equipment
	Scraper Do	ozer	Load Area	Dump Area	Motor Grader	Water Truc
%Utilization-machine:	100	NA	NA	NA	NA	N
Ownership cost/hour:	\$109.10	NA	NA	NA	NA	N
Operating cost/hour:	\$150.55	NA	NA	NA	NA	N.
%Utilization-ripper:	NA	NA	NA	NA	NA	N
Ripper own. cost/hour:	NA	NA	NA	NA	NA	N.
Ripper op. cost/hour:	NA	NA	NA	NA	NA	N
Operator cost/hour:	\$30.90	NA	NA	NA	NA	N.
Unit Subtotals:	\$290.54	NA	NA	NA	NA	N.
Number of Units:	1	0	0	0	0	
Group Subtotals:	Work: \$29	0.54	Support:	\$0.00	Maint:	\$0.00
Total work team cost/	NTITIES					
Initial volume: Loose volume:	1,078 1,202	CCY LCY	Swell fac	tor: <u>1.115</u>		
	ce of estimated volume: f estimated swell factor:	Division Cat Hand		, Mining & Safety	<i>i</i>	
HOURLY PRODU	UCTION					
			Scraper H	Bowl (volume) Ba	usis:	
Material weight:	2,100 lbs/LCY		Struck	Volume: 15.70	1	LCY
Material description:	Earth - Loam			Volume: 22.00		LCY
Rated Payload:	52,800 pounds			Volume: 18.85		LCY
Payload Capacity:	25.14 LCY		Adjusted (	Capacity: 18.85	]	LCY

<u>0.70</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5600 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	300.00	0.00	5.00	5.00	2218	0.28

Haul Time: **0.28** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	0.00	5.00	5.00	2814	0.24
				Return Time:	0.24	minutes
			Total Scrape	r team cycle time:	1.82	minutes
			Adjusted f	for job conditions:	515.79	LCY/Hour
			Selected Nu	mber of Scrapers:	1	Scraper(s)
	Adjusted	single scrap	er team (unit) h	ourly production:	515.79	LCY/Hour
	Adjusted mu	ltiple scrape	er team (fleet) h	ourly production:	515.79	LCY/Hour
Optimal	Unadjusted unit proc Number of Scrapers per			LCY/Hour		
OB TIN	ME AND COST					
Fleet	t size: 1	Team(s)	T	otal job time:	2.33	Hours

Unit cost: \$0.563 /LCY

Total job cost: _____\$677_____

# SCRAPER TEAM WORK

Site: McClane Canyor	n Mine Pe	ermit Action:	RN9	P	ermit/Job#: <u>C1</u>	980004
PROJECT IDENT	<b>TFICATION</b>					
Task #: 21A	State:	Colorado		Abbrev	viation: None	
Date: 3/4/20	21 County:	Garfield		Fil	ename: C004-2	21A
User: CCW						
Agency or o	organization name: D	RMS				
HOURLY EQUIP	MENT_		COSTS	Shift basis: <u>1 per</u>	<u>day</u>	
			nt Description			
	-Scrape -Doze		G			
Suppor	rt Equipment -Load Area					
	-Dump Area	a: NA				
Road Mai	ntenance – Motor Grade					
	-Water Truck	K: NA				
Cost Breakdown:	Scraper Work Tea	m	Support Equ	ipment	Maintenanc	e Equipment
	Scraper I	Dozer	Load Area	Dump Area	Motor Grader	Water Truc
%Utilization-machine:	100	NA	NA	NA	NA	N
Ownership cost/hour:	\$109.10	NA	NA	NA	NA	N
Operating cost/hour:	\$150.55	NA	NA	NA	NA	N.
%Utilization-ripper:	NA	NA	NA	NA	NA	N
Ripper own. cost/hour:	NA	NA	NA	NA	NA	N
Ripper op. cost/hour:	NA	NA	NA	NA	NA	N
Operator cost/hour:	\$30.90	NA	NA	NA	NA	N
Unit Subtotals:	\$290.54	NA	NA	NA	NA	N
Number of Units:	1	0	0	0	0	
Group Subtotals:	Work: \$2	290.54	Support:	\$0.00	Maint:	\$0.00
Total work team cost/	NTITIES					
Initial volume: Loose volume:	1,719 <b>1,917</b>	CCY LCY	Swell fac	tor: <u>1.115</u>		
	ce of estimated volume:		of Poolomatic-	Mining & Safety	7	
	f estimated swell factor:					
HOURLY PRODU	JCTION					
			Scraper E	Bowl (volume) Ba	sis:	
Material weight:	2,100 lbs/LCY		Struck	Volume: 15.70	L	CY
Material description:	Earth - Loam		Heaped	Volume: 22.00	L	CY
Rated Payload:	52,800 pounds		Average			CY
Payload Capacity:	25.14 LCY		Adjusted (	Capacity: <u>18.85</u>	L	CY

<u>0.70</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5600 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	850.00	4.00	5.00	9.00	1249	0.72

Haul Time: 0.72 minutes

### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)			
1	850.00	-4.00	5.00	1.00	2913	0.39			
				Return Time:	0.39	minutes			
		2.41	minutes						
		389.51	LCY/Hour						
		1	Scraper(s)						
	Adjusted	389.51	LCY/Hour						
	Adjusted mu	ltiple scrape	r team (fleet) ho	ourly production:	389.51	LCY/Hour			
Optimal	Unadjusted unit proc Number of Scrapers per			LCY/Hour					
JOB TIME AND COST									
Fleet	size: 1	Team(s)	То	tal job time:	4.92	Hours			

Unit cost: \$0.746 /LCY

Total job cost: **\$1,430** 

# SCRAPER TEAM WORK

Site: McClane Canyon	n Mine	Permit	Action:	RN9	P	ermit/Job#:	C1980004
PROJECT IDENT	<b>IFICATION</b>						
Task #: 22A	State	e: C	olorado		Abbrev	viation: Nor	ne
Date: 3/4/20 User: CCW	21 County	y: G	arfield		Fil	ename: COO	)4-22A
Agency or o	organization name:	DRMS	5				
HOURLY EQUIP	MENT_			COSTS	bift basis: <u>1 per</u>	<u>day</u>	
				t Description			
	-Scra	per:	Cat 6270 NA	Ĵ			
Suppor	rt Equipment -Load A	rea:	NA				
Pood Mai	-Dump A ntenance –Motor Gra		NA NA				
	-Water Tru		NA				
		-		а (р. 1			г :
<u>Cost Breakdown</u> :	Scraper Work T Scraper	eam Doze	er	Support Equi Load Area	Dump Area	Mainten Motor Grade	ance Equipme er   Water Tr
%Utilization-machine:	100		NA	NA	NA	N	A
Ownership cost/hour:	\$109.10		NA	NA	NA	N	A
Operating cost/hour:	\$150.55		NA	NA	NA	N	A
%Utilization-ripper:	NA		NA	NA	NA	N	A
Ripper own. cost/hour:	NA		NA	NA	NA	N	A
Ripper op. cost/hour:	NA		NA	NA	NA	N	A
Operator cost/hour:	\$30.90		NA	NA	NA	N	A
Unit Subtotals:	\$290.54		NA	NA	NA	N	A
Number of Units:	1		0	0	0		0
Group Subtotals:	Work:	\$290.	54	Support:	\$0.00	Main	t: \$0.00
Total work team cost/							
Initial volume: Loose volume:	7,760 <b>9,545</b>		CCY LCY	Swell fact	or: <u>1.230</u>		
	rce of estimated volun f estimated swell facto		Division o Cat Handb		Mining & Safety	7	
HOURLY PRODU	UCTION						
				Scraper B	owl (volume) Ba	<u>sis:</u>	
Material weight:	2,100 lbs/LCY				Volume: 15.70		LCY
Material description:	Earth - Loam			Heaped	Volume: 22.00		LCY
Rated Payload:	52,800 pounds			Average			LCY
<u>0.70</u> Minutes

<u>0.60</u> Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5600 feet

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

#### Travel Time:

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

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	5.00	3.00	8.00	1381	0.78

Haul Time: 0.78 minutes

### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	-5.00	3.00	-2.00	2938	0.41
				Return Time:	0.41	minutes
			Total Scraper	team cycle time:	2.49	minutes
			Adjusted for	or job conditions:	377.00	LCY/Hour
			Selected Nur	mber of Scrapers:	1	Scraper(s)
	Adjusted	single scrape	er team (unit) ho	ourly production:	377.00	LCY/Hour
	Adjusted mu	ltiple scrape	r team (fleet) he	ourly production:	377.00	LCY/Hour
Optimal	Unadjusted unit prod Number of Scrapers per			LCY/Hour		
JOB TIN	ME AND COST					
Fleet	size: 1	Team(s)	То	otal job time:	25.32	Hours

Unit cost: \$0.771 /LCY

Total job cost: \$7,356

# BULLDOZER WORK

e: McClane Canyon Mi	Replace Topson	пош экоскри	e to Coal Mine Was	te Pile Pond	
	ne Per	mit Action:	RN9	Permit/Jol	b#: <u>C1980004</u>
PROJECT IDENTIFI	<u>CATION</u>				
Task #:         23A           Date:         3/4/2021           User:         CCW	State: County:	Colorado Garfield		Abbreviation: Filename:	None C004-23A
Agency or organ	ization name:	MS			
HOURLY EQUIPME	NT COST				
Horsepower: 405 Blade Type: Ser Attachment: 3-s Shift Basis: 1 p	t D9T - 9SU 5 ni-Universal hank ripper er day RG)				
Cost Breakdown:					
Ownership Cost/Hour: Operating Cost/Hour:		\$156.88 \$127.87	Utilization % NA 100		
Ripper own. Cost/Hour:		\$15.59	NA		
Ripper op. Cost/Hour: Operator Cost/Hour:		\$0.00 \$41.30	0 NA		
Total Fleet Cost/Hour: MATERIAL QUANTI Initial Volume: 1,00 Swell factor: 1.12 Loose volume: 1,12	0				
Source of estimated volu			n, Mining & Safety		
Source of estimated swell factor:		JOOK			
-					
factor:					
factor: <u>HOURLY PRODUCT</u> Average push distance: Unadjusted hourly	<u>200 feet</u> 700.0 LCY	/hr	 e 1.0		
factor: HOURLY PRODUCT Average push distance: Unadjusted hourly production: Materials consistency de Average push gradient:	<u>ION</u> <u>200 feet</u> 700.0 LCY/ escription: <u>Consol</u> 0 %	/hr	 e 1.0		
factor: HOURLY PRODUCT Average push distance: Unadjusted hourly production: Materials consistency de Average push gradient: Average site altitude:	200 feet           200 feet           700.0 LCY/           escription:           0 %           5,600 feet	/hr	 e 1.0		
factor: <u>HOURLY PRODUCT</u> Average push distance: Unadjusted hourly production: Materials consistency de Average push gradient:	<u>ION</u> <u>200 feet</u> 700.0 LCY/ escription: <u>Consol</u> 0 %	/hr idated stockpil	 e 1.0		

Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4492

Adjusted unit production:	314.44 LCY/hr
Adjusted fleet production:	<b>314.44</b> LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$1.086/LCY

Total job time:	<b>3.58</b> Hours
Total job cost:	\$1,222

### Task # 25A

Page 1 of 2

# BULLDOZER WORK

Task description:	Replace Topsoil from Stock	pile to Light Use Road		
e: McClane Canyon Mi	ne Permit Action:	RN9	Permit/Jo	b#: <u>C1980004</u>
PROJECT IDENTIFI	CATION			
Task #: 25A	State: Colorado		Abbreviation:	None
Date: 3/4/2021	County: Garfield		Filename:	C004-25A
User: CCW				
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	NT COST			
	t D9T - 9SU	_		
Horsepower: 405				
• 1	mi-Universal hank ripper			
	hank hpper her day			
	RG)			
<u></u>	,			
Cost Breakdown:	1	Utilization %		
Ownership Cost/Hour:	\$156.88	<u>Utilization %</u> NA		
Operating Cost/Hour:	\$130.88	100		
Ripper own.				
Cost/Hour:	\$15.59	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$41.30	NA		
Tetal	¢241.62			
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$341.63 <b>\$341.63</b>			
	φ <b>31.0</b> 5			
MATERIAL QUANT	ITIFS			
Initial Volume: 2,00				
Swell factor: 1.12				
Loose volume: 2,25	50 LCY			
Source of estimated volu	ume: Division of Reclamati	on, Mining & Safety		
Source of estimated swe	ll Cat Handbook			
factor:				
HOURLY PRODUCT	<u>'ION</u>			
Average push distance:	100 feet			
Unadjusted hourly	1,243.2 LCY/hr			
production:	,			
L				
Materials consistency de	escription: Consolidated stock	oile 1.0		
	5.04			
Average push	5 %			
gradient: Average site altitude:	5,600 feet			
Average site attitude:				
Material weight:	2,550 lbs/LCY			
	,			
Weight description:	Earth - Dry packed			
Job Condition Correction	Factor	Source		
		source		

Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	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:	504.24 LCY/hr
Adjusted fleet production:	<b>504.24</b> LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$0.678/LCY

Total job time:	<b>4.46</b> Hours
Total job cost:	\$1,524

### SAFEGUARDING UNDERGROUND OPENINGS

Т	ask description:	Seal and Back	fill Portals			
Site:	McClane Canyon Mine	Pe	ermit Action:	RN9	Permit	/Job#: <u>C1980004</u>
<u>'ROJEC</u>	CT IDENTIFICATION	<u>1</u>				
Task #: Date:			Colorado Garfield		Abbreviation: Filename:	None C004-26A
User:	: CCW	· _				
	Agency or organiza	tion name: D	RMS			

### UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Seal Entry #1 (Main Roadway)	8'x20'	Adit closure - bulkhead seal (per opening)	1.00	EA	\$4,730.00	\$4,730.00
Backfill Entry #1	8'x20'	Adit closure - backfilling (per opening)	1.00	EA	\$2,105.30	\$2,105.30
Seal Entry #2 (Converyor Entry)	8'x20'	Adit closure - bulkhead seal (per opening)	1.00	EA	\$4,730.00	\$4,730.00
Backfill Entry #2	8'x20'	Adit closure - backfilling (per opening)	1.00	EA	\$2,105.30	\$2,105.30
Seal Entry #3 (Intake Entry)	8'x20'	Adit closure - bulkhead seal (per opening)	1.00	EA	\$4,730.00	\$4,730.00
Backfill Entry #3	8'x20'	Adit closure - backfilling (per opening)	1.00	EA	\$2,105.30	\$2,105.30
Seal Entry #4 (Renum Entry)	8'x20'	Adit closure - bulkhead seal (per opening)	1.00	EA	\$4,730.00	\$4,730.00
Backfill Entry #4	8'x20'	Adit closure - backfilling (per opening)	1.00	EA	\$2,105.30	\$2,105.30
Drain Pipe for Entry #4	100 LF	PVC drain pipe, 6 in. diameter (per ln. ft. incl. mat. & labor)	100.00	LF	\$12.35	\$1,235.00

Job Hours: 160.00

Total Cost: \$28,576.20

# BOREHOLE SEALING WORK

Та	sk description:	Seal Monitoring Well GW-	1		
Site: N	AcClane Canyon Mine	Permit Action:	RN9	Permit	/Job#: <u>C1980004</u>
PROJEC'	T IDENTIFICATION	<u>v</u>			
Task #: Date:	27A 3/5/2021	State: Colorado County: Garfield		Abbreviation: Filename:	None C004-27A
User:	<u>CCW</u> Agency or organiza	tion name: DRMS			

# **UNIT COSTS**

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Seal GW-1	Portland cement grout ( Bag, material cost only94 lb. bag)	3"	18.5'	2.00	bag	\$15.95	\$31.90
- Borehole Marker	Borehole location/identification marker (EA, material cost only)	NA	NA	1.00	EA	\$35.50	\$35.50
- Drill Rige Time	SCHRAMM T450WS	NA	NA	2.00	EA	\$415.81	\$831.62
- Water Truck Time	Water Tanker, 2,500 Gal.	NA	NA	4.00	EA	\$28.84	\$115.36

Job Hours: 6.00

Total Cost: \$1,014.00

# **DEMOLITION WORK**

Т	ask description:	Demolish an	d Remove All S	Structures			
Site:	McClane Canyon Mine		Permit Action:	RN9	Permit	/Job#:	C1980004
<u>PROJEC</u>	CT IDENTIFICATION	<u>N</u>					
Task #:	: 28A	State:	Colorado		Abbreviation:	None	
Date	: 3/5/2021	County:	Garfield		Filename:	C004	-28A
User	: CCW						
	Agency or organiza	tion name:	DRMS				

# UNIT COSTS

# Location adjustment: 98.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Trailer #1	10'x32'x8'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	2,560.00	CF	\$0.21	\$527.36
Trailer #2	12'x54'x8'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	5,184.00	CF	\$0.21	\$1,067.90
- Footers	2@3'x1.5'x54'	Demo. and on-site disposal in existing pit, 1.5 ft. x 3 ft Max. 10,000 ft. haul	108.00	LF	\$7.51	\$811.08
Trailer #3	12'x54'x8'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	5,184.00	CF	\$0.21	\$1,067.90
- Footers	2@3'x1.5'x54'	Demo. and on-site disposal in existing pit, 1.5 ft. x 3 ft Max. 10,000 ft. haul	108.00	LF	\$7.51	\$811.08
Trailer #4	12'x54'x8'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	5,184.00	CF	\$0.21	\$1,067.90
- Footers	2@3'x1.5'x54'	Demo. and on-site disposal in existing pit, 1.5 ft. x 3 ft Max. 10,000 ft. haul	108.00	LF	\$7.51	\$811.08
Warehouse Trailer	8'x40'x8'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	2,560.00	CF	\$0.21	\$527.36
Sasser Substation	12'x40'x10'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	4,800.00	CF	\$0.21	\$988.80
- Floor	10'x40'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	480.00	SF	\$0.84	\$400.80
- Footers	3'x1.5'x104 LF	Demo. and on-site disposal in existing pit, 1.5 ft. x 3 ft Max. 10,000 ft. haul	104.00	LF	\$7.51	\$781.04

Demo Worksheet Cont'd

Line Power Substation	10'x20'x8'	Bldg. (SN) demo./on- site disposal in excavated pit - Max.	1,600.00	CF	\$0.21	\$329.60
		10,000 ft. haul				
Crusher/Screener	25'x15'x25'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	9,375.00	CF	\$0.21	\$1,931.25
- Wing Walls - Floor	2 (15'x8'x6") 10'x25'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul Demo. and on-site	240.00	SF	\$0.84 \$0.84	\$200.40 \$208.75
		disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul				
Collection Conveyor	40 LF	Conveyor, Horizontal Belt 24" Belt, 41.5' Length	1.00	EA	\$2,225.00	\$2,225.00
Stacker Conveyor	110 LF	Conveyor, Horizontal Belt 24" Belt, 61.5' Length	2.00	EA	\$2,975.00	\$5,950.00
10,000 Gallon Water Tank	10,000 Gallons	Excavate and load tank onto trailer, non- leaking - 9,000 gal. to 12,000 gal.	1.00	EA	\$1,245.00	\$1,245.00
Water/Septic Tank	3,750 Gallons	Excavate and load tank onto trailer, non- leaking - 3,000 gal. to 5,000 gal.	1.00	EA	\$583.50	\$583.50
3MV Substation	NA	Powerline or utility line - Structural Steel Box Type Frame Structure Dismantle and Dispose	1.00	EA	\$1,777.00	\$1,777.00
- Footers (6)	3'x1.5'x24 LF	Demo. and on-site disposal in existing pit, 1.5 ft. x 3 ft Max. 10,000 ft. haul	24.00	LF	\$7.51	\$180.24
- Powerlines and Poles	2,200 LF	Utility Poles, Wood 35' - 45' high (each pole)	45.00	EA	\$282.00	\$12,690.00
2,000 Gallon Fuel Tank	2,000 Gallon	Excavate and load tank onto trailer, non- leaking - 3,000 gal. to 5,000 gal.	1.00	EA	\$583.50	\$583.50
- Remove Sludge from Tank Bottom	NA	Remove sludge, water, and rem. product from tank - 3,000 to 5,000 gal.	1.00	EA	\$233.00	\$233.00
- Sludge Disposal	Assume 200 Gal	Hazardous waste removal - Drum solids/liquids, per drum, (1-6 drum job)	4.00	DRUM	\$587.78	\$2,351.12
- Clean Tank with CO2	30 Pounds	Insert dry ice (CO2) into tank to produce inert gas - 1.5 lbs./100 gal.	30.00	LB	\$1.89	\$56.70

- Haul Tank to Certified Dump	NA	Haul tank to certified salvage dump - 3,000	1.00	EA	\$760.00	\$760.00
Certified Dullip		to 5,000 gal. tank				
Rock Dust Bin	24'x15' Diameter	Comprehensive storage tank removal, non- leaking - 3,000 to 5,000 gal. tank	1.00	EA	\$3,430.70	\$3,430.70
Shop Building	40'x80'x12'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	38,400.00	CF	\$0.21	\$7,910.40
- Floor	40'x80'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	3,200.00	SF	\$0.84	\$2,672.00
Mine Fan and Housing	8'x10'x30'	Bldg. (SN) demo./on- site disposal in excavated pit - Max. 10,000 ft. haul	2,400.00	CF	\$0.21	\$494.40
18" Culvert	230 LF	Pipe, corrugated metal (CMP) - 18 in. diameter pipe	230.00	LF	\$5.39	\$1,238.78
24" Culvert	120 LF	Pipe, corrugated metal (CMP) - 24 in. diameter pipe	120.00	LF	\$7.01	\$841.44
30" Culvert	100 LF	Pipe, corrugated metal (CMP) - 30 in. diameter pipe	100.00	LF	\$9.04	\$904.00
36" Culvert	15 LF	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	15.00	LF	\$10.95	\$164.18
42" Culvert	160 LF	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	160.00	LF	\$16.00	\$2,559.52
48" Culvert	75 LF	Pipe, corrugated metal (CMP) - 48 in. diameter pipe	75.00	LF	\$16.00	\$1,199.78
Fencing	330 LF	Fencing, chain link, including posts and fabric - to 6 ft. high	330.00	LF	\$2.68	\$884.40
Petroleum Contaminated Soil Removal	Assume 60 CY	Dispose of decontaminated soil - Average	60.00	СҮ	\$267.50	\$16,050.00
Removed Fiber Optic Line	2,370 LF	Utility Poles, Wood 20' to 0' high (each pole)	24.00	EA	\$235.50	\$5,652.00

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	330.00	(unadjusted):	\$84,168.96	location):	\$82,906.43

# **REVEGETATION WORK**

Task de	scription:	Juniper Woodland Seed Mi	X		
Site: McC	lane Canyon Mi	ne Permit Action:	RN9	Permit/Job	#: <u>C1980004</u>
	<u>CT IDENTIFI</u>				
Task		State: Colorado		Abbreviation:	None
D.	te: $3/5/2021$	County: Garfield		Filename:	C004-29A
Da	0.072021				

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
6-24-24, 10-20-10, 15-15-15	250.00	pound	\$0.27	\$66.25
			Total Fertilizer Materials Cost/Acre	\$66.25

### Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$37.03
	Total Fertilizer Application Cost/Acre	\$37.03

# **TILLING**

Description		Cost /Acre
Chisel plowing {DMG}		\$94.63
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$107.16
	<b>Total Tilling Cost/Acre</b>	\$201.79

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.20	7.81	\$5.70
Indian Ricegrass - Nespar	1.50	4.86	\$13.31
Aster, Engleman's	0.25	1.19	\$48.50
Canby Bluegrass - Canbar	0.50	10.63	\$5.13
Sand Dropseed	0.10	11.94	\$0.98
Great Basin Wildrye - Magnar	1.00	4.06	\$11.55
Russian Wildrye - Bozoisky	1.00	4.02	\$6.48
Black-eyed Susan	0.25	9.63	\$7.88
Galleta	1.00	3.65	\$22.35
Streambank Wheatgrass - Sodar	1.00	3.26	\$5.70

Mahogany, Mountain	2.00	2.71	\$73.61
Tall Wheatgrass - Jose	2.00	3.63	\$6.75
Western Wheatgrass - Arriba	1.50	3.79	\$9.75
Rabbitbrush, Rubber	0.25	3.72	\$16.07
Vetch, American	1.00	0.45	\$99.93
Sagebrush, Mountain or Big	0.04	2.11	\$0.79
Flax, Lewis Blue	0.50	3.32	\$8.25
Saltbush, Four Wing	1.00	1.38	\$12.50
Saltbush, Shadscale	1.00	1.49	\$10.00
Serviceberry	1.00	1.84	\$61.50
Sumac, Skunkbrush	1.50	0.70	\$31.50
Winter Fat	1.00	2.55	\$20.50
Penstemon, Palmer	0.25	5.53	\$13.63
Totals Seed Mix	19.84	94.25	¢ 402.24
Totals Seeu Wix	17.04		\$492.34

### Application

Description		Cost /Acre
Tractor spreader (MEANS 32 92 19.14 0100)		\$540.14
	Total Seed Application Cost/Acre	\$540.14

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$301.00	\$602.00
Total Mulch Materials Cost/Acre				\$602.00

### Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
Power mulcher (MEANS 32 91 13.16 0350)		\$101.93
	Total Mulch Application Cost/Acre	\$172.10

# **NURSERY STOCK PLANTING**

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

# JOB TIME AND COST

No. of Acres:	2.5	Cost /Acre:	\$2,111.65
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,032.48
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost: **\$5,279.13** 

Reseeding Job Cost:	\$645.30
Total Job Cost:	\$5,924
Job Hours:	5.00

# **REVEGETATION WORK**

Task descri	ption:	Shadescale Shrubland Seed	Mix		
ite: McClan	e Canyon Mino	e Permit Action:	RN9	Permit/Job	#: <u>C1980004</u>
	<u>IDENTIFIC</u>				
Task #:	30A	State: Colorado		Abbreviation:	None
Date:	3/5/2021	County: Garfield		Filename:	C004-30A
	CCW				

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
6-24-24, 10-20-10, 15-15-15	250.00	pound	\$0.27	\$66.25
			Total Fertilizer Materials	
			Cost/Acre	\$66.25

### Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$37.03
	Total Fertilizer Application Cost/Acre	\$37.03

# **TILLING**

Description		Cost /Acre
Chisel plowing {DMG}		\$94.63
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$107.16
	<b>Total Tilling Cost/Acre</b>	\$201.79

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.20	7.81	\$5.70
Indian Ricegrass - Nespar	1.50	4.86	\$13.31
Aster, Engleman's	0.13	0.62	\$25.22
Canby Bluegrass - Canbar	0.20	4.25	\$2.05
Sand Dropseed	0.10	11.94	\$0.98
Great Basin Wildrye - Magnar	1.00	4.06	\$11.55
Russian Wildrye - Bozoisky	0.50	2.01	\$3.24
Black-eyed Susan	0.13	5.01	\$4.10
Galleta	1.00	3.65	\$22.35
Streambank Wheatgrass - Sodar	1.00	3.26	\$5.70

Tall Wheatgrass - Jose	1.00	1.81	\$3.38
Western Wheatgrass - Arriba	1.00	2.53	\$6.50
Rabbitbrush, Rubber	0.13	1.94	\$8.36
Sagebrush, Mountain or Big	0.03	1.58	\$0.59
Flax, Lewis Blue	0.25	1.66	\$4.13
Saltbush, Four Wing	1.50	2.07	\$18.75
Saltbush, Shadscale	1.50	2.24	\$15.00
Winter Fat	0.50	1.27	\$10.25
Penstemon, Palmer	0.13	2.87	\$7.09
Penstemon, Rocky Mountain	0.13	2.04	\$3.84
Totals Seed Mix	11.93	67.47	\$172.06

### Application

Description	Cost /Acre
Tractor spreader (MEANS 32 92 19.14 0100)	\$540.14
Total Seed Application Cost/Acre	\$540.14

### **MULCHING and MISCELLANEOUS**

### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$301.00	\$602.00
Total Mulch Materials Cost/Acre				\$602.00

### Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
Power mulcher (MEANS 32 91 13.16 0350)		\$101.93
	Total Mulch Application Cost/Acre	\$172.10

### NURSERY STOCK PLANTING

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

No. of Acres:	1.5	Cost /Acre:	\$1,791.37
Estimated Failure Rate:	25%	Cost /Acre*:	\$712.20
*Selected Replanting Work Items:	SEEDING		
Initial Job Cost: <b>\$2,687.06</b>			

Reseeding Job Cost:	\$267.08
Total Job Cost:	\$2,954
Job Hours:	3.00

# **REVEGETATION WORK**

Task descr	iption:	Greasewood Shrubland Seed	Mix		
ite: McClar	e Canyon Min	e Permit Action:	RN9	Permit/Job	#: <u>C1980004</u>
	<u>TIDENTIFIC</u>				Name
Task #: Date:	_	State: <u>Colorado</u> County: Garfield		Abbreviation: Filename:	None C004-31A
User:					0001 5111

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
6-24-24, 10-20-10, 15-15-15	250.00	pound	\$0.27	\$66.25
			Total Fertilizer Materials Cost/Acre	\$66.25

### Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$37.03
	Total Fertilizer Application Cost/Acre	\$37.03

# **TILLING**

Description		Cost /Acre
Chisel plowing {DMG}		\$94.63
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$107.16
	<b>Total Tilling Cost/Acre</b>	\$201.79

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.10	3.90	\$2.85
Indian Ricegrass - Nespar	1.50	4.86	\$13.31
Aster, Engleman's	0.13	0.62	\$25.22
Canby Bluegrass - Canbar	0.20	4.25	\$2.05
Sand Dropseed	0.05	5.97	\$0.49
Great Basin Wildrye - Magnar	1.00	4.06	\$11.55
Russian Wildrye - Bozoisky	0.50	2.01	\$3.24
Black-eyed Susan	0.10	3.85	\$3.15
Galleta	1.00	3.65	\$22.35
Streambank Wheatgrass - Sodar	1.00	3.26	\$5.70

Tall Wheatgrass - Jose	1.50	2.72	\$5.06
Western Wheatgrass - Arriba	1.00	2.53	\$6.50
Rabbitbrush, Rubber	0.33	4.92	\$21.22
Vetch, American	1.50	0.68	\$149.89
Sagebrush, Mountain or Big	0.05	2.64	\$0.99
Flax, Lewis Blue	0.25	1.66	\$4.13
Saltbush, Four Wing	2.50	3.44	\$31.25
Saltbush, Shadscale	1.00	1.49	\$10.00
Winter Fat	1.50	3.82	\$30.75
Penstemon, Palmer	0.25	5.53	\$13.63
Penstemon, Rocky Mountain	0.25	3.92	\$7.38
Totals Seed Mix	15.71	69.77	\$370.69

# Application

Description		Cost /Acre
Tractor spreader (MEANS 32 92 19.14 0100)		\$540.14
	Total Seed Application Cost/Acre	\$540.14

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$301.00	\$602.00
Total Mulch Materials Cost/Acre				\$602.00

### **Application**

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
Power mulcher (MEANS 32 91 13.16 0350)		\$101.93
	<b>Total Mulch Application Cost/Acre</b>	\$172.10

### NURSERY STOCK PLANTING

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

	No. of Acres: ed Failure Rate:	25%	Cost /Acre: Cost /Acre*:	
*Selected Replanting	ng Work Items:	SEEDING		
Initial Job Cost:				
Reseeding Job Cost:	\$1,138.54			
Total Job Cost:	\$11,089			

Task # 31A

CIRCES Cost Estimating Software

# **REVEGETATION WORK**

Т	ask description	on:	Reseed Coal Mine W	aste Pile		
Site:	McClane C	anyon Mine	e Permit A	Action: RN9	Permit/Job#	t: <u>C1980004</u>
<u>PF</u>	ROJECT II					
	Task #: 1	32A	State: Col	orado	Abbreviation:	None
		3/5/2021	County: Gas	field	Filename:	C004-32A

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
6-24-24, 10-20-10, 15-15-15	250.00	pound	\$0.27	\$66.25
			Total Fertilizer Materials Cost/Acre	\$66.25

### Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$37.03
	Total Fertilizer Application Cost/Acre	\$37.03

# **TILLING**

Description		Cost /Acre
Chisel plowing {DMG}		\$94.63
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$107.16
	<b>Total Tilling Cost/Acre</b>	\$201.79

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.10	3.90	\$2.85
Indian Ricegrass - Nespar	1.50	4.86	\$13.31
Aster, Engleman's	0.13	0.62	\$25.22
Canby Bluegrass - Canbar	0.20	4.25	\$2.05
Sand Dropseed	0.05	5.97	\$0.49
Great Basin Wildrye - Magnar	1.00	4.06	\$11.55
Russian Wildrye - Bozoisky	0.50	2.01	\$3.24
Black-eyed Susan	0.10	3.85	\$3.15
Galleta	1.00	3.65	\$22.35
Streambank Wheatgrass - Sodar	1.00	3.26	\$5.70

Tall Wheatgrass - Jose	1.50	2.72	\$5.06
Western Wheatgrass - Arriba	1.00	2.53	\$6.50
Rabbitbrush, Rubber	0.33	4.92	\$21.22
Vetch, American	1.50	0.68	\$149.89
Sagebrush, Mountain or Big	0.05	2.64	\$0.99
Flax, Lewis Blue	0.25	1.66	\$4.13
Saltbush, Four Wing	2.50	3.44	\$31.25
Saltbush, Shadscale	1.00	1.49	\$10.00
Winter Fat	1.50	3.82	\$30.75
Penstemon, Palmer	0.25	5.53	\$13.63
Penstemon, Rocky Mountain	0.25	3.92	\$7.38
Totals Seed Mix	15.71	69.77	\$370.69

# Application

Description		Cost /Acre
Tractor spreader (MEANS 32 92 19.14 0100)		\$540.14
	Total Seed Application Cost/Acre	\$540.14

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$301.00	\$602.00
Total Mulch Materials Cost/Acre				\$602.00

### **Application**

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
Power mulcher (MEANS 32 91 13.16 0350)		\$101.93
	<b>Total Mulch Application Cost/Acre</b>	\$172.10

### NURSERY STOCK PLANTING

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

	No. of Acres:	4.75	Cost /Acre:	\$1,990.00
Estimate	ed Failure Rate:	25%	Cost /Acre*:	\$910.83
*Selected Replanting	ng Work Items:	SEEDING		
	*****			
Initial Job Cost:	\$9,452.50			
Reseeding Job Cost:	\$1,081.61			
Total Job Cost:	\$10,534			

Task # 32A

Job Hours: **9.50** 

# **REVEGETATION WORK**

Т	ask descrip	otion:	Reseed Coal Mine Waste Pil	e Pond		
Site:	McClane	Canyon Mine	e Permit Action:	RN9	Permit/Job	#: <u>C1980004</u>
<u>PI</u>		IDENTIFIC				
	Task #:	33A	State: Colorado		Abbreviation:	None
	Date:	3/5/2021	County: Garfield		Filename:	C004-33A
	User:	CCW				

# **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
6-24-24, 10-20-10, 15-15-15	250.00	pound	\$0.27	\$66.25
			Total Fertilizer Materials Cost/Acre	\$66.25

### Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$37.03
	<b>Total Fertilizer Application Cost/Acre</b>	\$37.03

# **TILLING**

Description		Cost /Acre
Chisel plowing {DMG}		\$94.63
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$107.16
	<b>Total Tilling Cost/Acre</b>	\$201.79

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	0.10	3.90	\$2.85
Indian Ricegrass - Nespar	1.50	4.86	\$13.31
Aster, Engleman's	0.13	0.62	\$25.22
Canby Bluegrass - Canbar	0.20	4.25	\$2.05
Sand Dropseed	0.05	5.97	\$0.49
Great Basin Wildrye - Magnar	1.00	4.06	\$11.55
Russian Wildrye - Bozoisky	0.50	2.01	\$3.24
Black-eyed Susan	0.10	3.85	\$3.15
Galleta	1.00	3.65	\$22.35
Streambank Wheatgrass - Sodar	1.00	3.26	\$5.70

Tall Wheatgrass - Jose	1.50	2.72	\$5.06
Western Wheatgrass - Arriba	1.00	2.53	\$6.50
Rabbitbrush, Rubber	0.33	4.92	\$21.22
Vetch, American	1.50	0.68	\$149.89
Sagebrush, Mountain or Big	0.05	2.64	\$0.99
Flax, Lewis Blue	0.25	1.66	\$4.13
Saltbush, Four Wing	2.50	3.44	\$31.25
Saltbush, Shadscale	1.00	1.49	\$10.00
Winter Fat	1.50	3.82	\$30.75
Penstemon, Palmer	0.25	5.53	\$13.63
Penstemon, Rocky Mountain	0.25	3.92	\$7.38
Totals Seed Mix	15.71	69.77	\$370.69

# Application

Description		Cost /Acre
Tractor spreader (MEANS 32 92 19.14 0100)		\$540.14
	Total Seed Application Cost/Acre	\$540.14

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$301.00	\$602.00
Total Mulch Materials Cost/Acre				\$602.00

### **Application**

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$70.17
Power mulcher (MEANS 32 91 13.16 0350)		\$101.93
	<b>Total Mulch Application Cost/Acre</b>	\$172.10

### NURSERY STOCK PLANTING

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

No. of Acrea Estimated Failure Rate Selected Replanting Work Item	e: 25%	Cost /Acre:         \$1,990.00           Cost /Acre*:         \$910.83	
Initial Job Cost: <b>\$1,990.00</b> Reseeding Job Cost: <b>\$227.71</b> Total Job Cost: <b>\$2,218</b>			

Task # 33A

Job Hours: **2.00** 

# **REVEGETATION WORK**

Ta	ask descript	tion:	Weed Spraying (Assume 1/3	of the Area 2 Ti	imes)	
Site:	McClane	Canyon Mine	Permit Action:	RN9	Permit/Job	o#: <u>C1980004</u>
<u>PR</u>		DENTIFIC.				
	Task #:	35A	State: Colorado		Abbreviation:	None
	Date:	3/5/2021	County: Garfield		Filename:	C004-35A
	User:	CCW				

# **FERTILIZING**

#### Materials

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

# Application

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

# TILLING

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

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
			\$
Totals Seed Mix	0.00	0.00	\$0.00

### Application

Description	Cost /Acre
	\$

# Total Seed Application Cost/Acre\$0.00

### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Banvel @ 1.0 pt/ac	1.00	ACRE	\$8.66	\$8.66
Herbicide - Tordon 22K @ 1.0 pt/ac	1.00	ACRE	\$12.88	\$12.88
Total Mulch Materials Cost/Acre				\$21.54

### Application

Description		Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	<b>Total Mulch Application Cost/Acre</b>	\$62.72

# **NURSERY STOCK PLANTING**

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

No. of Acres:	12	Cost /Acre:	\$84.26
Estimated Failure Rate:	0%	Cost /Acre*:	\$0.00
*Selected Replanting Work Items:	NONE		

Initial Job Cost:	\$1,011.12
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$1,011
Job Hours:	24.00

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description	n: Mo	bilize/Demobilize	Equipment fo	r Initial R	Reclamation		
e: McClane Ca	nyon Mine	Permit	Action: RN9			Permit/Job#: <u>C</u>	1980004
PROJECT ID	ENTIFICATI	<u>ON</u>					
Task #: 30	6A	State: Co	olorado		Abbre	eviation: None	
	/5/2021 CW	County: Ga	urfield		F	ilename: C004	-36A
Agency	or organization	n name: DRMS					
EQUIPMENT	TRANSPOR	T RIG COST					
					Shift ba		
				(	Cost Data Sour	rce: CRG Da	ta
Tru	ck Tractor Desc	ription: GENE	RIC ON-HIGH	WAY TRU	UCK TRACTO	OR, 6X4, DIESEI	POWERED,
		-			(2ND HALF,	,	
Tru	ick Trailer Desc	ription: G	ENERIC FOLD	NG GOC	DSENECK, DF	ROP DECK EQU	IPMENT
			r	FRAILER	(25T, 50T, AN	ND 100T)	
Cost Breakdown:							
Available Rig		0-25 Tons	26-50 Tons	51-	+ Tons		
	ip Cost/Hour:	\$17.20	\$29.63		38.69		
	ng Cost/Hour:	\$26.56	\$47.02	\$:	55.69		
Operat	or Cost/Hour:	\$23.63	\$23.63	\$2	23.63		
Help	er Cost/Hour:	\$0.00	\$23.53	\$2	23.53		
Total Ur	nit Cost/Hour:	\$67.39	\$123.81	\$1	41.54		
NON ROADA	BLE EQUIPN	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
Desemption	(TONS)		t	2120	fleet		
Cat D9T - 9SU	60.01	\$156.88	\$141.54	1	\$298.42	\$141.54	\$250.00
ATLAS COPCO ROC D7-11,4.0 i	0.00	\$71.15	\$67.39	1	\$138.54	\$67.39	\$250.00
Cat 324D L 9'-8 Stick		\$50.59	\$123.81	1	\$174.40	\$123.81	\$250.00
Cat 627G	41.80	\$109.10	\$123.81	1	\$232.91	\$123.81	\$250.00
CAT 12M	16.01	\$34.52	\$67.39	1	\$101.91	\$67.39	\$250.00
Drill/Broadcast Seeder with	25.00	\$6.72	\$67.39	1	\$74.11	\$67.39	\$250.00

Subtotals: **\$1,020.29 \$591.33** 

### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 2,500 Gal.	\$28.84	1	\$28.84	\$28.84
Fuel Tanker, 4x2, 170 HP	\$28.84	1	\$28.84	\$28.84
Lube Truck, 4x2, 190 HP	\$34.47	1	\$34.47	\$34.47
Flatbed Truck, 6x4, 45K GVW	\$50.03	1	\$50.03	\$50.03

\$1,500.00

Mobilization Worksheet Cont'd	Ta	sk # 36A		Page	2 of 3
Light Duty Pickup, 4x4, 1 T. Crew	\$21.48	1	\$21.48	\$21.48	]

Subtotals: \$163.66 \$163.66

# **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 40.00 45.00	miles mph
Total Non-Roadable Mob/Demob Cost *	\$7,905.68	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$290.95	_

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.89	0.89
Return Time (Hours):	0.89	0.89
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.78	1.78

### JOB TIME AND COST

Total job time: **5.56** Hours

Total job cost: \$8,197

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

	lescripti	ion: N	lobilize/Demobilize	e Equipment for	r Pond Re	emoval			
e: <u>Mc</u>	Clane (	Canyon Mine	Permit	Action: RN9		I	Permit/Job	#: <u>C19</u>	980004
<u>PROJI</u>	ECT I	DENTIFICAT	<u>TION</u>						
Tas	sk #:	37A	State: Co	olorado		Abbre	eviation:	None	
D	Date:	3/5/2021	County: Ga	arfield		Fi	lename:	C004-3	37A
U	Jser:	CCW					=		
	Agen	cy or organizati	on name: DRMS						
EQUI	PMEN	<u>T TRANSPO</u>	<u>RT RIG COST</u>						
						Shift ba	sis: 1	per day	
					(	Cost Data Sour	rce: C	RG Data	ı
	T	ruck Tractor De	scription: GENE	RIC ON-HIGHV		JCK TRACTO (2ND HALF,		DIESEL	POWERED,
	т	mult Troilor Do	· .:				,		
	1	ruck Trailer De	scription: G	ENERIC FOLD	ING GOU	DSENECK, DR	ROP DECH	K EQUII	PMENT
	1	ruck Trailer De	scription: G			SENECK, DR (25T, 50T, AN		K EQUII	PMENT
<u>Cost Br</u>			scription: G					K EQUII	PMENT
	eakdow		0-25 Tons		RAILER			C EQUII	PMENT
Availa	<u>eakdow</u> able Ri Owner	<u>'n:</u> <b>g Capacities</b> ship Cost/Hour:	0-25 Tons \$17.20	T 26-50 Tons \$29.63	<u>"RAILER</u> 51-	(25T, 50T, AN + Tons 38.69		C EQUI	PMENT
Availa	reakdow able Ri Owners Opera	<u>'n:</u> <b>g Capacities</b> ship Cost/Hour: ting Cost/Hour:	0-25 Tons \$17.20 \$26.56	<b>26-50 Tons</b> \$29.63 \$47.02	<u>`RAILER</u> 51- \$3 \$4	(25T, 50T, AN <b>Tons</b> 38.69 55.69		K EQUII	PMENT
Availa	reakdow able Ri Owners Opera Oper	<u>'n:</u> <b>g Capacities</b> ship Cost/Hour: ting Cost/Hour: ator Cost/Hour:	0-25 Tons \$17.20 \$26.56 \$23.63	T 26-50 Tons \$29.63 \$47.02 \$23.63	TRAILER           51-           \$3           \$3           \$5           \$5           \$2	(25T, 50T, AN <b>+ Tons</b> 38.69 55.69 23.63		K EQUII	PMENT
Availa	reakdow able Ri Owners Opera Oper He	<u>n:</u> g Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour:	0-25 Tons           \$17.20           \$26.56           \$23.63           \$0.00	T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	TRAILER           51-           \$2           \$2           \$2           \$2           \$2           \$2           \$2	(25T, 50T, AN <b>Tons</b> 38.69 55.69 23.63 23.53		K EQUII	PMENT
Availa	reakdow able Ri Owners Opera Oper He	<u>'n:</u> <b>g Capacities</b> ship Cost/Hour: ting Cost/Hour: ator Cost/Hour:	0-25 Tons \$17.20 \$26.56 \$23.63	T 26-50 Tons \$29.63 \$47.02 \$23.63	TRAILER           51-           \$2           \$2           \$2           \$2           \$2           \$2           \$2	(25T, 50T, AN <b>+ Tons</b> 38.69 55.69 23.63		K EQUII	PMENT
Avail	reakdow able Ri Owners Opera Oper He Total	<u>n:</u> g Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour:	0-25 Tons           \$17.20           \$26.56           \$23.63           \$0.00           \$67.39	T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	TRAILER           51-           \$2           \$2           \$2           \$2           \$2           \$2           \$2	(25T, 50T, AN <b>Tons</b> 38.69 55.69 23.63 23.53	<u>ND 100T)</u>		PMENT
Availa	reakdow able Ri Owner: Opera Oper He Total ROAD	<u>'n:</u> <b>g Capacities</b> ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour: Unit Cost/Hour:	0-25 Tons           \$17.20           \$26.56           \$23.63           \$0.00           \$67.39	T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	TRAILER           51-           \$2           \$2           \$2           \$2           \$2           \$2           \$2	(25T, 50T, AN <b>Tons</b> 38.69 55.69 23.63 23.53	ND 100T)	Ггір	DOT Permit
Availa	reakdow able Ri Owners Opera Oper He Total ROAD	<u>n:</u> <b>g Capacities</b> ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour: Unit Cost/Hour: <b>ABLE EQUI</b> Weight/ Unit	0-25 Tons           \$17.20           \$26.56           \$23.63           \$0.00           \$67.39	T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81 Haul Rig Cost/hr/uni	TRAILER           51-           \$1           \$1           \$2           \$2           \$2           \$2           \$1	(25T, 50T, AN <b>Tons</b> 38.69 55.69 23.63 23.53 41.54 Haul Trip Cost/hr/	<u>ND 100T)</u>	Ггір	
Avail: NON I Machi Descr	reakdow able Ri Owners Opera Oper He Total ROAD	<u>n:</u> <b>g Capacities</b> ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour: Unit Cost/Hour: <b>ABLE EQUI</b> Weight/ Unit (TONS)	0-25 Tons           \$17.20           \$26.56           \$23.63           \$0.00           \$67.39           PMENT:           Owner ship	T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81 Haul Rig	TRAILER           51-           \$1           \$1           \$2           \$2           \$2           \$1           \$1           Fleet	(25T, 50T, AN <b>Tons</b> 38.69 55.69 23.63 23.53 41.54 Haul Trip	ND 100T)	Ггір	DOT Permit

Subtotals: **\$372.53 \$208.93 \$500.00** 

# **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	\$50.03	1	\$50.03	\$50.03
		Subtotals:	\$50.03	\$50.03

# **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 40.00 45.00	miles mph
Total Non-Roadable Mob/Demob Cost *	\$2,406.24	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$88.94	_

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.89	0.89
Return Time (Hours):	0.89	0.89
Loading Time (Hours):	0.25	NA
Unloading Time (Hours):	0.25	NA
Subtotals:	2.28	1.78

### JOB TIME AND COST

Total job time: **4.56** Hours

Total job cost: \$2,495

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

: McClane Cany	Mobilize/Demobilize Equipment for Site Mail         e Canyon Mine       Permit Action:       RN9		Permit/Job#: <u>C1980004</u>				
PROJECT IDEN	TIFICATI	<u>ON</u>					
Task #: 38A		State: Co	olorado		Abbre	eviation: No	one
Date: 3/5/2			arfield				)04-38A
User: CCV	V	·					
Agency of	r organizatior	n name: DRMS					
EQUIPMENT T	RANSPOR'	<u>T RIG COST</u>					
					Shift ba	sis: 1 per	r day
				C	Cost Data Sour		
							SEL POWERED
Truck	Tractor Desc	rintion (FENE)					
Truck	Tractor Desc	ription: GENE	RIC ON-HIGHV				SEL I O WERED,
		·		400 HP	(2ND HALF,	2006)	
	Tractor Desc	·	ENERIC FOLD	400 HP ING GOO	(2ND HALF, SENECK, DF	2006) ROP DECK EG	
Truck		·	ENERIC FOLD	400 HP ING GOO	(2ND HALF,	2006) ROP DECK EG	
Truck Cost Breakdown:	Trailer Desc	ription: G	ENERIC FOLD T	400 HP ING GOO TRAILER (	(2ND HALF, SENECK, DR (25T, 50T, AN	2006) ROP DECK EG	
Truck <u>Cost Breakdown:</u> Available Rig Ca	Trailer Desc	ription: G	ENERIC FOLD T 26-50 Tons	400 HP ING GOO TRAILER ( 51+	(2ND HALF, SENECK, DR (25T, 50T, AN Tons	2006) ROP DECK EG	
Truck <u>Cost Breakdown:</u> Available Rig Ca Ownership	Trailer Desc pacities Cost/Hour:	ription: Gi	ENERIC FOLD T 26-50 Tons \$29.63	400 HP ING GOO TRAILER ( 51+ \$3	(2ND HALF, SENECK, DF (25T, 50T, AN Tons 8.69	2006) ROP DECK EG	
Truck Cost Breakdown: Available Rig Ca Ownership Operating	Trailer Desc pacities Cost/Hour: Cost/Hour:	ription: G	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02	400 HP ING GOO TRAILER ( 51+ \$3 \$5	(2ND HALF, SENECK, DF (25T, 50T, AN Tons 8.69 5.69	2006) ROP DECK EG	
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2	(2ND HALF, SENECK, DF (25T, 50T, AN Tons 8.69 5.69 3.63	2006) ROP DECK EG	
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$2	(2ND HALF, SENECK, DR (25T, 50T, AN Tons 8.69 5.69 3.63 3.53	2006) ROP DECK EG	
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$2	(2ND HALF, SENECK, DF (25T, 50T, AN Tons 8.69 5.69 3.63	2006) ROP DECK EG	
Truck <u>Cost Breakdown:</u> <b>Available Rig Ca</b> Ownership Operating Operator Helper Total Unit	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$2	(2ND HALF, SENECK, DR (25T, 50T, AN Tons 8.69 5.69 3.63 3.53	2006) ROP DECK EG	
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$2	(2ND HALF, SENECK, DF (25T, 50T, AN Tons 8.69 5.69 3.63 3.53	2006) ROP DECK EG	
Truck <u>Cost Breakdown:</u> <b>Available Rig Ca</b> Ownership Operating Operator Helper Total Unit	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons           \$17.20           \$26.56           \$23.63           \$0.00           \$67.39	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$2	(2ND HALF, SENECK, DF (25T, 50T, AN 70ns 8.69 5.69 3.63 3.53 41.54	2006) ROP DECK EG ND 100T)	QUIPMENT DOT Permit
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADABI Machine	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$2 \$14	(2ND HALF, SENECK, DF (25T, 50T, AN Tons 8.69 5.69 3.63 3.53	2006) ROP DECK EG ND 100T)	QUIPMENT DOT Permit
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/	0-25 Tons         \$17.20         \$26.56         \$23.63         \$0.00         \$67.39         MENT:         Owner ship	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81 Haul Rig Cost/hr/uni t	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$14 \$14 \$14 \$14	(2ND HALF, SENECK, DF (25T, 50T, AN 70ns 8.69 5.69 3.63 3.53 41.54 Haul Trip	2006) ROP DECK EG ND 100T)	QUIPMENT DOT Permit
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADABI Machine	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit	0-25 Tons         \$17.20         \$26.56         \$23.63         \$0.00         \$67.39         MENT:         Owner ship	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81 Haul Rig Cost/hr/uni	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$14 \$14 \$14 \$14	(2ND HALF, SENECK, DF (25T, 50T, AN 7005 8.69 5.69 3.63 3.53 41.54 Haul Trip Cost/hr/	2006) ROP DECK EG ND 100T)	QUIPMENT DOT Permit
Truck Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADABI Machine Description	Trailer Desc pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/H	0-25 Tons           \$17.20           \$26.56           \$23.63           \$0.00           \$67.39           MENT:           Owner ship           Cost/hr/ unit	ENERIC FOLD T 26-50 Tons \$29.63 \$47.02 \$23.63 \$23.53 \$123.81 Haul Rig Cost/hr/uni t \$67.39	400 HP ING GOO TRAILER ( 51+ \$3 \$5 \$2 \$2 \$2 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1	(2ND HALF, SENECK, DF (25T, 50T, AN (25T, 50T, AN)(25T, AN (25T, 50T, AN	2006) ROP DECK EG ND 100T) Return Trip Cost/hr/ flee	QUIPMENT DOT Permit Cost/ fleet \$250.00

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
		Subtotals:	\$0.00	\$0.00

# **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	GRAND JUNCTION 40.00 45.00	miles mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$9,100.16	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$0.00	_

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.89	0.89
Return Time (Hours):	0.89	0.89
Loading Time (Hours):	1.50	NA
Unloading Time (Hours):	1.50	NA
Subtotals:	4.78	1.78

### JOB TIME AND COST

Total job time: 9.56 Hours

Total job cost: \$9,100

### SITE MAINTENANCE

Т	ask description:	10 year site maintenance						
Site: _]	McClane Canyon Min	e Permit Action: <u>RN9</u>	Permit/Job#: <u>C1980004</u>					
<b>PROJEC</b>	T IDENTIFICATIO	<u>DN</u>						
Task #: Date: User:	39A 3/5/2021 CCW	State:ColoradoCounty:Garfield	Abbreviation:NoneFilename:C004-39A					
Agency or organization name: DRMS								
UNIT COSTS								

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Rill and Gullies and	40.00	Cat D3K LGP - 3P	400.00	EA	\$96.33	\$38,532.00
other site maintenance						

Job Hours: 0.00

Total Cost: \$38,532.00