

1313 Sherman St. Room 215 Denver, CO 80203

April 5, 2018

Mr. George Glasier Pinon Ridge Mining LLC P O Box 825 31161 Highway 90 Nucla, CO 81424

Re: St Jude Mine, Permit No. M-1978-039-HR, Financial Warranty Increase, Revision No. SI-2

Dear Mr. Glasier:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed). Therefore, pursuant to Section 34–32–117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter. The additional amount needs to be accepted prior to Friday, June 08, 2018. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be $\underline{$61,021.00}$. This is an increase of $\underline{$13,321.00}$ over the $\underline{$47,700.00}$ currently held by the Division. This estimate is based on conditions observed during the March 28, 2018 inspection.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria. If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field Office, by phone at (970)-243-6368 or by email at lucas.west@state.co.us.

Sincerely,

Lucas J. West

Environmental Protection Specialist Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215

Denver, CO 80203

Phone: (970)-243-6368



Enclosure: Reclamation Cost Estimate Worksheets

Barbara J. Coria, DRMS Financial Assurance Specialist Russ Means, Senior Environmental Protection Specialist cc:

Ec: James Blair, Bureau of Land Management

COST SUMMARY WORK

Task description:

Cost Summary

Site: St Jude Mine

Permit Action: 2018 Update

Permit/Job#: M1978039HR

PROJECT IDENTIFICATION

Task #:

000

State:

Colorado

Abbreviation:

None

Date: User:

4/5/2018 LJW

County: San Miguel Filename:

M039-000

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task 🤅	Description	Form Used	Fleet Size	Task Hours	Cost
001	Demolish onsite structures; underground or surface disposal	DEMOLISH	1	30.00	\$7,888.95
002	Remove and backfill ore pad liner and gravel	LOADER] 1	2.78	\$222.00
003	Portal closure (backfill and recontour)	MINESEAL] 1	24.00	\$8,397.00
004	Grade waste dump (DRA), pad and portal areas	DOZER] 1	21.39	\$5,146.00
005	Rip compaction on pad	RIPPER] 1	5.63	\$1,395.00
006	Carry topsoil to pad for spreading	LOADER] 1	8.30	\$661.00
007	Spread topsoil on pad areas	DOZER] 1	2.84	\$682.00
008	Grade access road	DOZER] 1	0.52	\$125.00
009	Revegetate disturbed areas	REVEGE	1	10.00	\$16,649.00
010	Haul reclamation equipment to and from site	MOBILIZE	1	8.00	\$6,050.00
		SUBTO	TALS:	113.46	\$47,216

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: Performance bond:

Job superintendent:

2.02

1.05

64.73

10.00

\$953.76 Total =

Total = \$495.77

\$4,728.53 Total =

Total = \$4,721.60

TOTAL O & P =

\$10,899.66

CONTRACT AMOUNT (direct + O & P) = \$58,115.66

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Profit:

Financial warranty processing (legal/related costs):

0.00 0.00 Total = 0.00

Total = \$0.00

Engineering work and/or contract/bid preparation: Reclamation management and/or administration:

5.00

\$2,905.78

CONTINGENCY:

0.00

Total = \$0.00

TOTAL INDIRECT COST = \$13,805.44

TOTAL BOND AMOUNT (direct + indirect) = \$61,021.44

DEMOLITION WORK

Task description:

Demolish onsite structures; underground or surface disposal

Site: St Jude Mine

Permit Action: 2018 Update

Permit/Job#: M1978039HR

PROJECT IDENTIFICATION

Task #:

001

State: County: San Miguel

Colorado

Abbreviation:

None

Date: 4/5/2018 User: LJW

Agency or organization name: DRMS

M039-001 Filename:

UNIT COSTS

Location adjustment: 96.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Shop/dry/office metal bldg.	40x50x15	Bldg. (SN) demo./on- site disposal in existing pit or cut - Max. 200 ft. push	30,000.00	CF	\$0.18	\$5,370.00
Shop/dry/office bldg. concrete slab	40x50	Demo. and on-site disposal in existing pit, 4 in. thick - Max. 200 ft. push	2,000.00	SF	\$0.41	\$814.00
Denison-owned powerlines	630 LF	Disposal of utility pole cross arms and hardware surplus material	630.00	LF	\$0.01	\$6.30
Electric substation, fenced	10x15x6	Fencing, chain link, including posts and fabric - to 6 ft. high	50.00	LF	\$2.62	\$131.00
Electric transformers, non- PCB	20x36 in	Hazardous waste removal - Drum solids/liquids, per drum, (1-6 drum job)	2.00	DRUM	\$614.14	\$1,228.28
Wood-cribbed loadouts	40x15x5	Bldg. (SN) demo./on- site disposal in existing pit or cut - Max. 50 ft. push	3,000.00	CF	\$0.17	\$522.00
Misc parts and debris	20x20x10 mass	Push demolished materials/rubble/debris into pit - Max. 100 ft. push	150.00	CY	\$0.47	\$69.75

Total Cost Subtotal (adjusted for Job Hours: 30.00 (unadjusted): \$8,141.33 location): \$7,888.95

WHEEL LOADER – LOAD AND CARRY WORK

	sk description: St Jude Mine					pad liner au on: 2018 U				Darmit/Ial	.#. 1	M1978039I
· _	St Jude Wine			Per	mit Acti	on: _2018 C	puate		-	Permit/Joc)#:	W11978U39
PRO	OJECT IDENTI	FICA	<u>FION</u>									
	Task #: 002			State:	Colora	do			Abbı	eviation:	Nor	ne
	Date: 4/5/201	8	C	ounty:	San M					ilename:		39-002
	User: LJW		_			- 100 W				,		
	Agency or or	ganizati	ion nam	e: DR	MS							
<u>HO</u>	URLY EQUIPM	1ENT	COST									
	Basic Machine:	: CA	T 924H					Horsepov	ver:		128	
	Attachment 1:	: RO	PS Cab					Shift Ba		1 p	er day	y
								Data Sou			CRG)	
Cost	Breakdown:											
						Utilizat	on %					
	Ownership Co			\$18.1		NA NA		_				
	Operating Co			\$20.2		100		_				
	Operator Co			\$41.2		NA NA	L	_				
	Total Unit Co	st/Hour	:	\$79.5	6	_						
	Total Fleet Co	ost/Hou	r:	\$79.5	56	_						
MA	TERIAL QUAN	TITI	ES									
	Initial volume:	500			CCY	Sw	ell fact	or: 1.0	50			
	Loose volume:		530		LCY							
	Source	e of ect	imated	volume:	Divis	ion of Reclar	nation	Mining &	Safe	ets/		
	Source of					andbook	nation,	Willing &	. Jaic	ity		
						/(4)						
HO	URLY PRODUC	CTION	<u>1</u>									
Load	der Cycle Time:			Unadju	sted Ba	sic Cycle Tin	ne (loa	d, dump,		0.475		minutes
						•	-	neuver):		0.475		
	Cycle Time Fa							i	acto	r (min.)	S	Source
		erial:				neter 0.00			0.	000	(C	Cat HB)
	Stock					not applicabl			0.	000	(C	at HB)
	Truck Owner	_				not applicabl	e 0.00			000	-	at HB)
	Opera			int operat						.040		at HB)
	Dump Ta	arget:	No adj	ustment -		not applicabl				000		at HB)
						Cycle Time A				.040		inutes
					Adjı	ısted Basic C	ycle T	ime:	0.	435	n	inutes
R _O 11	ing Resistance – Re	oad Co	ditions									
KUII												
	На					ance, no wate						
	Retu	rn: <u> </u>	cutted d	irt, little i	mainten	ance, no wate	r, I" ti	re penetra	tion 4	1.0		
<u>Hau</u>	l and Return Time											
		Ler	igth	Grade	Res.	Rolling	Tot	al Res.	Tra	vel Time	_	•
			et)	(%		Res. (%)		(%)		ninutes)	5	Source
	Haul Route:		20	0.0		4.00		100		1260	10	'at UR)

Loader Worksheet Cont'd		Task # 002	Page 2 of 2
Return Route:	200	0.00 4.00 4.00	0.1269 (Cat HB)
		Total Travel Time Total Cycle Time	
Load Bucket Capacity			
Rated Capacity:	2.70	LCY (heaped)	
Bucket Fill Factor:		Sand and gravel (95% - 100%)	0.975
Adjusted Capacity:		LCY	
Job Condition Correction F Site Altitude: 5800 feet	actors		
		Source	
Altitude Adj:	1.00	(CAT HB)	
Job Efficiency:	0.83	(1 shift/day)	
Net Correction:	0.83	multiplier	
Adj	usted Hourly Unusted Hourly Unusted Hourly Flo	it Production: 190.31 L	.CY/Hour .CY/Hour .CY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s)

Unit cost: _____\$0.418_____ /LCY

Total job time: 2.78 Hours

SAFEGUARDING UNDERGROUND OPENINGS

Task description:

Portal closure (backfill and recontour)

Site: St Jude Mine

Permit Action: 2018 Update

Permit/Job#: M1978039HR

PROJECT IDENTIFICATION

Task #:

003 4/5/2018 State:

Colorado

Abbreviation: None

Filename: M039-003

Date: _ User: LJW

Agency or organization name: DRMS

County: San Miguel

UNIT COSTS

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Backfill inert debris/rock in adit	10x10	Adit closure - backfilling (per cu. yd.)	200.00	CY	\$27.00	\$5,400.00
Backfill earth and recontour portal	10x10	Adit closure - backfilling (per cu. yd.)	111.00	CY	\$27.00	\$2,997.00

Job Hours: _____ 24.00

Total Cost: \$8,397.00

BULLDOZER WORK

Task description:	Grade waste dur	np (DRA), p	oad and portal areas		
Site: St Jude Mine	Per	mit Action:	2018 Update	Permit/Jol	o#: <u>M1978039HR</u>
PROJECT IDENTIF	<u>ICATION</u>				
Task #: 004	State:	Colorado		Abbreviation:	None
Date: 4/5/2018	County:	San Migue	1	Filename:	M039-004
User: LJW			01. <u>1 - 13.85 - 1112 - 1</u> .		
Agency or orga	anization name: DR	MS			
HOURLY EQUIPM	ENT COST				
	at D9T - 9SU				
	05		_		
	emi-Universal				
	-shank ripper				
	per day				
	CRG)	1111	-		
	SKG)		-		
Cost Breakdown:			Utilization %		
Ownership Cost/Hour		\$100.59	NA 100	=====	
Operating Cost/Hour		\$87.23	100		
Ripper own Cost/Hour		\$10.94	NA		
Ripper op. Cost/Hour		\$0.00	0		
Operator Cost/Hour		\$41.85	NA NA		
Operator Cost/Hour	200	Ψ1.05	NA		
Total unit Cost/Hour:	\$240.61				y.
Total Fleet Cost/Hour:	\$240.61				
MATERIAL OHAN	PITIEC				
MATERIAL QUANT					
	,000	_			
	335	_			
Loose volume: 16	,020 LCY	_			
Source of estimated vo	Jume Division	of Reclamati	on, Mining & Safety		
Source of estimated sw			on, mining a barery		
factor:	Cut Hand	book			
14001.					
HOURLY PRODUC	TION				
HOURLI PRODUC	HON				
Average push distance	50 feet				
Unadjusted hourly	2,110.5 LC	Y/hr			
production:					
Materials consistency	description: Consol	dated stock	oile 1.0		
Average push	5 %				
gradient:					
Average site altitude:	5,800 feet	_			
ū					
Material weight:	_2,550 lbs/LCY			_	
Weight description:	Sandstone				
Job Condition Correction	n Factor		Source		
200 Condition Confection	II I CIUI		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:	0.700	(FND-MF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3549

Adjusted unit production:

749.02 LCY/hr

Adjusted fleet production:

749.02 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.321/LCY

Total job time: 21.39 Hours
Total job cost: \$5,146

BULLDOZER RIPPING WORK

Task description:	Rip compaction on pac	i			
Site: St Jude Mine	Permit Ac	ction: 2018 Updat	<u>e</u> P	ermit/Job#: M1	978039HR
PROJECT IDEN	FIFICATION				
Task #: 005	State: Colo	rado	Abbrev	viation: None	
Date: 4/5/20	018 County: San l	Miguel	File	ename: M039-	005
User: LJW			<u> </u>		
Agency or	organization name:DRMS				
HOURLY EQUIF	PMENT COST				
Basic Ma	chine: Cat D9T - 9SU		Horsepower:	405	
Ripper Attach	ment: 3-Shank Ripper		Shift Basis:	1 per day	
••			Data Source:	(CRG)	
Cost Breakdown:					
			Utilization %		
	Ownership Cost/Hour:	\$100.59	NA		
	Operating Cost/Hour:	\$87.23	100		
	Ownership Cost/Hour:	\$10.94	NA NA		
Ripper	Operating Cost/Hour:	\$6.82	100		
_	Operator Cost/Hour:	\$41.85	NA NA		
,	Fotal Unit Cost/Hour:	\$247.43			
Т	Cotal Fleet Cost/Hour:	\$247.43			
ea: 4.00	acres Rip Depth ource of estimated quantity: _A		Volume:	6,453	BCY or
HOURLY PROD	<u>UCTION</u>				
Seismic:			9		
	Seismic Velocity:	NA	feet/seco	nd	
Area:					
	Average Ripping Depth:	2.63	mph		
	Average Ripping Width:	7.67	degrees		
	Average Ripping Length:	250.00	feet		
	Average Dozer Speed:	88.00	feet		
	Average Maneuver Time: Production per unit area:	0.25 0.855	feet acres/hou	r	
Job Condition Correct	-	0.033	40103/1104		
-	usted Hourly Unit Production:	0.855	Acres/hr		
	Site Altitude:	5,800	feet		
	Altitude Adj:	1.00	(CAT HE	8)	
	Job Efficiency:	0.83	(1 shift/d	•	
	Net Correction:	0.83	multiplie	* '	
	Adjusted Hourly Unit Produc Adjusted Hourly Fleet Produc		Acres/hr Acres/hr		
JOB TIME AND	COST				
Fleet size:	1 Grader(s)	Total job tin	ne:5.	64	Hours
	\$348.868 Per acre	Total job co	ost: \$1,		

WHEEL LOADER – LOAD AND CARRY WORK

	:		Permit A	Action:	2018 Up	date		Permit/J	ob#:	M1978039
PROJECT IDI	ENTIFIC	<u>ATION</u>								
Task #: 00	16		State: Co	lorado				Abbreviation:	N	one
	5/2018	(County: Sar	ı Miguel				Filename:	M	1039-006
User: LJ	W									
Agency	or organiz	ation nan	ne: DRMS							
HOURLY EQ	J IPMEN	<u>г cost</u>	•							
Basic Ma	chine: C	CAT 924F	I				Horsepow	er:	128	
Attachm	ient 1: R	OPS Cab)				Shift Bas		per c	
							Data Sour	ce:	(CRC	3)
Cost Breakdown:										
					Utilizatio	n %				
	ip Cost/Ho		\$18.14		NA		_			
	ng Cost/Ho		\$20.22		100		_			
_	or Cost/Ho		\$41.20		NA		_			
Total Ur	nit Cost/Ho	ur:	\$79.56							
Total Fl	eet Cost/He	our:	\$79.56							
MATERIAL Q	UANTIT	<u>IES</u>								
Initial volu	me: 1,5	00	C	CY	Swe	ll fact	or: 1.00	0		
Loose volu	me:	1,500	L(CY						
	Source of e	estimated	volume: D	ivision o	f Reclama	ation.	Mining &	Safety		
	Source of e			ivision o at Handb		ation,	Mining &	Safety		
						ation,	Mining &	Safety		
	ce of estin	ated swe				ation,	Mining &	Safety		
Sour HOURLY PRO	ce of estin	ated swe	Il factor: Ca	at Handb	ook			Safety		minutes
Sour	ce of estin	ated swe		at Handb	ook	e (load	d, dump,	Safety 0.475		minutes
Sour HOURLY PRO Loader Cycle Tin	DUCTION	nated swe	Il factor: Ca	at Handb	ook	e (load	l, dump, neuver):	0.475		_
Sour HOURLY PRO Loader Cycle Tin	ce of estin	nated swe	Il factor: Ca	at Handb	ook	e (load	l, dump, neuver):			minutes Source (Cat HB)
HOURLY PRO Loader Cycle Tin	DDUCTION DDUCTION DE: Me Factors Material: Stockpile:	Mixed No ad	Unadjusted I material 0.02 justment - fac	Basic C	ycle Time	e (loac ma	l, dump, neuver):	0.475 actor (min.)		Source
HOURLY PRO Loader Cycle Tin Cycle Tin	DDUCTION The control of the control	Mixed No ad No ad	Unadjusted I material 0.02 justment - fac justment - fac	Basic C	ycle Time	e (loac ma	l, dump, neuver):	0.475 actor (min.) 0.020		Source (Cat HB)
HOURLY PRO Loader Cycle Tin Cycle Tin	DDUCTION The control of the control	Mixed No ad Const	Unadjusted I material 0.02 justment - faci	Basic C tor not a tor not a -0.04	ycle Time	0.00 0.00	l, dump, neuver):	0.475 actor (min.) 0.020 0.000 0.000 -0.040		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)
HOURLY PRO Loader Cycle Tin Cycle Tin	DDUCTION The control of the control	Mixed No ad Const	Unadjusted I material 0.02 justment - faci justment - faci ant operation justment - fac	Basic C tor not a tor not a -0.04 tor not a	ycle Time pplicable pplicable	0.00 0.00	d, dump, neuver): F	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Sour HOURLY PRO Loader Cycle Tin Cycle Tin	DDUCTION The control of the control	Mixed No ad Const	Unadjusted I material 0.02 justment - faci justment - faci ant operation - justment - fac	Basic C tor not a tor not a -0.04 tor not a let Cycle	pplicable pplicable pplicable	0.00 0.00 0.00	d, dump, neuver): F	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Sour HOURLY PRO Loader Cycle Tin Cycle Tin	DDUCTION The control of the control	Mixed No ad Const	Unadjusted I material 0.02 justment - faci justment - faci ant operation - justment - fac	Basic C tor not a tor not a -0.04 tor not a let Cycle	ycle Time pplicable pplicable	0.00 0.00 0.00	d, dump, neuver): F	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Sour HOURLY PRO Loader Cycle Tin Cycle Tin Truck C	me Factors Material: Stockpile: Ownership: Operation: mp Target:	Mixed No ad No ad Const	Unadjusted Unadjusted I material 0.02 justment - faction fa	Basic C tor not a tor not a -0.04 tor not a let Cycle	pplicable pplicable pplicable	0.00 0.00 0.00	d, dump, neuver): F	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tin Cycle Tin	me Factors Material: Stockpile: Ownership: Operation: mp Target:	Mixed No ad No ad Const	Unadjusted Unadjusted I material 0.02 justment - faction fa	Basic C tor not a tor not a -0.04 tor not a let Cycle	pplicable pplicable pplicable	0.00 0.00 0.00	d, dump, neuver): F	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Sour HOURLY PRO Loader Cycle Tin Cycle Tin Truck C	me Factors Material: Stockpile: Ownership: Operation: mp Target:	Mixed No ad No ad No ad Const No ad Rutted d	Unadjusted Unadjusted I material 0.02 justment - fac justment - fac ant operation justment - fac	Basic C tor not a tor not a -0.04 tor not a let Cycle Adjusted tenance,	pplicable pplicable pplicable Time Ad Basic Cy	0.00 0.00 0.00 ljustm	d, dump, neuver): F lent: ime:	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020 0.455		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Sour HOURLY PRO Loader Cycle Tin Cycle Tin Truck C	me Factors Material: Stockpile: Ownership: Operation: mp Target:	Mixed No ad No ad No ad Const No ad Rutted d	Unadjusted Unadjusted I material 0.02 justment - fac justment - fac ant operation justment - fac	Basic C tor not a tor not a -0.04 tor not a let Cycle Adjusted tenance,	pplicable pplicable pplicable Time Ad Basic Cy	0.00 0.00 0.00 ljustm	d, dump, neuver): F lent: ime:	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020 0.455		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tin Cycle Tin Truck C	me Factors Material: Stockpile: Ownership: Operation: mp Target: e - Road C Haul: Return:	Mixed No ad No ad No ad Const No ad Rutted d	Unadjusted Unadjusted I material 0.02 justment - fac justment - fac ant operation justment - fac	Basic C tor not a tor not a -0.04 tor not a let Cycle Adjusted tenance,	pplicable pplicable pplicable Time Ad Basic Cy	0.00 0.00 0.00 ljustm	d, dump, neuver): F lent: ime:	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020 0.455		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tin Cycle Tin Truck C	me Factors Material: Stockpile: Operation: mp Target: e — Road C Haul: Return:	Mixed No ad No ad Const No ad Conditions	Unadjusted Unadjusted I material 0.02 justment - fac justment - fac ant operation justment - fac it, little main lirt, little main	Basic C tor not a tor not a tor not a tor not a diet Cycle Adjusted tenance,	pplicable pplicable pplicable Time Ad Basic Cy no water	0.00 0.00 0.00 ljustm cle Ti	d, dump, neuver): F lent: ime: re penetrat	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020 0.455		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tin Cycle Tin Truck C	me Factors Material: Stockpile: Operation: mp Target: e - Road C Haul: Return: Time	Mixed No ad No ad No ad Const No ad Rutted d	Unadjusted Unadjusted I material 0.02 justment - fac justment - fac ant operation justment - fac	Basic C tor not a tor not a -0.04 tor not a let Cycle Adjusted tenance,	pplicable pplicable pplicable Time Ad Basic Cy	0.00 0.00 0.00 ljustm cle Ti	d, dump, neuver): F lent: ime:	0.475 actor (min.) 0.020 0.000 0.000 -0.040 0.000 -0.020 0.455		Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes

Loader Worksheet Cont'd		Task # 00	06			Page 2 of 2
Return Route:	200 0.	00 4.0	00	4.00	0.1269	(Cat HB)
			Total Trav Total Cyc		0.2539 0.7089	minutes minutes
Load Bucket Capacity						
Rated Capacity Bucket Fill Factor Adjusted Capacity Job Condition Correction Site Altitude: 5800 feet	1.050 2.84	LCY (heape Moist loam of LCY		ay (100%	- 110%) 1.050	
Ad	1.00 0.83 0.83 djusted Hourly Unit ljusted Hourly Unit justed Hourly Fleet	Production:	239.96 199.16 199.16	LC	Y/Hour Y/Hour Y/Hour	
JOB TIME AND COS	<u>T</u>					

Total job time: 7.53 Hours

Total job cost: \$599

Fleet size: 1 Loader(s)

Unit cost: \$0.399 /LCY

BULLDOZER WORK

Task description:	Spre	ad topsoil o	n pad areas		***	
Site: St Jude Mine		Pe	rmit Action:	2018 Update	Permit/Job	#: <u>M1978039HR</u>
PROJECT IDEN	TIFICATIO	<u>DN</u>				
Task #: 007 Date: 4/5/2 User: LJW		State: County:	Colorado San Migue	1 2	Abbreviation: Filename:	None M039-007
	r organization	name: DI	RMS			102-
HOURLY EQUI	PMENT CO	<u>ST</u>				
Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	405 Semi-Univ 3-shank rip 1 per day	ersal				
Cost Breakdown:			1	Utilization %		
Ownership Cost/I	Hour:		\$100.59	NA		
Operating Cost/I	Hour:		\$87.23	100		
Ripper			\$10.94	NA		
Cost/I Ripper op. Cost/I			\$0.00	0		
Operator Cost/l			\$41.85	NA		
Total Fleet Cost/F MATERIAL QU Initial Volume: Swell factor: Loose volume:	,	61				
Source of estimate		Division Cat Hand		on, Mining & Safety		
factor:		-				
HOURLY PROI	DUCTION					
Average push dist Unadjusted hourly production:		75 feet 1,514.3 LC	CY/hr			
Materials consiste	ency descriptio	n: Conso	lidated stock	pile 1.0		
Average push gradient: Average site altitu	0 % ude: 5,800) feet	_			
Material weight:	2,550	lbs/LCY			_	
Weight descriptio		- Dry packe	ed			
Job Condition Corre	ection Factor			Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3930

Adjusted unit production: Adjusted fleet

595.12 LCY/hr

production:

595.12 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s) Unit cost: \$0.404/LCY

Total job time: 2.84 Hours Total job cost: \$682

BULLDOZER WORK

Task description:	Grade access ro	oad			
Site: St Jude Mine	Pe	ermit Action:	2018 Update	Permit/Job	#: <u>M1978039HR</u>
PROJECT IDENTI	FICATION				
Task #: 008	State:	Colorado		Abbreviation:	None
Date: 4/5/2018		San Migue	1	Filename:	M039-008
User: LJW	S County.	Sali Wilgue	<u> </u>	riiename.	101039-006
OSCI. LJW					
Agency or org	ganization name:D	RMS			
HOURLY EQUIPM	IENT COST				
Basic Machine:	Cat D9T - 9SU				
Horsepower:	405		_		
	Semi-Universal		_		
	3-shank ripper		_		
	1 per day		_		
	(CRG)		_		
	,01(0)		_		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hou		\$100.59	NA		
Operating Cost/Hou	r:	\$87.23	100		
Ripper own	n.	\$10.04	NIA		
Cost/Hou	r:	\$10.94	NA		
Ripper op. Cost/Hou	r:	\$0.00	0		
Operator Cost/Hou		\$41.85	NA		
operator contribu		ψ 11.05	III.		
Total unit Cost/Hour:	\$240.61				
Total Fleet Cost/Hour	: \$240.61				
			;:-		
MATERIAL QUAN	TITIES				
	25				
	.165				
Loose volume: 3	79 LCY				
	1) 4' ' O O C '		
Source of estimated v			on, Mining & Safety	-	
Source of estimated s	well Cat Han	dbook			
factor:					
HOURLY PRODUC	CTION				
Average push distance	e: 50 feet				
Unadjusted hourly	2,110.5 LC	CY/hr			
production:	,				
•					
Materials consistency	description: Consc	lidated stockr	nile 1 0		
iviatoriais consistency	description. Consc	maatea stock	71.0		
Average push	0 %				
gradient:	0 70				
	5 000 f4				
Average site altitude:	5,800 feet				
Material weight:	2,900 lbs/LCY			_	
Weight description:	Decomposed roc	k - 50% Rock	, 50% Earth		
Joh Condition Comment	on Paston		C		
Job Condition Correction	on ractor		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:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3455

Adjusted unit production: Adjusted fleet

729.18 LCY/hr

production:

729.18 LCY/hr

JOB TIME AND COST

1 Dozer(s) Fleet size: \$0.330/LCY Unit cost:

Total job time: _ **0.52** Hours Total job cost: \$125

REVEGETATION WORK

Task description:	Revegetate disturbed a	reas			
e: St Jude Mine	Permit Ac	etion: _2018	Update	Permit/Job#	#: <u>M1978039HR</u>
PROJECT IDENTIF	<u>ICATION</u>				
Task #: 009 Date: 4/5/2018 User: LJW Agency or orga	State: Color County: San Manization name: DRMS	rado Miguel		= "	None M039-009
FERTILIZING Materials Description		Units /	Unit	Cost / Unit	Cost /Acre
				\$	\$
Application				Total Fertilizer Materials Cost/Acre	\$0.00
Description					Cost /Acre

TILLING

Description		Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$106.29
		-
	Total Tilling Cost/Acre	\$106.29

Total Fertilizer Application Cost/Acre

SEEDING

Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
0.96	15.67	\$13.92
7.42	24.02	\$51.94
0.14	16.71	\$1.52
4.08	17.98	\$95.88
4.94	18.03	\$122.02
0.20	4.13	\$6.91
0.20	10.56	\$3.95
0.50	0.69	\$6.25
0.50	1.27	\$10.25
	PLS LBS / Acre 0.96 7.42 0.14 4.08 4.94 0.20 0.20 0.50	PLS per SQ. FT 0.96 15.67 7.42 24.02 0.14 16.71 4.08 17.98 4.94 18.03 0.20 4.13 0.20 10.56 0.50 0.69

\$

\$0.00

	Totals Seed Mix	18.94	109.07	\$312.63	
Application					
Description				Cost /Acre	
Broadcast seeding [DMG]				\$267.22	
	Total Seed	Application	on Cost/Acre	\$267.22	

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$261.00	\$522.00
Herbicide - 2,4D @ 1.0 pt/ac	9.00	ACRE	\$2.74	\$24.66
Total Mulch Materials Cost/Acre				\$546.66

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$66.02
Weed spray, truck, non-aquatic area, nox. [DMG]		\$71.50
	Total Mulch Application Cost/Acre	\$137.52

NURSERY STOCK PLANTING

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

JOB TIME AND COST

Cost /Acre: \$1,370.32 Cost /Acre*: \$1,370.32

No. of Acres: 9 CO
Estimated Failure Rate: 35% CO
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: \$12,332.88

Reseeding Job Cost: \$4,316.51

Total Job Cost: \$16,649 Job Hours: 10.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:

Haul reclamation equipment to and from site

Site: St Jude Mine

Permit Action: 2018 Update

Permit/Job#: M1978039HR

PROJECT IDENTIFICATION

Task #:

010

State: Colorado

Abbreviation:

None

Date:

4/5/2018

County: San Miguel

Filename:

M039-010

User: LJW

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis:

1 per day

Cost Data Source:

CRG Data

Truck Tractor Description:

GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,

400 HP (2ND HALF, 2006)

Truck Trailer Description:

GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT

TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

NON ROADABLE EQUIPMENT:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
-	(TONS)		t		fleet		
Cat D9T - 9SU	66.13	\$111.53	\$125.45	1	\$236.98	\$125.45	\$250.00
CAT 924H	12.69	\$18.14	\$88.67	1	\$106.81	\$88.67	\$250.00
Drill/Broadcast	25.00	\$12.22	\$88.67	1	\$100.89	\$88.67	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00
(Bowie LD-90)							

Subtotals:

\$540.38

\$391.46

\$1,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$12.26	1	\$12.26	\$12.26

Subtotals:

\$12.26

\$12.26

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

NATURITA 40.00 miles 40.00 mph

Total Non-Roadable Mob/Demob Cost *

"* two round trips with haul rig:

\$6,025.20

Total Roadable Mob/Demob Cost **

** one round trip, no haul rig:

\$24.52

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.00	1.00
Return Time (Hours):	1.00	1.00
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	4.00	2.00

JOB TIME AND COST

Total job time: 8.00 Hours

Total job cost: \$6,050