September 5, 2018

Russell Larsen/ Jon Muller Kilgore Companies LLC dba Elam Construction 556 Struthers Ave Grand Junction CO 81501



1313 Sherman Street, Room 215 Denver, CO 80203

RE: Woodring Pit, Permit No. M-1978-323, Reclamation Costs Update and Notice of Surety Increase (SI-4)

Dear Mr. Larsen/Muller:

On July 12, 2018 the Colorado Division of Reclamation, Mining and Safety (Division) approved the Transfer of Permit and Succession of Operators Application (SO-2). 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 Division has updated the reclamation cost estimate (copy enclosed).

Division calculations estimate the cost to reclaim the above referenced site to be \$284,766.42. This is an increase of \$147,004.99 over the \$137,761.43 currently held by the Division. This estimate is based on conditions observed during the July 26, 2018 inspection. Therefore, pursuant to Section 34–32.5–117(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 Monday, November 05, 2018. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

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, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.veldell@ state.co.us

Sincerely,

Amy Yeldell

**Environmental Protection Specialist** 

Ec: Wally Erickson, Senior EPS, Grand Junction DRMS

Enc: Financial Warranty Cost Estimate

Notice of Estimated Reclamation Cost Estimate



## **COST SUMMARY WORK**

Task description:	SO-2 update PRELIMINARY

Site: Woodring Pit Permit Action: SO-2 Permit/Job#: M1978323

## **PROJECT IDENTIFICATION**

Task #:ACYState:ColoradoAbbreviation:NoneDate:8/1/2018County:MesaFilename:M323-ACY

User: ACY

Agency or organization name: DRMS

## TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	-		
	Description	Used	Size	Hours	Cost		
01a	Rough grade pit floor	DOZER	2	28.47	\$14,030.00		
02a	Rip compaction on pit floor	RIPPER	2	13.43	\$7,164.00		
03a	Push overburden off top of north highwall to pit	DOZER	2	42.23	\$20,810.00		
	floor		ļ				
04a	Distribute overburden over pit floor	SCRAPER1	1	57.71	\$46,909.00		
05a	Distribute and configure overburden on pit floor	GRADER	1	5.58	\$875.00		
06a	Push topsoil off highwall to pit floor	DOZER	2	9.18	\$4,522.00		
07a	Distribute topsoil over pit floor	SCRAPER1	1	20.25	\$16,463.00		
08a	Distribute and configure topsoil on pit floor	GRADER	1	5.58	\$875.00		
09a	Reduce highwalls to 2H:1V	DOZER	2	74.35	\$36,641.00		
10a	Haul overburden from berm to top of east and west	SCRAPER1	1	7.13	\$5,794.00		
	slopes						
11a	Spread overburden down east and west slopes	DOZER	2	3.34	\$1,646.00		
12a	Haul topsoil from berm to top of east and west	SCRAPER1	1	2.58	\$2,095.00		
	slopes						
13a	Spread topsoil down east and west slopes	DOZER	2	0.73	\$358.00		
14a	Spread overburden on north slope	DOZER	2	9.48	\$4,672.00		
15a	Spread topsoil on north slope	DOZER	1	4.12	\$1,015.00		
16a	Revegetate 27 acres disturbance	REVEGE	1	32.00	\$44,307.00		
17a	Mobilization	MOBILIZE	1	5.50	\$9,241.00		
18a	Secondary Mobilization	MOBILIZE	1	5.50	\$2,136.00		
	<u>SUBTOTALS:</u> 327.16 \$219,553						

## **INDIRECT COSTS**

#### **OVERHEAD AND PROFIT:**

Liability insurance: 2.02 Total = \$4,434.97 Performance bond: 1.05 Total = \$2,305.31 Job superintendent: Total = \$11,949.52 163.58 Profit: 10.00 Total = \$21,955.30

TOTAL O & P = \$40,645.10

CONTRACT AMOUNT (direct + O & P) =  $\frac{$260,198.10}{}$ 

## LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	4.25	Total =	\$11,058.42
Reclamation management and/or administration:	5.00		\$13,009.91

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$65,213.42

TOTAL BOND AMOUNT (direct + indirect) = \$284,766.42

# **BULLDOZER WORK**

Task description:	Rough grade pit floor			
: Woodring Pit	Permit Action:	SO-2	Permit/Job#:	M1978323
PROJECT IDENTIF	<u>ICATION</u>			
Task #: 01A	State: Colorado		Abbreviation:	None
Date: 8/1/2018	County: Mesa		Filename:	M323-01a
User: ACY				
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	ENT COST			
Basic Machine: Cat	t D9T - 9SU			
Horsepower: 405				
	ni-Universal			
Attachment: NA				
	er day			
Data Source: (CF	(U)	<u> </u>		
Cost Breakdown:		i		
		<u>Utilization %</u>		
Ownership Cost/Hour:	\$110.70	NA 100		
Operating Cost/Hour:	\$95.46	100		
Ripper own. Cost/Hour:	\$0.00	NA 0		
Ripper op. Cost/Hour:	\$0.00			
Operator Cost/Hour:	\$40.23	NA		
Total unit Cost/Hour:	\$246.39			
Total Fleet Cost/Hour:	\$492.79			
<b>MATERIAL QUANT</b>	CITIES			
•				
Initial Volume: 16,1				
Swell factor: 1.25 Loose volume: 20,1	68 LCY			
Loose volume: <u>20,1</u>	00 LC 1			
Source of estimated volume				
Source of estimated swell	l factor: Cat Handbook			
<b>HOURLY PRODUC</b>	<u> FION</u>			
Average push distance:	150 feet			
Unadjusted hourly produc				
Materials consistency des	Scription: Compacted fill or e	moankment 0.9		
Average push gradient:	0 %			
Average site altitude:	5,400 feet			
Material weight:	2,650 lbs/LCY			
Weight description:	Decomposed rock - 25% Rock	75% Farth	<u> </u>	
Job Condition Correction		Source		
Operator		(AVG.)		
Material consist		(CEN.)		
Dozing me		(GEN.)		
V1S1b	oility:1.000	(AVG.)		

0.830	(1 SHIFT/DAY)
0.800	(FND-RF)
1.000	(CAT HB)
1.000	(CAT HB)
0.868	(CAT HB)
1.000	(PAT)
	0.800 1.000 1.000 0.868

Net correction: 0.3890

Adjusted unit production: 354.18 LCY/hr
Adjusted fleet production: 708.36 LCY/hr

# **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.696/LCY

Total job time: 28.47 Hours
Total job cost: \$14,030

# **BULLDOZER RIPPING WORK**

	Task description:	Rip c	compaction on pit floor				
Site	Woodring Pit		Permit Action:	SO-2	Permit/Job	o#: M19783	23
	PROJECT IDE	ENTIFICATION	<u>ON</u>				
	Task #: 02A		State: Colorado		Abbreviation	: None	
		2018	County: Mesa		Filename		a
	User: AC	Y	<u> </u>				
	Agency	or organization	name: DRMS				
	<b>HOURLY EQU</b>	JIPMENT CO	<u>OST</u>				
	Basic N	Machine: Cat	D9T - 9SU		Horsepower:	405	
	Ripper Atta		hank Ripper	<del>_</del>		1 per day	
					Data Source:	(CRG)	_
	Cost Breakdown:						
					Utilization %		
		Ownership Co		\$110.70	NA NA		
	Pinno	Operating Co or Ownership Co		\$95.46 \$12.36	100 NA		
		er Operating Co		\$7.88	100		
	тирр	Operator Co		\$40.23	NA		
		Total Unit Co		\$266.63			
		Total Fleet Co	st/Hour: \$533	3.27			
	MATERIAL Q	UANTITIES	Sele	ected estimating	method: Area		
	Alternate Method		Sere	oted estimating	<u> </u>		<del></del>
Seismic:	NA	<u> </u>	Bank Volume:	NA	ВСҮ	NA	
Area:	20.00	acres	Rip Depth (ft):	1.50	Volume: 48,400	1471	BCY or CCY
		Source of estin	nated quantity: 20 ac p	it floor			
	HOURLY PRO	DUCTION					
	Seismic:						
	<u>Scisific.</u>	S	Seismic Velocity:	NA	feet/second		
	A maa.		·				
	Area:	Average	e Ripping Depth:	1.50	mph		
			e Ripping Width:	7.67	degrees		
		_	Ripping Length:	600.00	feet		
			nge Dozer Speed:	88.00	feet		
			Maneuver Time:	0.25	feet		
		Product	ion per unit area:	0.897	acres/hour		
	Job Condition Co	rrection Factors					
	Una	adjusted Hourly	Unit Production:	0.897	Acres/hr		
			Site Altitude:	5,400	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency: Net Correction:	0.83 0.83	(1 shift/day)		
					multiplier		
			Hourly Unit Production:	0.74	Acres/hr		
		Adjusted I	Hourly Fleet Production:	1.49	Acres/hr		
	JOB TIME AN	D COST					
	Fleet size:	2	Grader(s)	Total job time	e: <b>13.43</b>	Ног	ırs
	Unit cost:	\$358.203	Per acre	Total job cos	st: <b>\$7,164</b>		

# **BULLDOZER WORK**

Woodring Pit	Permit Action:	SO-2	Permit/Job#:	M1978323
PROJECT IDENTIF	ICATION			
Task #: 03A	State: Colorado		Abbreviation:	None
Date: $\frac{0.571}{8/1/2018}$	County: Mesa		Filename:	M323-03a
User: ACY	county		i iichame.	111323 034
Agency or organ	nization name: DRMS			
HOURLY EQUIPME				
	D9T - 9SU			
Horsepower: 405		=		
	mi-Universal	_		
Attachment: NA		_		
Shift Basis: 1 p	er day	_		
Data Source: (CF	RG)	_		
Cost Breakdown:				
0 ~		<u>Utilization %</u>		
Ownership Cost/Hour:	\$110.70	NA 100		
Operating Cost/Hour:	\$95.46 \$0.00	100 NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour:	\$0.00	NA 0		
Operator Cost/Hour:	\$40.23			
Operator Cost/Hour.	φ40.23	NA		
Total unit Cost/Hour:	\$246.39			
Total Fleet Cost/Hour:	\$492.79			
MATERIAL QUANT	TTIES			
Initial Volume: 48,4	00			
Swell factor: 1.12				
Loose volume: <b>54,4</b>	50 LCY			
Source of estimated volume	me: 20 ac @ 18" Depth			
Source of estimated swell				
HOURLY PRODUCT	<u> TION</u>			
Average push distance:	120 feet			
Unadjusted hourly produc				
omajastea nourry produc	1,073.1 DC 1/III			
Materials consistency des	cription: Compacted fill or em	bankment 0.9		
Average push gradient:	-25 %			
Average site altitude:	5,400 feet			
Material weight:	2,650 lbs/LCY			
Weight description:	Decomposed rock - 25% Rock, 7	75% Farth	<u>—</u>	
2				
Job Condition Correction		Source		
Operator Material consist		(AVG.) (CAT HB))		
Dozing me		(GEN.)		
	sility: 1.000	(GEN.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5898

Adjusted unit production: 644.71 LCY/hr
Adjusted fleet production: 1289.42 LCY/hr

# **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.382/LCY

Total job time: 42.23 Hours
Total job cost: \$20,810

# SCRAPER TEAM WORK

Task description:	Distribute	overburd	en over	pit floor			
Site: Woodring Pit		Permit	Action:	SO-2	Per	mit/Job#: M197	78323
Task #: 04A Date: 8/1/20 User: ACY	S	anty: N	olorado Iesa			viation: None M323	-04a
HOURLY EQUIP				COSTS	hift basis: 1 per d	l <u>ay</u>	
			Equipma	ent Description		<del></del>	
	rt Equipment -Loa	craper: Dozer: d Area: p Area: Grader:		'G w/push-pull			
Cost Breakdown:	Scraper Wo	·k Taam		Support Equi	nment	Maintenance	Fauinment
Cost Breakdown.	Scraper Wol	Doz	er	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100		100	NA	NA	NA	NA
Ownership cost/hour:	\$108.96	\$1	10.70	NA	NA	NA	NA
Operating cost/hour:	\$128.41	\$	95.46	NA	NA	NA	NA NA
%Utilization-ripper:	NA		NA	NA	NA	NA	NA NA
Ripper own. cost/hour:	NA		\$0.00	NA	NA	NA	NA NA
Ripper op. cost/hour:	NA		\$0.00	NA	NA	NA	NA NA
Operator cost/hour:	\$45.84	\$	640.23	NA	NA	NA	NA
Unit Subtotals:	\$283.20	\$2	246.39	NA	NA	NA	NA
Number of Units:	2		1	0	0	0	(
Group Subtotals:	Work:	\$812.	.79	Support:	\$0.00	Maint:	\$0.00
Total work team cost  MATERIAL QUA  Initial volume:	54,450		CCY	Swell fac	tor: _ 1.000		
Loose volume:	54,450		LCY				
	rce of estimated vo of estimated swell f		20 ac @1 Cat Hand	18" (Task 03a) dbook			
HOURLY PROD	<u>UCTION</u>						
				Scraper B	owl (volume) Bas	is:	
Material weight:	2,650 lbs/LCY			Struck	Volume: _15.70	I	CY
Material description:	Decomposed rock 75% Earth	k - 25% R	ock,	•	Volume: 22.00		CY
Rated Payload: Payload Capacity:	52,800 pounds 19.92 LCY			Average Adjusted (	Volume: 18.85 Capacity: 18.85		.CY .CY

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$\sim$ y	-	11.	m.

Scraper Loading Time: <u>0.90</u> Minutes Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction: Site Altitude: 5400 feet

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

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	200.00	0.00	3.00	3.00	2824	0.30

Haul Time: **0.30** minutes

943.45

LCY/Hour

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	200.00	0.00	3.00	3.00	2874	0.19

Return Time: **0.19** minutes Total Scraper team cycle time: 1.99 minutes Adjusted for job conditions: 943.45 LCY/Hour 2 Selected Number of Scrapers: Scraper(s) Adjusted single scraper team (unit) hourly production: 943.45 LCY/Hour Adjusted multiple scraper team (fleet) hourly production:

Optimal Number of Scrapers per push dozer:

#### JOB TIME AND COST

Total job time: \_\_\_\_ 57.71 Hours Fleet size: 1 Team(s) Unit cost: \$0.862 /LCY Total job cost: **\$46,909** 

# **MOTOR GRADER WORK**

Task descri	ption:	Distri	bute and co	onfigure ove	rburden on pit	t floor		
e: Woodrin	ng Pit		Per	mit Action:	SO-2	Perm	it/Job#:	: M1978323
PROJEC'	T IDENTI	FICATIO	<u>N</u>					
Task #: Date: User:	05A 8/1/2018 ACY		State: County:	Colorado Mesa		Abbrevi Filer	ation: name:	None M323-05a
Aş	gency or org	ganization n	ame: DF	RMS				
HOURLY	EQUIPM	IENT CO	<u>ST</u>					
	Basic Machi er Attachme		14M		<u> </u>	Horsepower: Shift Basis:		259 per day
Kipp	ci Attaciiii	<u></u>			<u>—</u>	Data Source:		CRG)
Cost Break	down:							
		1. 0			<b>\$50.12</b>	Utilization %		
		nership Cos			\$60.13 \$50.87	NA 100		
		erating Cos nership Cos			\$50.87	100 NA		
		erating Cos			\$0.00	11/1		
		perator Cos			\$45.64	NA		
		tal Unit Cos			\$156.64			
	Tot	al Fleet Cos	t/Hour:	\$150	5.64			
			_	·				
<u>MATERI</u>	AL QUAN	<u>NTITIES</u>						
	Total Are	ea to be grad	led or rippe	ed: 20.00				acres
	Sou	rce of estim	ated acreag	ge: 20 ac p	it floor			
HOURLY	PRODU	CTION						
			e Grader Sp		3.25	mph		
			ted Applica			blading (0-6 mph) -	3.25	
			ed Blade A		30	degrees		
	Wide	Effective h of blade of	e Blade Lei		12.10 2.00	feet feet		
		g or ripping			10.10	feet		
		ed Hourly U			3.9788	acres/hour		
Job Conditi	•	·	3 4 4 4	- · <u> </u>		te Altitude: 5400 fee	t	
				Source				
	ltitude Adj:	1.0		(CAT HE				
	Efficiency:	0.9		(1sh/d, fav				
Net	Correction:	0.90	000	multiplier				
		Adjusted H	lourly Unit	Production:	3.5809	acres/Hour		
		•	•	Production:	3.5809	acres/Hour		
JOB TIM	E AND C	<u>OST</u>						
Fleet siz		1	Grader(s)		Total job time	5.59		Hours
Unit	vet. •	12 71	nor core		Total ich cost	. ¢07 <i>5</i>		
Unit co	ost: \$	43.74	per acre		Total job cost	: \$875		_

# **BULLDOZER WORK**

Task description:	Push	topsoil off	ingnwan to j	oit floor			
: Woodring Pit		Per	mit Action:	SO-2		Permit/Job#:	M1978323
PROJECT IDEN	TIFICATIO	<u>ON</u>					
Task #: 06A		State:	Colorado			Abbreviation:	None
Date: $\frac{8/1}{20}$	018	County:	Mesa			Filename:	M323-06a
User: ACY						_	
Agency or	organization	name: DF	RMS				
HOURLY EQUI							
Basic Machine:	Cat D9T - 9						
Horsepower:	405						
Blade Type:	Semi-Unive	ersal		<del>_</del>			
Attachment:	NA			<u> </u>			
Shift Basis:	1 per day						
Data Source:	(CRG)						
Cost Breakdown:							
				Utiliza	ation %		
Ownership Cost/He	our:		\$110.70		IA		
Operating Cost/He			\$95.46	10	00		
Ripper own. Cost/He	our:		\$0.00	N	ΙA		
Ripper op. Cost/He	our:		\$0.00	(	0		
Operator Cost/H	our:		\$40.23	N	ΙA		
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL OIL	ur: <b>\$492.</b>						
MATERIAL QU.  Initial Volume: Swell factor:	ANTITIES  16,133 1.215						
MATERIAL QU. Initial Volume:	wr: \$492.7  ANTITIES  16,133						
MATERIAL QU.  Initial Volume: Swell factor:	ANTITIES  16,133 1.215 19,602 LCY volume:						
MATERIAL QU.  Initial Volume: Swell factor: Loose volume: Source of estimated	ANTITIES  16,133 1.215 19,602 LCY  volume: swell factor:	20 ac @ (					
MATERIAL QUA  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	ANTITIES  16,133 1.215 19,602 LCY  volume: swell factor:  DUCTION  ace:	20 ac @ (	book				
MATERIAL QUA  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan	ANTITIES  16,133 1.215 19,602 LCY  volume: swell factor:  DUCTION  ace: production:	20 ac @ Cat Hand	Y/hr	mbankment 0.	9		
MATERIAL QU.  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD  Average push distan Unadjusted hourly p	ANTITIES  16,133 1.215 19,602 LCY volume: swell factor:  DUCTION ace: production:	20 ac @ 6 Cat Hand  120 feet 1,093.1 LC: Compa	Y/hr	mbankment 0.	9		
MATERIAL QU.  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie	### ##################################	20 ac @ 6 Cat Hand  120 feet 1,093.1 LC: Compa	Y/hr	mbankment 0.	9		
MATERIAL QU.  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude	### ##################################	20 ac @ 6 Cat Hand  120 feet 1,093.1 LC Compa	Y/hr	mbankment 0.	9	_	
MATERIAL QU.  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distan Unadjusted hourly p  Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre	### ##################################	20 ac @ c Cat Hand  120 feet 1,093.1 LC  Compa  feet  lbs/LCY oil	Y/hr acted fill or e		Source		
MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corree Open	### ##################################	20 ac @ 6 Cat Hand  120 feet 1,093.1 LC  Compa  feet  lbs/LCY  oil  0.	Y/hr acted fill or e		Source (AVG.)		
MATERIAL QU.  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push distan Unadjusted hourly p  Materials consistence Average site altitude Material weight: Weight description: Job Condition Corre Oper Material co	### ##################################	20 ac @ 6 Cat Hand  120 feet 1,093.1 LC  Compa  feet  lbs/LCY  oil  0.0	Y/hr acted fill or e		Source		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.9771

Adjusted unit production: 1,068.07 LCY/hr
Adjusted fleet production: 2136.14 LCY/hr

# **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.231/LCY

Total job time: 9.18 Hours
Total job cost: \$4,522

# SCRAPER TEAM WORK

Task description:	Distribute	topsoil over pit f	loor			
Site: Woodring Pit		Permit Action:	SO-2	Peri	mit/Job#: M197	8323
PROJECT IDEN	<u> FIFICATION</u>					
Task #: 07A		State: Colorado			viation: None	
Date: $\frac{8/1/20}{\text{User:}}$	18 Co	unty: Mesa		Fil	ename: M323-	07a
Agency or o	organization name:	DRMS				
HOURLY EQUIP	PMENT_		COSTS	hift basis: 1 per d	<u>ay</u>	
			ent Description			
			7G w/push-pull			
Suppo	rt Equipment -Loa		T - 9SU			
Бирро		p Area: NA				
Road Ma	intenance – Motor					
	-Water	Truck: NA				
Cost Breakdown:	Scraper Wor	rk Team	Support Equi	nment	Maintenance	Fauinment
Cost Dicardown.	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$108.96	\$110.70	NA	NA	NA	NA
Operating cost/hour:	\$128.41	\$95.46	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$45.84	\$40.23	NA	NA	NA	NA
Unit Subtotals:	\$283.20	\$246.39	NA	NA	NA	NA
Number of Units:	2	1	0	0	0	0
Group Subtotals:	Work:	\$812.79	Support:	\$0.00	Maint:	\$0.00
Total work team cost	/hour: <b>\$812.79</b>					
MATERIAL QUA	<u>ANTITIES</u>					
Initial volume:	19,602	CCY	Swell fact	tor: 1.000		
Loose volume:	19,602	LCY				
	rce of estimated vo					
Source of	of estimated swell f	factor: Cat Han	dbook			
HOURLY PROD	<u>UCTION</u>					
			Scraper B	owl (volume) Bas	is:	
Material weight:	1,600 lbs/LCY		Struck	Volume: 15.70	L	CY
Material description:	Top Soil		Heaped	Volume: 22.00		CY
Rated Payload:	52,800 pounds		Average			CY
Payload Capacity:	33.00 LCY		Adjusted C	Capacity: <b>18.85</b>	L	CY

Site Altitude: 5400 feet

Scraper Loading Time: 0.90 Minutes
Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction:

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

## **Travel Time:**

Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	200.00	0.00	5.00	5.00	2218	0.22

Haul Time: **0.22** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	200.00	0.00	5.00	5.00	2814	0.22

**0.22** minutes Return Time: Total Scraper team cycle time: 1.94 minutes Adjusted for job conditions: 967.76 LCY/Hour Selected Number of Scrapers: Scraper(s) 2 Adjusted single scraper team (unit) hourly production: 967.76 LCY/Hour Adjusted multiple scraper team (fleet) hourly production: 967.76 LCY/Hour

Unadjusted unit production/hour: 1,165.98 LCY/Hour Optimal Number of Scrapers per push dozer:

#### **JOB TIME AND COST**

Fleet size:	1	Team(s)	Total job time:	20.25	Hours
Unit cost:	\$0.840	/LCY	Total job cost:	\$16,463	

# MOTOR GRADER WORK

Task description:	Distribute and o	configure tops	soil on pit floo	r	
Woodring Pit	Pe	rmit Action:	SO-2	Permit/	Job#: <u>M1978323</u>
PROJECT IDENT	<u>TIFICATION</u>				
Task #: 08A	State:	Colorado		Abbreviat	ion: None
Date: 8/1/201	8 County:	Mesa		Filena	
User: ACY	·				<del></del>
A		DMC			
Agency or o	rganization name:D	RMS			
HOURLY EQUIP	MENT COST				
Basic Macl	nine: CAT 14M			Horsepower:	259
Ripper Attachn	nent:		<del></del>	Shift Basis:	1 per day
				Data Source:	(CRG)
Cost Breakdown:					
Cost Breaker win.				Utilization %	
O	wnership Cost/Hour:		\$60.13	NA	
	perating Cost/Hour:		\$50.87	100	
	wnership Cost/Hour:		\$0.00	NA	
	perating Cost/Hour: _		\$0.00		
	Operator Cost/Hour: _		\$45.64	NA	
T	otal Unit Cost/Hour: _		\$156.64		
To	otal Fleet Cost/Hour:	\$156	5.64		
MATERIAL QUA Total A	rea to be graded or ripp	ed: 20.00			acres
So	ource of estimated acrea	ge: 20 ac p	it floor		
HOURLY PRODU	<u>JCTION</u>				
	Average Grader S	peed:	3.25	mph	
	Selected Applic			blading (0-6 mph) - 3.	25
	Selected Blade A		30	degrees	
	Effective Blade Le		12.10	feet	
	th of blade overlap per		2.00	feet	
	ng or ripping width per		10.10	feet	
· ·	sted Hourly Unit Produ	CHOII:	3.9788	acres/hour	
Job Condition Correct	tion Factors	~	Si	te Altitude: <u>5400</u> feet	
Altitude Adj	: 1.00	Source (CAT HB	2)		
Job Efficiency		(1sh/d, fav			
Net Correction		multiplier	··/		
THE COHECHON		-			
	Adjusted Hourly Uni		3.5809	acres/Hour	
	Adjusted Hourly Flee	t Production:	3.5809	acres/Hour	
JOB TIME AND (	<u>COST</u>				
Fleet size:	1 Grader(s	)	Total job time	: <b>5.59</b>	Hours
Unit aget:	\$12.71		Total lab 4	. ¢075	
Unit cost:	\$43.74 per acre		Total job cost	:: <b>\$875</b>	

# **BULLDOZER WORK**

Task description:		ce highwalls to 2H:1V			
: Woodring Pit		Permit Action:	SO-2	Permit/Job#:	M1978323
PROJECT IDE	NTIFICATIO	<u>ON</u>			
Task #: 09A		State: Colorado		Abbreviation:	None
Date: $\frac{00A}{8/1/2}$	018	County: Mesa		Filename:	M323-09a
User: ACY		County. Wiesa		i inchame.	W1323-07a
	<del></del>				
Agency o	r organization i	name: DRMS			
HOURLY EQU	IPMENT CO	<u>OST</u>			
Basic Machine:	Cat D9T - 9	SU	<u> </u>		
Horsepower:	405	1	<u>—</u>		
Blade Type:	Semi-Unive	rsal	<u>—</u>		
Attachment:	NA 1 man dans		<u> </u>		
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:			i		
	_		<u>Utilization %</u>		
Ownership Cost/I		\$110.70	NA		
Operating Cost/I		\$95.46	100		
Ripper own. Cost/I		\$0.00	NA		
Ripper op. Cost/I		\$0.00	0		
			NT A		
Operator Cost/Ho Total unit Cost/Ho Total Fleet Cost/Ho MATERIAL QU	\$246.3 Sour: \$492.7		NA NA		
Total unit Cost/Ho Total Fleet Cost/Ho	\$246.3 Sour: \$492.7	39	NA NA		
Total unit Cost/Hor Total Fleet Cost/Hor MATERIAL QU Initial Volume:	\$246.3 bur: \$492.7 \$492.7 \$492.7 \$492.7	39	NA NA		
Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume:  Source of estimated Source of estimated	### \$246.3 ### \$492.7 ### JANTITIES  68,865  1.125  77,473 LCY  d volume: d swell factor:	39			
Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume:  Source of estimated Source of estimated HOURLY PRO	### \$246.3 ### \$246.3 ### \$492.7	See attached Approx Cat Handbook			
Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume:  Source of estimated Source of estimated  HOURLY PROD  Average push dista	### \$246.3 ### \$246.3 ### \$492.7 ### \$246.3 ### \$492.7	See attached Approx Cat Handbook			
Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume:  Source of estimated Source of estimated HOURLY PRO	### \$246.3 ### \$246.3 ### \$492.7 ### \$246.3 ### \$492.7	See attached Approx Cat Handbook			
Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume:  Source of estimated Source of estimated  HOURLY PROD  Average push dista	\$246.3  \$492.7  Sur: \$492.7  \$492.7  \$492.7  \$68,865  1.125  77,473 LCY  \$1 volume: \$1 swell factor:  \$246.3  \$492.7	See attached Approx Cat Handbook  120 feet 1,093.1 LCY/hr	2500 LF of highwall		
Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume: Source of estimated Source of estimated  HOURLY PROD  Average push dista Unadjusted hourly	\$246.3 \$492.7  Sur: \$246.3 \$492.7  Sur: \$492	See attached Approx Cat Handbook  120 feet 1,093.1 LCY/hr  Compacted fill or e	2500 LF of highwall		
Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consistent Average push grad	\$246.3 \$492.7  Sur: \$492.7  \$4	See attached Approx Cat Handbook  120 feet 1,093.1 LCY/hr  Compacted fill or e	2500 LF of highwall		
Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consistent Average push grad Average site altitud	\$246.3 \$492.7  Sur: \$492.7  \$4	See attached Approx Cat Handbook  120 feet 1,093.1 LCY/hr  Compacted fill or e	2500 LF of highwall		
Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consistent Average push grad Average site altitud Material weight: Weight description Job Condition Corr	\$246.3 \$492.7  Sur: \$492.7  \$4	See attached Approx Cat Handbook  120 feet 1,093.1 LCY/hr  Compacted fill or e  feet  lbs/LCY  nposed rock - 25% Rock	2500 LF of highwall  mbankment 0.9  , 75% Earth  Source		
Total unit Cost/Hot Total Fleet Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consistent Average push grad Average site altitud Material weight: Weight description Job Condition Corr	\$246.3 \$492.7  Sur: \$492.7  \$492.7  Sur: \$492.7  \$492.7  Sur: \$492.7  \$492.7	See attached Approx Cat Handbook  120 feet 1,093.1 LCY/hr  Compacted fill or e  feet  lbs/LCY  nposed rock - 25% Rock  0.750	2500 LF of highwall  2500 LF of highwall  mbankment 0.9  75% Earth  Source (AVG.)		
Total unit Cost/Hot Total Fleet Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume:    Swell factor:    Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consistent Average push grad Average site altitud Material weight: Weight description Job Condition Corr Ope Material of	\$246.3 \$492.7  Sur: \$492.7  \$4	See attached Approx Cat Handbook  120 feet 1,093.1 LCY/hr  Compacted fill or e  feet  lbs/LCY  nposed rock - 25% Rock	2500 LF of highwall  mbankment 0.9  , 75% Earth  Source		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4766

Adjusted unit production: 520.97 LCY/hr
Adjusted fleet production: 1041.94 LCY/hr

# **JOB TIME AND COST**

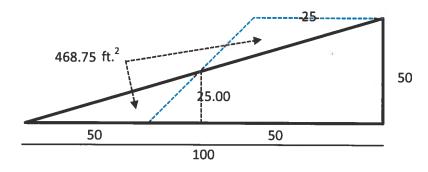
Fleet size: 2 Dozer(s)
Unit cost: \$0.473/LCY

Total job time: 74.35 Hours
Total job cost: \$36,641

# Highwall reduction - cut and fill

near vertical active	highwall
Highwall Height (ft.)	50.0
Length of Highwall (Ift.)	300
Initial Slope	0.5 H:1V
Desired Slope	2 H:1V
Volume of material to be moved (ft.3)	140,625
Volume of material to be moved (yd.3)	5,208

All dimensions measured in feet Drawing not to scale



# Highwall reduction - cut and fill

Highwall Height (ft.) 50.0

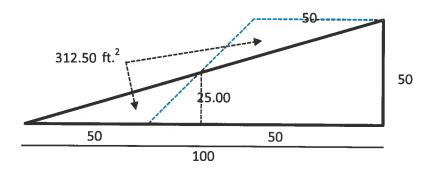
Length of Highwall (Ift.) 1100

Initial Slope 1.0 H:1V

Desired Slope 2 H:1V

Volume of material to be moved (ft. 3) 343,750 Volume of material to be moved (yd. 3) 12,731

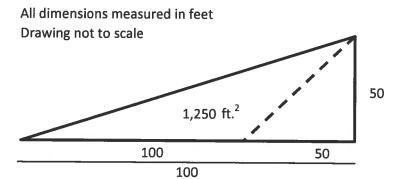
All dimensions measured in feet Drawing not to scale



# Highwall reduction - backfill Exterior Pit Walls

Highwall Height (ft.)		
Length of Highwall (Ift.)	1100.00	
Initial Slope		H:1V
Desired Slope	2.00	H:1V

Volume of material to be moved (ft.3) 1,375,000 Volume of material to be moved (yd.<sup>3</sup>)



# **SCRAPER TEAM WORK**

Task description:	Haul overb	ourden fi	rom bern	n to top of east a	nd west slopes			
Site: Woodring Pit		Permit	Action:	SO-2	Per	mit/Job#: <u>M</u>	11978323	3
PROJECT IDENT           Task #:         10A           Date:         8/1/20           User:         ACY	S	unty: 1	Colorado Mesa			eviation: No lename: M	one 323-10a	
HOURLY EQUIP				COSTS	hift basis: 1 per o	lay		_
			Equipme	ent Description				
	rt Equipment -Loa	p Area: Grader:		G w/push-pull				
G (P 11	C W	1 7		G .F.:	,	3.6 1 4	Е	<del>_</del>
Cost Breakdown:	Scraper Wor	rk Team Doz	zer	Support Equi Load Area	pment Dump Area	Maintena Motor Grad		upment Vater Truck
%Utilization-machine:	100		100	NA	NA		NA	NA NA
Ownership cost/hour:	\$108.96	•	110.70	NA NA	NA NA		NA NA	NA NA
Operating cost/hour:	\$108.41		\$95.46	NA NA	NA NA		NA NA	NA NA
%Utilization-ripper:	NA		NA	NA NA	NA NA		NA NA	NA NA
Ripper own. cost/hour:	NA		\$0.00	NA	NA		NA	NA NA
Ripper op. cost/hour:	NA		\$0.00	NA	NA		NA	NA
Operator cost/hour:	\$45.84		\$40.23	NA	NA		NA	NA
Unit Subtotals:	\$283.20	\$	246.39	NA	NA	]	NA	NA
Number of Units:	2		1	0	0		0	(
Group Subtotals:	Work:	\$812	2.79	Support:	\$0.00	Ma	int:	\$0.00
Total work team cost  MATERIAL QUA								
Initial volume: Loose volume:	5,106 <b>5,744</b>		CCY LCY	Swell fac	tor: 1.125			
	rce of estimated vo of estimated swell f	_	800 LF o	of 115' slope, 2.1 dbook	1 ac @ 18"			_
HOURLY PROD	UCTION							
	<del></del>			Scraper B	owl (volume) Bas	ais.		
Matarial maialet	2.650 lbs/I CV			<u></u>			LCV	
Material weight: Material description:	2,650 lbs/LCY Decomposed roc 75% Earth	k - 25% I	Rock,		Volume: 15.70 Volume: 22.00		_ LCY LCY	
Rated Payload: Payload Capacity:	52,800 pounds 19.92 LCY			Average Adjusted (	Volume: 18.85 Capacity: 18.85		LCY LCY	

$\sim$	1	<b>—</b> :	
( '\77	CIA	111	me:
$\sim$ y	-	11.	m.

 $\begin{array}{lll} \text{Scraper Loading Time:} & \underline{0.90} \text{ Minutes} \\ \text{Maneuver and Spread Time:} & \underline{0.60} \text{ Minutes} \end{array}$ 

Job Condition Correction: Site Altitude: 5400 feet

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

**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	700.00	0.00	3.00	3.00	2824	0.47

Haul Time: **0.47** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time (min)
1	700.00	0.00	3.00	3.00	2874	0.36

Return Time: 0.36 minutes Total Scraper team cycle time: 2.33 minutes Adjusted for job conditions: 805.78 LCY/Hour 2 Selected Number of Scrapers: Scraper(s) Adjusted single scraper team (unit) hourly production: 805.78 LCY/Hour Adjusted multiple scraper team (fleet) hourly production: 805.78 LCY/Hour

Unadjusted unit production/hour:	970.82	LCY/Hou
Optimal Number of Scrapers per push dozer:		

## **JOB TIME AND COST**

Fleet size:	1	Team(s)	Total job time:	7.13	Hour
Unit cost:	\$1.009	/LCY	Total job cost:	\$5,794	

# **BULLDOZER WORK**

Task description:	Sprea	d overburden down ea	ist and west stopes		
Woodring Pit		Permit Action:	SO-2	Permit/Job#:	M1978323
PROJECT IDEN	NTIFICATIO	<u>ON</u>			
Task #: 11A		State: Colorado		Abbreviation:	None
Date: $8/1/2$	018	County: Mesa		Filename:	M323-11a
User: ACY		·		-	
Agency of	r organization 1	name: DRMS			
		· · · · · · · · · · · · · · · · · · ·			
HOURLY EQUI					
Basic Machine: Horsepower:	Cat D9T - 9	SU	<u> </u>		
Blade Type:	Semi-Unive	real	<u> </u>		
Attachment:	NA	isai			
Shift Basis:	1 per day		<del></del>		
Data Source:	(CRG)		<u>—</u>		
Cost Breakdown:			Utilization %		
Ownership Cost/H	lour:	\$110.70	NA		
Operating Cost/F		\$95.46	100		
Ripper own. Cost/F		\$0.00	NA		
Ripper op. Cost/H		\$0.00	0		
Tupper op. cosur		¢40.22	27.4		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot	\$246.3 \$492.7		NA NA		
Operator Cost/Hotal unit Cost/Hotal	\$246.3 \$492.7	9	NA NA		
Operator Cost/F Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL OU Initial Volume:	\$246.3 5ur: \$492.7 \$492.7 \$5,744	9	NA		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	\$246.3 \$492.7 SANTITIES  5,744  1.000  5,744 LCY  I volume: I swell factor:	9			
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume: Source of estimated Source of estimated	\$246.3 \$492.7 SANTITIES  5,744 1.000 5,744 LCY I volume: I swell factor:  DUCTION	700 LF of 115' slope Cat Handbook			
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	\$246.3 \$492.7 SANTITIES  5,744  1.000  5,744 LCY  I volume: I swell factor:  DUCTION  nce:	700 LF of 115' slope			
Operator Cost/F Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push distat	\$246.3 \$492.7 \$492.7 \$492.7 \$5,744 1.000 5,744 LCY I volume: I swell factor: \$\text{DUCTION}\$  ance:  production:	700 LF of 115' slope Cat Handbook  120 feet 1,093.1 LCY/hr	, 2.1 ac @ 18" Deep		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI  Average push dista Unadjusted hourly	\$246.3 \$492.7  SANTITIES  5,744  1.000  5,744 LCY  I volume: I swell factor:  DUCTION  nce: production:  cy description:  ent: -25 %	700 LF of 115' slope Cat Handbook  120 feet 1,093.1 LCY/hr  Loose stockpile 1.2	, 2.1 ac @ 18" Deep		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU  Initial Volume:    Swell factor:    Loose volume: Source of estimated Source of estimated HOURLY PROI  Average push distat Unadjusted hourly Materials consisten  Average push gradi	\$246.3 \$492.7  SANTITIES  5,744 1.000 5,744 LCY  I volume: I swell factor:  DUCTION  nce: production:  cy description:  ent: e: -25 % 5,400	700 LF of 115' slope Cat Handbook  120 feet 1,093.1 LCY/hr  Loose stockpile 1.2	, 2.1 ac @ 18" Deep		
Operator Cost/Hortotal unit Cost/Hortotal Unit Cost/Hortotal Fleet Fleet Cost/Hortotal Fleet Fle	\$246.3 \$492.7 \$492.7 \$492.7 \$492.7 \$5,744 1.000 \$5,744 LCY \$1 volume: \$1 swell factor: \$246.3 \$5,744 1.000 \$5,744 LCY \$1 volume: \$1 swell factor: \$2 cy description: \$2 cy description: \$2 cy description:	700 LF of 115' slope Cat Handbook  120 feet 1,093.1 LCY/hr  Loose stockpile 1.2	, 2.1 ac @ 18" Deep		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU Initial Volume:    Swell factor:    Loose volume: Source of estimated Source of estimated HOURLY PROI  Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description Job Condition Corr	\$246.3   \$492.7   \$	700 LF of 115' slope Cat Handbook  120 feet 1,093.1 LCY/hr  Loose stockpile 1.2  feet  lbs/LCY  nposed rock - 25% Rock	, 2.1 ac @ 18" Deep ., 75% Earth Source		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU Initial Volume:    Swell factor:    Loose volume: Source of estimated Source of estimated HOURLY PROI  Average push dista: Unadjusted hourly: Materials consisten Average push gradi Average site altitud Material weight: Weight description: Job Condition Corr Ope	\$246.3   \$492.7   \$	700 LF of 115' slope Cat Handbook  120 feet 1,093.1 LCY/hr  Loose stockpile 1.2  feet  lbs/LCY  nposed rock - 25% Rock  0.750	2.1 ac @ 18" Deep  2.75% Earth  Source (AVG.)		
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot  MATERIAL QU Initial Volume:    Swell factor:    Loose volume: Source of estimated Source of estimated HOURLY PROI  Average push dista Unadjusted hourly Materials consisten Average push gradi Average site altitud Material weight: Weight description:    Job Condition Corr    Oper Material c	\$246.3   \$492.7   \$	700 LF of 115' slope Cat Handbook  120 feet 1,093.1 LCY/hr  Loose stockpile 1.2  feet  lbs/LCY  nposed rock - 25% Rock	, 2.1 ac @ 18" Deep ., 75% Earth Source		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7864

Adjusted unit production: 859.61 LCY/hr
Adjusted fleet production: 1719.22 LCY/hr

# **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.287/LCY

Total job time: 3.34 Hours
Total job cost: \$1,646

# SCRAPER TEAM WORK

Task description:	Task description: Haul topsoil from berm to top of east and west slopes					
Site: Woodring Pit	Permit Action:	SO-2	Peri	mit/Job#: <u>M197</u>	8323	
PROJECT IDEN	TIFICATION					
Task #: 12A		tate: Colorado	1	Abbre	viation: None	
Date: 8/1/20	18 Cou	nty: Mesa		Fil	ename: M323-	12a
User: ACY						
Agency or	organization name:	DRMS				
<b>HOURLY EQUIP</b>	<u>PMENT</u>		COSTS	hift basis: 1 per d	<u>ay</u>	
			ent Description			
			7G w/push-pull			
Suppo	ort Equipment -Load		T - 9SU			
Барро	-Dump					
Road Ma	intenance – Motor C					
	-Water	Truck: NA				
Cost Breakdown:	Scraper Worl	k Team	Support Equi	pment	Maintenance	Equipment
O O O O O O O O O O O O O O O O O O O	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$108.96	\$110.70	NA	NA	NA	NA
Operating cost/hour:	\$128.41	\$95.46	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$45.84	\$40.23	NA	NA	NA	NA
Unit Subtotals:	\$283.20	\$246.39	NA	NA	NA	NA
Number of Units:	2	1	0	0	0	0
Group Subtotals:	Work:	\$812.79	Support:	\$0.00	Maint:	\$0.00
Total work team cost  MATERIAL QUA						
		CCV	C .11 C	1.015		
Initial volume: Loose volume:	1,702 2,068	CCY LCY	Swell fact	tor: 1.215		
	•		0 1151 6 1	) 11 O C 1		
	rce of estimated vol of estimated swell fa		@ 115' of slope, 2 dbook	2.11 ac @ 6" deep		
HOURLY PROD	UCTION					
110 CALLY TAOD	<u> </u>		Scraper B	owl (volume) Bas	is:	
Material weight:	1,600 lbs/LCY		Struck	Volume: 15.70	L	CY
Material description:	Top Soil		Heaped	Volume: 22.00	L	CY
Rated Payload:	52,800 pounds 33 00 LCY		Average	Volume: 18.85		CY CY
Payload Capacity:	33 UU LCY		Aduisted (	apacity: IXX5		L.Y

Site Altitude: 5400 feet

$\alpha$ 1	an:
1 3701	a lima
CVU	e Time:

Scraper Loading Time: 0.90 Minutes
Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction:

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

## **Travel Time:**

Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity (fpm)	Travel Time (min)
1	700.00	0.00	5.00	5.00	2218	0.44

Haul Time: **0.44** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	700.00	0.00	5.00	5.00	2814	0.40

Return Time: **0.40** minutes Total Scraper team cycle time: 2.34 minutes Adjusted for job conditions: 802.33 LCY/Hour Selected Number of Scrapers: Scraper(s) 2 Adjusted single scraper team (unit) hourly production: 802.33 LCY/Hour Adjusted multiple scraper team (fleet) hourly production: 802.33 LCY/Hour

Unadjusted unit production/hour: 966.67 LCY/Hour Optimal Number of Scrapers per push dozer:

#### **JOB TIME AND COST**

Fleet size:	1	_ Team(s)	Total job time:	2.58	Hours
Unit cost:	\$1.013	/LCY	Total job cost:	\$2,095	

# **BULLDOZER WORK**

Task description:	Spread topsoil d	own east an	d west slopes		
Woodring Pit	Per	mit Action:	SO-2	Permit/Job#:	M1978323
PROJECT IDENTIF	FICATION				
Task #: 13A	State:	Colorado		Abbreviation:	None
Date: $\frac{1374}{8/1/2018}$	County:	Mesa		Filename:	M323-13a
User: ACY		111000		i memanie.	171323 134
	DI	N 40			
Agency or orga	anization name: DF	RMS			
HOURLY EQUIPM	ENT COST				
	nt D9T - 9SU		<u> </u>		
Horsepower: 40			<u> </u>		
<u> </u>	mi-Universal		<u> </u>		
Attachment: NA			_		
	per day		<u> </u>		
Data Source: (C	RG)		<u></u>		
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$110.70	NA		
Operating Cost/Hour:		\$95.46	100		
Ripper own. Cost/Hour:		\$0.00	NA 0		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.23	NA		
Total unit Cost/Hour:	\$246.39				
Total Fleet Cost/Hour:	\$492.79				
MATERIAL QUAN	<u>TITIES</u>				
Initial Volume: 2,00	68				
Swell factor: 1.00		_			
	68 LCY				
<del></del>		_			
Source of estimated volu					
Source of estimated swe	ll factor: Cat Hand	book			
HOURLY PRODUC	TION				
Average push distance:					
Unadjusted hourly produ		Y/hr			
Materials consistency de		stockpile 1.2			
Average push gradient:	-25 %				
Average site altitude:	5,400 feet				
Material weight:	1,600 lbs/LCY				
Weight description:	Top Soil				
			<b>G</b>		
Job Condition Correction		750	Source (AVG)		
Operator Material consis		200	(AVG.) (CAT HB)		
Dozing m		000	(GEN.)		
		000	(AVG.)		

0.830	(1 SHIFT/DAY)
0.800	(FND-RF)
1.516	(CAT HB)
1.000	(CAT HB)
1.438	(CAT HB)
1.000	(PAT)
	0.800 1.516 1.000 1.438

Net correction: 1.3028

Adjusted unit production: 1,424.09 LCY/hr
Adjusted fleet production: 2848.18 LCY/hr

# **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.173/LCY

Total job time: 0.73 Hours
Total job cost: \$358

# **BULLDOZER WORK**

Task description:	Sp	read overburd	len on north	slope		
Woodring Pit		Per	mit Action:	SO-2	Permit/Job#:	M1978323
PROJECT IDEN	NTIFICAT	<u> FION</u>				
Task #: 14A		State:	Colorado		Abbreviation:	None
Date: $\frac{8/1/2}{}$	018	County:	Mesa		Filename:	M323-14a
User: ACY		_			· · · · · · · · · · · · · · · ·	
Agency of	r organizati	on name. DR	RMS			
HOURLY EQUI						
Basic Machine:	Cat D9T	<u></u>				
Horsepower:	405	750		<u> </u>		
Blade Type:	Semi-Un	niversal		<u> </u>		
Attachment:	NA			<del></del>		
Shift Basis:	1 per day	У				
Data Source:	(CRG)			<u> </u>		
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/H			\$110.70	NA		
Operating Cost/F			\$95.46	100		
Ripper own. Cost/F Ripper op. Cost/F			\$0.00 \$0.00	NA 0		
Operator Cost/F			\$40.23	<del>-</del>		
Operator Cost/r	10ui.		\$40.23	NA		
Total unit Cost/Hou	ur: \$24	46.39				
<b>MATERIAL QU</b>	JANTITII	E <u>S</u>				
Initial Volume:	10,866					
Swell factor:	1.125		_			
Loose volume:	12,224 LO	CY	<u> </u>			
G				4.40 102 1		
Source of estimated Source of estimated				e, 4.49 ac @ 18" deep		
Source of estimated	i swell lack	or. <u>Cat Hand</u>	DOOK			
HOURLY PROI	DUCTION	J				
		<del></del>				
Average push dista		120 feet	67./I			
Unadjusted hourly	production:	1,093.1 LC	Y/hr			
Materials consisten	cy descripti	ion: Compa	cted fill or e	mbankment 0.9		
Average push gradi						
Average site altitud	ie. <u>3,4</u>	00 feet				
Material weight:	2,6	50 lbs/LCY				
Weight description	: <u>De</u>	composed rock	- 25% Rock	, 75% Earth		
Job Condition Corr				Source		
	erator Skill:		750	(AVG.)		
	onsistency:		900	(CAT HB))		
Dozi	ng method:		000	(GEN.)		
	Visibility:	1.	000	(AVG.)		

0.830	(1 SHIFT/DAY)
0.800	(FND-RF)
1.516	(CAT HB)
1.000	(CAT HB)
0.868	(CAT HB)
1.000	(PAT)
	0.800 1.516 1.000 0.868

Net correction: 0.5898

Adjusted unit production: 644.71 LCY/hr
Adjusted fleet production: 1289.42 LCY/hr

# **JOB TIME AND COST**

Fleet size: 2 Dozer(s)
Unit cost: \$0.382/LCY

Total job time: 9.48 Hours
Total job cost: \$4,672

# **BULLDOZER WORK**

Task description:	Spre	ad topsoil o	n north slop	e		
: Woodring Pit		Per	mit Action:	SO-2	Permit/Job#:	M1978323
PROJECT IDEN	TIFICATIO	<u>ON</u>				
Task #: 15A		State:	Colorado		Abbreviation:	None
Date: $\frac{8/1}{20}$	018	County:	Mesa		Filename:	M323-15a
User: ACY		,				
Agency or	organization	name: DI	RMS			
HOURLY EQUI	PMENT CO	<u>OST</u>				
Basic Machine:	Cat D9T - 9	SU		<u> </u>		
Horsepower:	405					
Blade Type:	Semi-Unive	ersal				
Attachment:	NA			<del></del> ;		
Shift Basis:	1 per day			_		
Data Source:	(CRG)					
Cost Breakdown:				i		
				<u>Utilization</u>	<u>%</u>	
Ownership Cost/H			\$110.70	NA		
Operating Cost/H			\$95.46	100		
Ripper own. Cost/H			\$0.00	NA		
Ripper op. Cost/H			\$0.00	0		
Operator Cost/H	our:		\$40.23	NA		
MATERIAL QU Initial Volume: Swell factor:	3,622 1.215		<u></u>			
Loose volume:	<b>4,401</b> LCY					
Source of estimated Source of estimated		1700 lf o Cat Hand		4.49 @ 6" deep		
HOURLY PROD	OUCTION					
Average push distant Unadjusted hourly p		120 feet 1,093.1 LC	Y/hr			
Materials consistence	cy description	: Compa	cted fill or e	mbankment 0.9		
Average push gradie Average site altitude						
Material weight:	_1,600	lbs/LCY				
Weight description:	Top S	oil				
Job Condition Corre				Sour		
	rator Skill:		.750	(AVC		
Material co			.900	(CAT I		
Dozir	ng method:		.000	(GEN		
	Visibility: _	1.	.000	(AVC	j.)	

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Page 2 of 2

Net correction: 0.9771

Adjusted unit production: 1,068.07 LCY/hr
Adjusted fleet production: 1068.07 LCY/hr

# **JOB TIME AND COST**

Fleet size: 1 Dozer(s)
Unit cost: \$0.231/LCY

Total job time: 4.12 Hours
Total job cost: \$1,015

# **REVEGETATION WORK**

Task description:	Revegetate 27 acres disturbance		
Site: Woodring Pit	Permit Action: SO-2	Permit/Jol	o#: M1978323
PROJECT IDENTII	FICATION		
Task #: 16A Date: 8/1/2018 User: ACY	State: Colorado County: Mesa	Abbreviation: Filename:	None M323-16a
Agency or org	ganization name: DRMS		
<b>FERTILIZING</b>			

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	100.00	pound	\$0.34	\$34.00
			Total Fertilizer Materials Cost/Acre	\$34.00

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$34.72
	<b>Total Fertilizer Application Cost/Acre</b>	\$34.72

# **TILLING**

Description	Cost /Acre
Chisel plowing {DMG}	\$92.77
Total Tilling Cost/Acre	\$92.77

# **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Ephraim	2.40	11.02	\$9.00
Sand Dropseed	0.20	23.88	\$2.22
Burnett, Small (or Little) - Delar	8.00	10.10	\$20.48
Pubescent Wheatgrass - Luna	5.60	11.57	\$23.35
Galleta	4.80	17.52	\$121.39
Rabbitbrush, Rubber	0.24	3.58	\$15.80
Saltbush, Four Wing	2.00	2.75	\$25.60
Totals Seed Mix	23.24	80.42	\$217.85

## Application

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

## **MULCHING and MISCELLANEOUS**

## Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.81	\$2.81
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$288.00	\$288.00
<b>Total Mulch Materials Cost/Acre</b>				\$290.81

**Application** 

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$68.78
Power mulcher (MEANS 32 91 13.16 0350)		\$92.78
Weed spray, truck, non-aquatic area, nox. [DMG]		\$73.22
	<b>Total Mulch Application Cost/Acre</b>	\$234.78

## **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:
 27
 Cost /Acre:
 \$1,172.15

 Estimated Failure Rate:
 40%
 Cost /Acre\*:
 \$1,172.15

 $\hbox{*Selected Replanting Work Items: } \overline{ \ \ FERTILIZING,TILLING,SEEDING,MU \\$ 

LCHING

Initial Job Cost: \$31,648.05

Reseeding Job Cost: \$12,659.22

Total Job Cost: Job Hours: \$2.00

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Mo	bilization			
e: Woodring Pit	Permit	Action: SO-2	Permit/Jo	b#: <u>M1978323</u>
PROJECT IDENTIFICATI	ON			
Task #: 17A Date: 8/1/2018 User: ACY		olorado Iesa	Abbreviation: Filename:	None M323-17a
Agency or organization	n name: DRMS	S		
EQUIPMENT TRANSPOR	T RIG COST			
			Shift basis:	1 per day CRG Data
Truck Tractor Desc	ription: GENI		AY TRUCK TRACTOR, 6X4, 400 HP (2ND HALF, 2006)	DIESEL POWERED,
Truck Trailer Desc	ription: C		G GOOSENECK, DROP DEC AILER (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	

## **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

Helper Cost/Hour:

\$0.00

\$88.67

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	60.01	\$110.70	\$125.45	2	\$472.30	\$250.90	\$250.00
CAT 14M	23.57	\$60.13	\$88.67	1	\$148.80	\$88.67	\$250.00
Cat 627G w/push-	43.48	\$108.96	\$117.55	2	\$453.02	\$235.10	\$500.00
pull							
Drill/Broadcast	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00
(Bowie LD-90)							

\$25.39

\$117.55

\$25.39

\$125.45

Subtotals: \$1,275.33 \$752.01 \$1,500.00

## **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$40.58	2	\$81.16	\$81.16

Subtotals	\$81.16	\$81.16

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: GRAND JUNCTION,

Total one-way travel distance:
Average Travel Speed:

CO

35.00

miles

40.00

mph

Total Non-Roadable Mob/Demob Cost \*

'\* two round trips with haul rig:

Total Roadable Mob/Demob Cost \*\*

\*\* one round trip, no haul rig:

\$9,098.51 \$142.03

## **Transportation Cycle Time:**

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.88	0.88
Return Time (Hours):	0.88	0.88
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.75	1.75

## **JOB TIME AND COST**

Total job time: 5.50 Hours

Total job cost: **\$9,241** 

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Sec	condary Mobiliza	ation		
e: Woodring Pit	Permit	t Action: SO-2	Permit/J	ob#: <u>M1978323</u>
PROJECT IDENTIFICAT	<u>ION</u>			
Task #: 18A	State: C	colorado	Abbreviation:	None
Date: 8/16/2018 User: ACY	County: N	Iesa	Filename:	M323-18a
Agency or organizatio	n name: DRMS	S		
EQUIPMENT TRANSPOR	T RIG COST			
	1110 0001		Shift basis:	1 per day
			Cost Data Source:	CRG Data
Truck Tractor Desc	cription: GENI		AY TRUCK TRACTOR, 6X4 400 HP (2ND HALF, 2006)	, DIESEL POWERED,
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		\$25.39	

## **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

\$88.67

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		
Drill/Broadcast	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$8.33	\$88.67	1	\$97.00	\$88.67	\$250.00
(Bowie LD-90)							

\$117.55

\$125.45

Subtotals: \$201.21 \$177.34 \$500.00

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$40.58	1	\$40.58	\$40.58

Subtotals:	\$40.58	\$40.58

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: GRAND JUNCTION,

Total one-way travel distance:
Average Travel Speed:

CO

35.00

miles

40.00

mph

Total Non-Roadable Mob/Demob Cost \*
 '\* two round trips with haul rig:
 Total Roadable Mob/Demob Cost \*\*

 \$2,064.88

\$71.02

\*\* one round trip, no haul rig:

## **Transportation Cycle Time:**

Non- Roadable	Roadable Equipment
0.88	0.88
0.88	0.88
0.50	NA
0.50	NA
2.75	1.75
	Roadable Equipment 0.88 0.88 0.50

## **JOB TIME AND COST**

Total job time: 5.50 Hours

Total job cost: **\$2,136** 



1313 Sherman Street, Room 215 Denver, CO 80203

August 16, 2018

Russell Larsen/ Jon Muller Kilgore Companies LLC dba Elam Construction 556 Struthers Ave Grand Junction, CO 81501

#### RE: Woodring Pit, Permit No. M-1978-323, Estimated Reclamation Costs Update

Dear Mr. Larsen/Muller:

In response to the Succession of Operators (SO-2) request that was approved on July 12, 2018 the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate. The Division calculations estimate the cost to reclaim the above referenced site to be \$284,766.42. This is an increase of \$147,004.99 over the \$137,761.43 currently held by the Division. This estimate is based on conditions observed during the July 26, 2018 inspection.

This substantial increase has mainly come from the increased acreage needing to be reclaimed. Previous calculations were largely based off of a 10 acre pit floor rather than the estimated 20 acres that is currently affected. Also there is significantly more highwall present than the previously used 600 linear foot figure.

The Division would like to give you an opportunity to either complete reclamation tasks to decease your overall liability. Or survey the site and provide the Division with more accurate input figures for calculations. The Division has enclosed both the preliminary post SO-2 calculation as well as the 2012 SI-03 calculation with redlined changes.

Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted. If no response is received by <u>Friday August 31, 2018</u> than it is the Divisions understanding that the operator has no objections to the bond calculated on August 1, 2018 for the amount of \$284,766.42. At that time a Notice for Surety Increase will be issued for the above amount as required by the Act and Rules.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us



Sincerely,

Amy Yeldell

Environmental Protection Specialist Department of Natural Resources Division of Reclamation, Mining and Safety

Phone: (970) 254-8511 Fax: (970) 241-1516

Amy Geldell

Ec:

Wally Erickson, Senior EPS, Grand Junction DRMS

Enc:

SO-2 Preliminary Financial Warranty Cost Estimate SI-3 Redlined Financial Warranty Cost Estimate