STATE OF COLCCRADO

DIVISION OF RECLAMATION, MINING AND SAFETY Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106

June 4, 2012



John W. Hickenlooper Governor

Mike King Executive Director

Loretta E. Pineda Director

Randy McClure Rio Grande Silver, Inc. PO Box 610 Creede, CO 81130

Re: Financial Warranty Reduction (SR-1), North Amethyst Project, File No. P-2010-007

Dear Mr. McClure

On May 24, 2012 the Division performed an inspection to assess the amount of completed reclamation at the above-named project. (The Division's inspection report will be mailed under separate cover.)

Based on observations of which reclamation tasks remain to be completed, the Division has recalculated the required bond amount that must remain posted for this project. The breakdown of those costs is shown in the enclosed packet. Please review these figures and contact me if you see any errors or omissions.

On June 4, 2012, the Division approved the financial warranty reduction request for the above prospect.

The financial warranty currently posted for this project is a Statewide prospecting bond: Safeca surety no. 6575235, in the amount of \$44,368. <u>The Division's recalculated reclamation costs indicate that the amount of bond required may be reduced to \$8,202</u>. This is a reduction of \$36,166.

The Division appreciates the reclamation that Rio Grande Silver has performed to-date. Please contact me if you have any questions.

Sincerely,

Bob Oswald Environmental Protection Specialist

Encl: Reclamation cost recalculation, 6/2/12.

Ec(w/encl): Steve Shuey, Grand Junction DRMS Barbara Coria, Denver DRMS

(c:\12-06 docs\N Amy Proj SR-1 appr/rco)

COST SUMMARY WORK

North A	nethyst Project	Permit Action:	SR-1	Permit/Job#:	P2010007
ROJECI	<u> IDENTIFICA</u>	TION			
Task #:	000	State: Colorado		Abbreviation:	None
Date:	6/2/2012	County: Mineral		Filename:	P007-000
User:	RCO				

TASK LIST (DIRECT COSTS)

Description	Form Used	Fleet Size	Task Hours	Cost
Backfill pad sumps (3 per pad, on 2 pads)	DOZER	1	0.94	\$146.76
Pull up material for recontouring pads (2)	EXCAVATE	1	4.65	\$508.00
Recontour grading of pad areas (2)	DOZER	1	8.28	\$1,294.73
Pull material onto access road for recontouring	EXCAVATE	1	0.49	\$53.00
Recontour grading of access road	DOZER	1	0.69	\$107.19
Rip compaction on roads and pads	RIPPER	1	0.80	\$125.00
Respread topsoil on pads (2) and access road (300 LF)	DOZER	1	2.44	\$380.85
Revegetate remaining areas	REVEGE	1	8.00	\$902.56
Haul reclamation equipment to and from site	MOBILIZE	1	6.50	\$2,445.11
	32.79	\$ \$5,963.20		
-	Backfill pad sumps (3 per pad, on 2 pads)Pull up material for recontouring pads (2)Recontour grading of pad areas (2)Pull material onto access road for recontouringRecontour grading of access roadRip compaction on roads and padsRespread topsoil on pads (2) and access road (300LF)Revegetate remaining areas	DescriptionUsedBackfill pad sumps (3 per pad, on 2 pads)DOZERPull up material for recontouring pads (2)EXCAVATERecontour grading of pad areas (2)DOZERPull material onto access road for recontouringEXCAVATERecontour grading of access roadDOZERRip compaction on roads and padsRIPPERRespread topsoil on pads (2) and access road (300DOZERLF)Revegetate remaining areasRevegetate remaining areasREVEGEHaul reclamation equipment to and from siteMOBILIZE	DescriptionUsedSizeBackfill pad sumps (3 per pad, on 2 pads)DOZER1Pull up material for recontouring pads (2)EXCAVATE1Recontour grading of pad areas (2)DOZER1Pull material onto access road for recontouringEXCAVATE1Recontour grading of access roadDOZER1Recontour grading of access roadDOZER1Respread topsoil on roads and padsRIPPER1Respread topsoil on pads (2) and access road (300DOZER1LF)Revegetate remaining areasREVEGE1	DescriptionUsedSizeHoursBackfill pad sumps (3 per pad, on 2 pads)DOZER10.94Pull up material for recontouring pads (2)EXCAVATE14.65Recontour grading of pad areas (2)DOZER18.28Pull material onto access road for recontouringEXCAVATE10.49Recontour grading of access roadDOZER10.69Rip compaction on roads and padsRIPPER10.80Respread topsoil on pads (2) and access road (300DOZER12.44LF)Revegetate remaining areasREVEGE18.00Haul reclamation equipment to and from siteMOBILIZE16.50

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Tot	tal =	\$120.46
Performance bond:	1.05	Tot	tal =	\$62.61
Job superintendent:	10.00	Tot	tal = ¯	\$593.00
Profit:	10.00	Tot	tal =	\$596.32
		TOTAL O &	P = -	\$1,372.39
	CON	TRACT AMOUNT (direct + O & 1	P) =]	\$7,335.59
LEGAL - ENGINEERING - PF	OJECT MANAGEMENI	ſ:		
Financial warranty proces	sing (legal/related costs)	500.00 Tot	- 1 -	500.00

TOTAL B	\$8,202.37			
		TOTAL INDIRECT COST =	\$2,239.17	
CONTINGENCY:	0.00	Total =	\$0.00	
Reclamation management and/or administration:	5.00		\$366.78	
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0.00	
Financial warranty processing (legal/related costs):	500.0	0 Total =	500.00	

BULLDOZER WORK

Task description:	Backfi	ll pad sumps (3 per p	ad, on 2 pads)		
e: <u>North Amethyst Pr</u>	oject	Permit Action:		Permit/Job#:	P2010007
PROJECT IDENTI	FICATIO	<u>N</u>			
Task #: 001		State: Colorado		Abbreviation:	None
Date: $\frac{6/2}{2012}$		County: Mineral		Filename:	P007-001
User: RCO		County		r nename.	1007-001
Agency or org		ame: DRMS			
	-				
HOURLY EQUIPM					
	Cat D6T LGF				
	200				
Blade Type: S	Straight				
Attachment: 3	-shank rippe	Г — — — — — — — — — — — — — — — — — — —			
	per day				
	CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour	**	\$49.25	NA		
Operating Cost/Hour		\$68.58	100		
Ripper op. Cost/Hour		\$0.00	0		
Operator Cost/Hour		\$38.49	NA		
Total unit Cost/Hour:	\$0.00		· · ·		
Total Fleet Cost/Hour:	\$156.32				
		· · · · · · · · · · · · · · · · · · ·			
MATERIAL QUAN	TITIES				
Initial Volume: 13	3				
	165				
	5 LCY				
Loose volume: 15	5LCI				
Source of estimated vol			ion, Mining & Safety		
Source of estimated swe	ell factor: _	Cat Handbook			
HOURLY PRODUC	<u>CTION</u>				
Average push distance:	5	0 feet			
Unadjusted hourly prod		44.6 LCY/hr			
chacjusted noarry prod		, .			
Materials consistency d	escription:	Consolidated stock	pile 1.0		
Average push gradient:	0 %				
Average site altitude:	11,600 f	řeet			
Tivolage she alutade.	11,0001				
Material weight:	2,900 lb	s/LCY			
Weight description:	Decomp	osed rock - 50% Rock	, 50% Earth		
Job Condition Correction	on Factor		Source		
Operato		0.750	(AVG.)		
Material consi		1.000	(CAT HB)		
Dozing n		1.000	(GEN.)		
8			(32.1)		

Visibili	ty: 1.000	(AVG.)
Job efficien	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 1.000	(CAT HB)
Altitu	le: 0.940	(CAT HB)
Material Weig	ht: 0.793	(CAT HB)
Blade ty	pe: 1.000	(PAT)
Net correction	on: 0.3712	
Adjusted unit production:	165.04 LCY/hr	
Adjusted fleet production:	165.04 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.947/LCY

Total job time:	0.94 Hours
Total job cost:	\$146.76

No cost adjustment needed for whether sump liners are breached and buried, or removed from site.

HYDRAULIC EXCAVATOR WORK

Task description:	Pull up material	for reconto	uring pads (2)			
: North Amethyst Proje	ct Per	mit Action:	SR-1	F	ermit/Job#	P2010007
PROJECT IDENTIFI	<u>CATION</u>					
Task #: 002 Date: 6/2/2012 User: RCO	State: County:	Colorado Mineral			reviation: Filename:	None P007-002
Agency or organ	zation name:	RMS				
HOURLY EQUIPME	NT COST					
	Cat 320D L 9'-6" S	Stick		Horsepower:		148
Attachment 1:	ROPS Cab			Weight (MT): Shift Basis:		21.55
				Data Source:		CRG)
Cost Breakdown:						
Ownership Cost/H	our: \$24.0	63	Utilization % NA			
Operating Cost/H			100			
Operator Cost/H			NA			
Total Unit Cost/H	our: \$109.	00				
Total Fleet Cost/H	lour: \$109	.00				
MATERIAL QUANTI	TIES					
Initial volume: 94	0 0	_ CCY	Swell fac	tor: <u>1.000</u>		
Loose volume: <u>94</u>	D	_ LCY				
Source of	estimated volume:	Division	of Reclamation,	Mining & Safet	v	
	mated swell factor:				<u></u>	
HOURLY PRODUCT	<u>ION</u>					
Excavator Cycle Time (loa	d bucket, swing loa	ded, dump b	ucket, swing en	<u>pty):</u>		
		Basic Job C	ondition Descrip	otion: AVER	AGE	
	Secondary Job Co					
	-		Cycle Time V	alue: 0.284		minutes
Load Bucket Capacity						
		и		Bucket Size	Class: <u>M</u>	edium
Rated Capacity:	1.54	- LCY (hea			000	
Bucket Fill Factor: Adjusted Capacity:	0.900	LCY	oil, boulders, roc	ts (80 -100%) 0	.900	
	-					
Job Condition Correction I	actors		Sit	e Altitude: <u>1160</u>	<u>0</u> feet	
A 1414- 1 - A 18	0.92	Source				
Altitude Adj: Job Efficiency:	0.83	(CAT HE				
Net Correction:	0.69	(1 shift/da multiplier				
		•		_		
	justed Hourly Unit		292.82	LCY/Hour		
	justed Hourly Unit usted Hourly Fleet		201.72	LCY/Hour LCY/Hour		
JOB TIME AND COS		r rouuciioii:	201.72	LC1/HOUR		
	-	_			-	
Fleet size: 1	Excavato	or To	otal job time:	4.6	5	Hours
Unit cost: \$0.54	0 /LCY		Total job cost:	\$508.	.00	
				φυνο.		

BULLDOZER WORK

North Amethyst Proj	ect Perm	nit Action:	SR-1		Permit/Job#:	P2010007
PROJECT IDENTIF	ICATION					
Task #: 003	State:	Colorado			Abbreviation:	None
Date: 6/2/2012	County:	Mineral			Filename:	P007-003
User: RCO					-	
Agency or orga	nization name:	MS				
HOURLY EQUIPME	ENT COST					
•	t D6T LGP					
Horsepower: 200						
· ·	aight					
	hank ripper					
	er day					
	RG)		<u>.</u>			
	· /		_			
<u>lost Breakdown</u> :			1141	ization %		
Ownership Cost/Hour:	\$49.25			NA		
Operating Cost/Hour:	\$68.58			100		
Ripper op. Cost/Hour:	\$0.00			0		
Operator Cost/Hour:	\$38.49			NA		
otal unit Cost/Hour:	\$0.00					
Ulai unit Cost nout.	DA'AA					
otal Fleet Cost/Hour:		· · · · ·				
	\$156.32					
otal Fleet Cost/Hour:	\$156.32					
'otal Fleet Cost/Hour: <u>IATERIAL QUANT</u>	\$156.32					
otal Fleet Cost/Hour: <u>IATERIAL QUANT</u> Initial Volume: <u>807</u>	\$156.32 <u>CITIES</u>					
otal Fleet Cost/Hour: <u>IATERIAL OUANT</u> Initial Volume: <u>807</u> Swell factor: <u>1.16</u>	\$156.32 TITIES 55					
otal Fleet Cost/Hour: <u>IATERIAL OUANT</u> Initial Volume: <u>807</u> Swell factor: <u>1.16</u>	\$156.32 <u>CITIES</u>					
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940	\$156.32 <u>S</u> <u>S</u> LCY		on. Mining	& Safety		
otal Fleet Cost/Hour: <u>IATERIAL OUANT</u> Initial Volume: <u>807</u> Swell factor: <u>1.16</u>	\$156.32 TITIES 55 LCY me: Division of		ion, Mining	& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volume	\$156.32 <u>S</u> <u>S</u> <u>LCY</u> me: Division c		on, Mining	& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volumource of estimated swell	\$156.32 CITIES 55 LCY me: Division of 1 factor: Cat Handle		ion, Mining	& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volumource of estimated swell IOURLY PRODUCT	\$156.32 TITIES 55 LCY me: Division of 1 factor: Cat Handle TION			& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volum ource of estimated swell HOURLY PRODUCT Average push distance:	\$156.32 CITIES 55 LCY me: Division of 1 factor: Cat Handle FION 50 feet	book	on, Mining	& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volumource of estimated swell IOURLY PRODUCT	\$156.32 CITIES 55 LCY me: Division of 1 factor: Cat Handle FION 50 feet	book	on, Mining	& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volum ource of estimated swell HOURLY PRODUCT Average push distance:	\$156.32 CITIES 55 LCY me: Division of Cat Handb 1 factor: Cat Handb FION 50 feet ction: 50 feet	book		& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated voluto 0 ource of estimated swell 1000000000000000000000000000000000000	\$156.32 CITTIES 55 LCY me: Division of Cat Handle 1 factor: Cat Handle FION ction: 50 feet 444.6 LCY/I scription: Consoli	book		& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated voluto 0 ource of estimated swell 1000000000000000000000000000000000000	\$156.32 CITIES i5 LCY me: Division of Cat Handle 1 factor: Cat Handle FION ction: 50 feet 444.6 LCY/I scription: Consoli 10 % 10 %	book		& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated voluto 0 ource of estimated swell 1000000000000000000000000000000000000	\$156.32 CITTIES 55 LCY me: Division of Cat Handle 1 factor: Cat Handle FION ction: 50 feet 444.6 LCY/I scription: Consoli	book		& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated voluto 0 ource of estimated swell 1000000000000000000000000000000000000	\$156.32 CITIES i5 LCY me: Division of Cat Handle 1 factor: Cat Handle FION ction: 50 feet 444.6 LCY/I scription: Consoli 10 % 10 %	book		& Safety		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volum ource of estimated volum ource of estimated swell HOURLY PRODUCT Average push distance: Inadjusted hourly product Atterials consistency destruction Average push gradient: Average site altitude:	\$156.32 CITTIES 55 LCY me: Division of 1 factor: Cat Handle FION ction: 50 feet ction: 444.6 LCY/I scription: Consoli 10 % 11,600 feet	book hr dated stock				
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volumource of estimated volumource of estimated swell HOURLY PRODUCT Verage push distance: Inadjusted hourly product Atterials consistency destructions Verage site altitude: Verage site altitude: Verage site altitude:	\$156.32 CITTIES i5 LCY me: Division of 1 factor: Cat Handle FION ction: 50 feet ction: 444.6 LCY/I scription: Consoli 10 % 11,600 feet 2,900 lbs/LCY Decomposed rock	book hr dated stock				
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volumource of estimated volumource of estimated swell IOURLY PRODUCT Atterials consistency destructed swell Verage push distance: Inadjusted hourly producted Atterials consistency destructed swell Verage site altitude: Atterial weight: Veight description: ob Condition Correction	\$156.32 CITTIES 55 LCY me: Division of 1 factor: Cat Handh FION ction: 50 feet ction: 50 feet ction: 444.6 LCY/I scription: Consoli 10 % 11,600 feet 2,900 lbs/LCY Decomposed rock Factor Factor	book hr dated stock		Source		
Yotal Fleet Cost/Hour: Initial Volume: 807 Swell factor: 1.16 Loose volume: 940 ource of estimated volumource of estimated volumource of estimated swell HOURLY PRODUCT Verage push distance: Inadjusted hourly product Atterials consistency destructions Verage site altitude: Verage site altitude: Verage site altitude:	\$156.32 CITTIES 55 LCY me: Division of 1 factor: Cat Handb FION ction: 50 feet ction: 50 feet ction: 444.6 LCY/I scription: Consoli 10 % 11,600 feet	book hr dated stock				

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	0.786	(CAT HB)
Altitude:	0.940	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.2553	
Adjusted unit production: 11	3.51 LCY/hr	

Adjusted fleet production: 113.51 LCY/hr

Fleet size: Unit cost:	1 Dozer(s) \$1.377/LCY	
Total job time: Total job cost:	8.28 Hours \$1,294.73	

Volume estimated for approx 1-ft average depth.

HYDRAULIC EXCAVATOR WORK

User: <u>RCO</u> Agency or organization name: <u>DRMS</u> HOURLY EQUIPMENT COST Basic Machine: <u>Cat 320D L 9'-6" Stick</u> Horsepower: <u>148</u> Attachment 1: <u>ROPS Cab</u> <u>Basic Machine: Cat 320D L 9'-6" Stick</u> Horsepower: <u>148</u> Attachment 1: <u>ROPS Cab</u> <u>Shift Basis: <u>1 per day</u> Data Source: <u>(CRG)</u> Cost Breakdown: <u>Ownership Cost/Hour: <u>\$24.63</u> <u>NA</u> <u>Operating Cost/Hour: <u>\$45.70</u> <u>100</u> <u>Operating Cost/Hour: <u>\$109.00</u> <u>MATERIAL OUANTITUES</u> Initial volume: <u>99</u> <u>CCY</u> Swell factor: <u>1.000</u> Loose volume: <u>99</u> <u>LCY</u> Source of estimated swell factor: <u>Cat Handbook</u> <u>HOURLY PRODUCTION</u> ixeavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty): Basic Job Condition Description: <u>AVERAGE</u> Secondary Job Condition Description: <u>AVERAGE</u> <u>Cycle Time Value: <u>0.284</u> minutes <u>Cycle Time Value</u> <u>0.284</u> minutes <u>AVERAGE</u> <u>Secondary Job Condition Description: <u>AVERAGE</u> Secondary Job Condition Description: <u>AVERAGE</u> <u>Secondary Job Condition Description: <u>AVERAGE</u> <u>Cycle Time Value</u> <u>0.284</u> minutes <u>Cycle Time Value</u> <u>0.284</u> minutes <u>Adjusted Capacity: <u>1.54</u> LCY (heaped) Bucket Fill Factor: <u>0.900</u> Other - soil, boulders, roots (80-100%) 0.900 Adjusted Capacity: <u>1.39</u> LCY ch Condition Correction Factors <u>Site Altitude Adj: 0.83 (CAT HB)</u> Job Efficiency: <u>0.69</u> multiplier Unadjusted Hourty Unit Production: <u>201.72</u> LCY/Hour Adjusted Hourty Unit Production: <u>201.72</u> LCY/Hour Adjusted Hourty Fleet Production: <u>201.72</u> LCY/Hour Adjusted Hourty Fleet Production: <u>201.72</u> LCY/Hour Adjusted Hourty Fleet Production: <u>201.72</u> LCY/Hour <u>Adjusted Hourty Fleet Production: <u>201.72</u> LCY/Hour</u></u></u></u></u></u></u></u></u></u></u></u></u></u></u></u>	Task description:	Pull material o	nto access roa	ad for recontourin	ng	
Task #: 004 State: County: Mineral Poterviation: None Date: 62/2012 County: Mineral Pot7-004 User: RCO RCO Pot7-004 Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat 320D L 9'-6' Stick Horsepower: 148 Attachment 1: ROPS Cab Shift Basis: Iper day Data Source:	North Amethyst Proje	ect Po	ermit Action:	SR-1	Permit/Job#:	P2010007
Date: 6/2/2012 County: Mineral Filename: P007-004 Agency or organization name: DRMS HOURLY EQUIPMENT COST Basic Machine: Cat 3200 L 9'-6" Stick Horsepower: 148 Attachment 1: ROPS Cab Weight (MT): 21.55 Shift Basis: 1 per day Data Data Ownership Cost/Hour: \$24.63 NA Operating Cost/Hour: \$45.70 100 Operating Cost/Hour: \$38.67 NA Total Unit Cost/Hour: \$109.00 MATERIAL QUANTITIES Initial volume: 99 CCY Sweil factor: 1.000 MATERIAL QUANTITIES Initial volume: 99 LCY Sweil factor: 1.000 Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook AURINE LOW Condition Worket, swing empty): Basic Job Condition Description: AVERAGE Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Basic Job Condition Description: AVERAGE <td>PROJE<u>CT IDENTIF</u>I</td> <td>CATION</td> <td></td> <td></td> <td></td> <td></td>	PROJE <u>CT IDENTIF</u> I	CATION				
HOURLY EQUIPMENT COST Basic Machine: Cat 3200 L 9'-6" Stick Horsepower: 148 Attachment 1: ROPS Cab Weight (MT): 21.55 Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Utilization % Ownership Cost/Hour: \$24.63 NA Operating Cost/Hour: \$38.67 NA Operator Cost/Hour: \$109.00 Total Unit Cost/Hour: \$109.00 MATERIAL OUANTITIES Initial volume: 99 CCY Swell factor: 1.000 Loose volume: 99 CCY Swell factor: 1.000 Loose volume: 99 CCY Swell factor: 1.000 Loose volume: 99 LCY Swell factor: 0.00 Swere of estimated swell factor: Cat Handbook AVERAGE minutes	Date: 6/2/2012					None P007-004
Basic Machine: Cat 320D L 9'-6" Stick Horsepower: 148 Attachment 1: ROPS Cab Weight (MT): 21.55 Shift Basis: i per day Data Source: (CRG) Ownership Cost/Hour: \$24.63 NA Operating Cost/Hour: \$38.67 NA Operator Cost/Hour: \$109.00 Total Unit Cost/Hour: \$109.00 Total Fleet Cost/Hour: \$109.00	Agency or organ	ization name:I	ORMS			
Attachment 1: ROPS Cab Weight (MT): 21.55 Shift Basis: Data Source: (CRG) Oot Breakdown: Utilization % Ownership Cost/Hour: \$24.63 NA Operating Cost/Hour: \$45.70 100 Operator Cost/Hour: \$38.67 NA Total Unit Cost/Hour: \$109.00 MA MATEERIAL QUANTITIES Initial volume: 99 Initial volume: 99 CCY Swell factor: 1.000 MATERIAL QUANTITIES Initial volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook AVERAGE MOURLY PRODUCTION Secondary Job Condition Mithin Basic Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE MERAGE Coad Bucket Capacity: 1.54 LCY (heaped) 0.284 minutes Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY adjusted Capacity: 0.43 (CAT HB) 1.600 feet Source Altitude Adj: 0.63 (CAT HB)	HOURLY EQUIPME	NT COST				
Data Source: (CRG) \best Breakdown: (CRG) Ownership Cost/Hour: \$24.63 NA Operating Cost/Hour: \$38.67 NA Operating Cost/Hour: \$109.00			'Stick		Veight (MT): 2	1.55
Utilization % Ownership Cost/Hour: \$24.63 NA Operating Cost/Hour: \$38.67 NA Operator Cost/Hour: \$38.67 NA Operator Cost/Hour: \$109.00 Total Unit Cost/Hour: \$109.00 Total Flect Cost/Hour: \$109.00 MATERIAL QUANTITIES Initial volume: 90 Loose volume: 99 LCY Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Easic Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE average Cycle Time Value: 0.284 minutes coad Bucket Capacity: 1.54 LCY (heaped) Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Source Ste Altitude: 11600 feet Mainue Adj: 0.83 (CAT HB) Job Efficiency: 0.83 I (shih/day) Net Correction:]		
Ownership Cost/Hour: \$24.63 NA Operating Cost/Hour: \$38.67 NA Operator Cost/Hour: \$38.67 NA Total Unit Cost/Hour: \$109.00 Total Fleet Cost/Hour: \$109.00 MATERIAL QUANTITIES Initial volume: 99 Initial volume: 99 CCY Swell factor: Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Secondary Job Condition othescription: AVERAGE Secondary Job Condition within Basic Description: AVERAGE O.284 minutes .coad Bucket Capacity: 1.54 LCY (heaped) 0.284 minutes .oad Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted flaum Adjusted Capacity: 1.54 LCY (heaped) 0.900 0.900 Adjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour <td< td=""><td><u>Cost Breakdown:</u></td><td></td><td>1</td><td>Utilization %</td><td></td><td></td></td<>	<u>Cost Breakdown:</u>		1	Utilization %		
Operating Cost/Hour: \$45.70 100 Operator Cost/Hour: \$109.00 Total Unit Cost/Hour: \$109.00 Total Fleet Cost/Hour: \$109.00 MATERIAL QUANTITIES Initial volume: \$109.00 Initial volume: \$9 CCY Swell factor: 1.000 Loose volume: \$9 LCY Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook AVERAGE HOURLY PRODUCTION Basic Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE Load Bucket Capacity: 1.54 LCY (heaped) Bucket Size Class: Medium Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Ste Altitude: 11600 feet Source 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/	Ownership Cost/F	Iour: \$24	4.63			
Total Unit Cost/Hour: \$109.00 Total Fleet Cost/Hour: \$109.00 MATERIAL QUANTITIES Initial volume: 99 CCY Swell factor: 1.000 Loose volume: 99 LCY Swell factor: 1.000	Operating Cost/H	Iour:\$4:	5.70			
Total Fleet Cost/Hour: \$109.00 MATERIAL QUANTITUES Initial volume: 99 Loose volume: 99 LCY Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook HOURLY PRODUCTION Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty): Basic Job Condition Description: AVERAGE Cycle Time (load bucket, swing loaded, dump bucket, swing empty): Basic Job Condition Description: AVERAGE O.284 minutes .oad Bucket Capacity: 1.54 LCY (heaped) Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Altitude Adj: 0.83 Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour <td< td=""><td>•</td><td></td><td></td><td>NA</td><td></td><td></td></td<>	•			NA		
MATERIAL QUANTITIES Initial volume: 99 CCY Swell factor: 1.000 Loose volume: 99 LCY Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook Cat Handbook FOURLY PRODUCTION Scavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty): Basic Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE Cycle Time Value: O.284 minutes coad Bucket Capacity: 1.54 LCY (heaged) Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.69 multiplier Unadjusted Hourly Unit Production: 201.	Total Unit Cost/F	Iour: \$10	9.00			
Initial volume: 99 CCY Swell factor: 1.000 Loose volume: 99 LCY Swell factor: 1.000 Source of estimated volume: Division of Reclamation, Mining & Safety Cat Handbook HOURLY PRODUCTION Secondary Job Condition Description: AVERAGE Secondary Job Condition Description: CY Basic Job Condition Description: AVERAGE Outlet for Value: Outlet for Value: <td>Total Fleet Cost/I</td> <td>Hour:\$10</td> <td>)9.00</td> <td></td> <td></td> <td></td>	Total Fleet Cost/I	Hour:\$10)9.00			
Source of estimated swell factor: Cat Handbook Gource of estimated swell factor: Cat Handbook AURLY PRODUCTION Secondary Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE Cycle Time (load bucket, swing loaded, dump bucket, swing empty): Basic Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: O.284 AVERAGE Outline: O.284 minutes Outline: Network of the colspan="2">Outline: Outline: Outline: Network of the colspan="2">Outline: Outline: Network of the colspan="2">Outline: Outline:	Initial volume: 99)		Swell facto	or: <u>1.000</u>	
BOURLY PRODUCTION Basic Job Condition Description: AVERAGE Basic Job Condition Description: AVERAGE Secondary Job Condition Description: AVERAGE Secondary Job Condition Description: AVERAGE Optimize Value: OPTIME Value: AVERAGE Optimize Value: OPTIME Value: AVERAGE Optimize Value: OPTIME Valu					lining & Safety	
Sxcavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty): Basic Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE QUERAGE QUERAGE Cycle Time Value: 0.284 minutes Cycle Time Value: 0.284 minutes Load Bucket Capacity 1.54 LCY (heaped) Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Source Altitude Adj: 0.83 Job Efficiency: 0.83 Majusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour OB TIME AND COST Total job time: 0.49 Hours	Source of est	imated swell facto	r: <u>Cat Hand</u>	lbook		
Basic Job Condition Description: AVERAGE Secondary Job Condition within Basic Description: AVERAGE Cycle Time Value: O.284 minutes Odd Bucket Capacity Bucket Size Class: Medium Rated Capacity: 1.54 LCY (heaped) Bucket Fill Factor: O.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.83 (I shift/day) Net Correction: 202.82 LCY/Hour Adjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Fleet Production: 292.82 LCY/Hour OB TIME AND COST Fleet size: 1 Excavator Total job cost: \$\$\$53.00			oaded dump b	ucket swing empt		
Secondary Job Condition within Basic Description: Cycle Time Value: AVERAGE Cycle Time Value: 0.284 minutes Bucket Capacity: Rated Capacity: 1.54 LCY (heaped) Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour OB TIME AND COST Fleet size: 1 Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00		ad bablet, build I	-			
Goad Bucket Capacity Bucket Size Class: Medium Bucket Size Class: Medium Bucket Size Class: Medium Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Medium 200.72 LCY/Hour Majusted Hourly Fleet Production: 201.72 LCY/Hour Majusted Hourly Fleet Production: 201.72 LCY/Hour Muster Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00		Secondary Job (
Bucket Size Class: Medium Rated Capacity: 1.54 LCY (heaped) Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Altitude Adj: 0.83 Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour Medium Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00	and Bucket Canadity			Cycle Time Val	ue: 0.284	minutes
Bucket Fill Factor: 0.900 Other - soil, boulders, roots (80 -100%) 0.900 Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Source Source Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour Minute Adjusted Hourly Fleet Production: 201.72 LCY/Hour Minute Adjusted Hourly Fleet Production: 201.72 LCY/Hour Hours Kortine 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00	Louis Durant Capacity				Bucket Size Class: Me	edium
Adjusted Capacity: 1.39 LCY ob Condition Correction Factors Site Altitude: 11600 feet Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour OB TIME AND COST Fleet size: 1 Excavator Total job time: 0.49 Unit cost: \$0.540 /LCY Total job cost: \$53.00					(80 -100%) 0 900	
Source Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour OB TIME AND COST Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00				JII, DOUIDEIS, 10018	(00-10070) 0.300	
Altitude Adj: 0.83 (CAT HB) Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour Image: COB TIME AND COST Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00	lob Condition Correction	Factors		Site	Altitude: <u>11600</u> feet	
Job Efficiency: 0.83 (1 shift/day) Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour OB TIME AND COST Fleet size: 1 Excavator Total job time: 0.49 Unit cost: \$0.540 /LCY Total job cost: \$53.00			Source			
Net Correction: 0.69 multiplier Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour IOB TIME AND COST Fleet size: 1 Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00						
Unadjusted Hourly Unit Production: 292.82 LCY/Hour Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour IOB TIME AND COST Fleet size: 1 Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00 \$			-			
Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour IOB TIME AND COST Fleet size: 1 Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00 \$	Net Correction:	0.69	multiplier			
Adjusted Hourly Unit Production: 201.72 LCY/Hour Adjusted Hourly Fleet Production: 201.72 LCY/Hour IOB TIME AND COST Fleet size: 1 Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00 \$	Una	djusted Hourly Un	it Production:	292.82	LCY/Hour	
Adjusted Hourly Fleet Production: 201.72 LCY/Hour IOB TIME AND COST Image: State of the st						
Fleet size: 1 Excavator Total job time: 0.49 Hours Unit cost: \$0.540 /LCY Total job cost: \$53.00						
Unit cost: \$0.540 /LCY Total job cost: \$53.00	<u>JOB TIME AND COS</u>	T				
j	Fleet size: 1	Excava	ator To	otal job time:	0.49	Hours
Cost includes handling slash.				Total job cost:	\$53.00	

North Amethyst Pr	oject	Permi	it Action:	<u>SR-1</u>		Permit/Job#:	P2010007
ROJECT IDENTI	FICATION						
Task #: 005		tate:	Colorado			Abbreviation:	None
Date: 6/2/2012			Mineral			Filename:	P007-005
User: RCO						-	
Agency or org	ganization name:	DRM	1S				
OURLY EQUIPN	IENT COST						
Basic Machine: 0	Cat D6T LGP						
	00			_			
	traight						
	-shank ripper						
	per day						
Data Source:(CRG)						
<u>ost Breakdown</u> :							
		40.05		<u>U</u> 1	ilization %		
Ownership Cost/Hour		<u>49.25</u> 68.58			<u>NA</u> 100		
Operating Cost/Hour Ripper op. Cost/Hour		<u>08.58</u> 30.00			0		
Operator Cost/Hour		38.49					
Operator Cost/Hour	·	30.49		.	NA		
otal unit Cost/Hour:	\$0.00						
otal Fleet Cost/Hour:	\$156.32						
IATERIAL QUAN	<u>(TITIES</u>						
Initial Volume: 85							
Swell factor: 1.	165						
Loose volume: 99	LCY						
ource of estimated vol	lume: Div	rision of	Reclamati	on, Minin	g & Safety		
ource of estimated sw		Handbo		,	yy		
OURLY PRODU	CTION						
verage push distance:	50 fee	.t					
nadjusted hourly proc		LCY/hr					
5 51							
aterials consistency d	escription: <u>C</u>	onsolida	ated stockp	oile 1.0			
verage push gradient:	0%						
verage site altitude:	11,600 feet		_				
verage site attitude.			_				
aterial weight:	2,900 lbs/LC	Υ					
eight description:	Decomposed	l rock - :	50% Rock	50% Ear	h		
b Condition Correction	on Factor				Source		
Operato		0.75	0		(AVG.)		
Material consi	stency:	1.00	00		(CAT HB)		

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	0.940	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3248	
Adjusted unit production:14	14.41 LCY/hr	
Adjusted fleet production: 14	4.41 LCY/hr	

Fleet size:	1 Dozer(s)	
Unit cost:	\$1.082/LCY	
Total job time: Total job cost:	0.69 Hours \$107.19	

Volume is estimated for grading the last remaining 300 feet of access road.

BULLDOZER RIPPING WORK

	Task description:	- Kip cou	paction on roads :	inu pitub		
Site:	North Amethyst	Project	Permit Action	:: <u>SR-1</u>	Permit/Job#:	P2010007
	PROJECT IDEN	TIFICATION				
	Task #: 006		State: Colorad	0	Abbreviation:	None
	Date: 6/2/20	12 0	County: Mineral		Filename:	P007-006
	User: RCO					
	Agency or o	organization nan	ne: DRMS			
•	HOURLY EQUIP	PMENT COST				
	Basic Mac	chine: Cat D6	T LGP		Horsepower:	200
	Ripper Attach	ment: 3-Shan	k Ripper			er day
					Data Source: (0	CRG)
1	Cost Breakdown:					
			-		Utilization %	
		wnership Cost/I		49.25	NA	
		Operating Cost/H		68.58 50.00	<u>100</u> 100	
	Kipper	Operating Cost/H Operator Cost/H		38.49	 NA	
	7	Fotal Unit Cost/H		156.32		
	_	otal Fleet Cost/H		156.32		
			· · · · · ·			
-	MATERIAL QUA	ANTITIES	S	elected estimating n	nethod: Area	
4	Alternate Methods:					
Seismic:	NA	_	Bank Volume:	NA	BCY	NA
Area:	0.45	acres	Rip Depth (ft):	1.00	Volume: 726	BCY or CCY
	Sc	ource of estimate	d quantity: SR-1	calculations.		
	HOURLY PROD					
-						
2	<u>Seismic:</u>	Seis	nic Velocity:	NA	feet/second	
	A					
4	<u>Area:</u>	Average R	pping Depth:	1.64	mph	
			pping Depth pping Width:	6.58	degrees	
			pping Length:	200.00	feet	
			Dozer Speed:			
		nvulagu.		88.00	Ieet	
		-	·	<u> </u>	feet feet	
		Average Ma	neuver Time: per unit area:	0.25 0.719	feet feet acres/hour	
	Job Condition Correc	Average Ma Production	neuver Time:	0.25	feet	
		Average Ma Production	neuver Time: per unit area:	0.25	feet	
:		Average Ma Production <u>ction Factors</u> usted Hourly Uni	neuver Time: per unit area:	0.25 0.719 0.719	feet acres/hour Acres/hr	
:		Average Ma Production <u>ction Factors</u> 1sted Hourly Uni	neuver Time: per unit area: t Production:	0.25 0.719	feet acres/hour Acres/hr feet	
		Average Ma Production <u>ction Factors</u> 1sted Hourly Uni	neuver Time: per unit area: t Production: Site Altitude:	0.25 0.719 0.719 11,600	feet acres/hour Acres/hr	
		Average Ma Production <u>ction Factors</u> isted Hourly Uni Jo	neuver Time: per unit area: t Production: Site Altitude: Altitude Adj:	0.25 0.719 0.719 11,600 0.94	feet acres/hour Acres/hr feet (CAT HB)	
		Average Ma Production <u>ction Factors</u> 1sted Hourly Uni Jo No	neuver Time: per unit area: t Production: Site Altitude: Altitude Adj: b Efficiency: et Correction:	0.25 0.719 0.719 11,600 0.94 0.83 0.78	feet acres/hour Acres/hr feet (CAT HB) (1 shift/day) multiplier	
		Average Ma Production <u>etion Factors</u> isted Hourly Uni Jo No Adjusted Hou	neuver Time: per unit area: t Production: Site Altitude: Altitude Adj: b Efficiency:	0.25 0.719 0.719 11,600 0.94 0.83 0.78 n: 0.56	feet acres/hour Acres/hr feet (CAT HB) (1 shift/day)	
		Average Ma Production <u>ction Factors</u> isted Hourly Uni Jo No Adjusted Hou Adjusted Hou	neuver Time: per unit area: t Production: Site Altitude: Altitude Adj: b Efficiency: et Correction: rly Unit Production	0.25 0.719 0.719 11,600 0.94 0.83 0.78 n: 0.56	feet acres/hour Acres/hr feet (CAT HB) (1 shift/day) multiplier Acres/hr	
	Unadju	Average Ma Production <u>ction Factors</u> usted Hourly Uni Jo No Adjusted Hou Adjusted Hou COST	neuver Time: per unit area: t Production: Site Altitude: Altitude Adj: b Efficiency: et Correction: rly Unit Production	0.25 0.719 0.719 11,600 0.94 0.83 0.78 n: 0.56	feet acres/hour Acres/hr feet (CAT HB) (1 shift/day) multiplier Acres/hr Acres/hr	Hours

BULLDOZER WORK

Task description:		Respre	ead topsoil	l on pads (2)) and ac	cess road (300 LF	0		
e: North Amethyst	Proj	ect	Per	mit Action:	SR-1		Permit/Job#:	P2010007	
PROJECT IDEN	TIF	CATIO	N						
Task #: 007			State:	Colorado			Abbreviation;	None	
Date: 6/2/20	12		County:	Mineral			Filename:	P007-007	
User: RCO							-	1001 001	
Agency or	orgai	vization na	ame: DF	RMS					
HOURLY EQUI	PME	NT COS	<u>ST</u>						
Basic Machine:	Cat	D6T LGI							
Horsepower:	200								
Blade Type:		ight							
Attachment:		ank rippe	r	-					
Shift Basis:		r day	A						
Data Source:	$\frac{1}{(CR)}$								
- Cost Breakdown:									
COST DICARUOWII.					l T	Utilization %			
Ownership Cost/Ho	יזוור		\$49.25		-	NA			
Operating Cost/Ho			\$68.58			100	_		
Ripper op. Cost/Ho			\$0.00			0			
Operator Cost/Ho			\$38.49						
Operator Cost/11	Jui .		\$20.49			NA			
Total unit Cost/Hour	:	\$0.00							
Total Fleet Cost/Hou	ır:	\$156.32							
MATERIAL QUA	ANT	ITIES							
T	202								
	302								
	1.16								
Loose volume:	352 I	<u>.CY</u>	··· ·	_					
Source of estimated	volun	ne:	Division of	of Reclamati	on, Mini	ng & Safety			
Source of estimated s	swell	factor:	Cat Hand						
		_							
HOURLY PROD	UCT	ION							
Average push distand		5	0 feet						
Unadjusted hourly p			44.6 LCY/						
Onacjusted nourry pr	ouuc	uon. <u>+</u>	44.0 LC 17.	111					
Materials consistency	y des	ription:	Consoli	idated stocky	oile 1.0				
Average push gradier	nt·	0 %							
Average site altitude:		11,600 f	Peet						
riverage site utilide.	· ,								
Material weight:		2,900 lb	s/LCY				10		
Weight description:	-	Decomp	osed rock	- 50% Rock	<u>, 50% Ea</u>	rth			
Job Condition Correct	tion :	Factor				Source			
Opera			0.1	750		(AVG.)			
Material con				000		(CAT HB)			
Dozing				000		(GEN.)			
	-			-					

1.000	(AVG.)
0.830	(1 SHIFT/DAY)
0.700	(FND-MF)
1.000	(CAT HB)
0.940	(CAT HB)
0.793	(CAT HB)
1.000	(PAT)
0.3248	
44.41 LCY/hr	
44.41 LCY/hr	
	0.830 0.700 1.000 0.940 0.793 1.000 0.3248 44.41 LCY/hr

Fleet size:	1 Dozer(s)	
Unit cost:	\$1.082/LCY	

Total job time:	2.44 Hours
Total job cost:	\$380.85

REVEGETATION WORK

:	North Am	ethyst Project	Е Реп	nit Action:	SR-1	Permit/Job#:	P2010007
Ē	ROJECT	<u>IDENTIFIC</u>	ATION				
	Task #:	008	State:	Colorado		Abbreviation:	None
	Date:	6/2/2012	County:	Mineral		Filename:	P007-008
	User:	RCO					

Materials

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

Application

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

TILLING

Description		Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)		\$145.20
	Total Tilling Cost/Acre	\$145.20

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Mountain Brome - Bromar	3.90	6.27	\$12.99
Slender Wheatgrass - San Luis	4.40	16.06	\$15.97
Streambank Wheatgrass - Sodar	2.30	7.50	\$9.48
Fireweed	0.26	47.06	\$74.88
Totals Seed Mix	10.86	76.89	\$113.32

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$255.76

Total Seed Application Cost/Acre

\$255.76

MULCHING and MISCELLANEOUS

Materials

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

Application

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

NURSERY STOCK PLANTING

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

JOB TIME AND COST

		30%		Cost /Acre: Cost /Acre*:	
*Selected Replanti	ng Work Items:	TILLING, SEEI	JING		
Initial Job Cost:	\$694.28				
Reseeding Job Cost:	\$208.28				
Total Job Cost:	\$902.56				
Job Hours:	8.00				

EQUIPMENT MOBILIZATION/DEMOBILIZATION

: North Amethy	st Project	Permit /	Action: SR-1		Pe	ermit/Job#: P201	10007
PROJECT IDE	MITTCAL	101					
Task #: 009 State: Colorado				Abbr	reviation: <u>None</u>		
Date: <u>6/2/</u> User: RC	/ <u>2012</u>	12 County: Mineral			F	ilename: P007	-009
Agency	or organization	n name: DRMS					
EQUIPMENT	TRANSPOR	RT RIG COST					
					Shift ba	asis: 1 per da	iv
					Cost Data Sou		
T 1	- T D						
Iruc	k Tractor Desc	ription: GEN	ERIC ON-HIGH		UCK TRACTO 9 (2ND HALF,	OR, 6X4, DIESEL	POWERED,
m	1. T 1 D						
Truc	k Trailer Desc	ription: GENE	RIC FOLDING	GOOSEN	ECK, DROP I	DECK EQUIPME	NT TRAILER
Truc	k Trailer Desc	ription: GENE	RIC FOLDING	GOOSEN		DECK EQUIPME	NT TRAILER
	k Trailer Desc	ription: GENE	RIC FOLDING	GOOSEN	ECK, DROP I	DECK EQUIPME	NT TRAILER
Cost Breakdown:				GOOSEN (25T	ECK, DROP I , 50T, AND 10	DECK EQUIPME	NT TRAILER
Cost Breakdown: Available Rig Ca	pacities	0-25 Tons	26-50 Tons	GOOSEN (25T	ECK, DROP I , 50T, AND 10 + Tons	DECK EQUIPME	NT TRAILER
<u>Cost Breakdown:</u> Available Rig Ca Ownership	pacities Cost/Hour:		26-50 Tons \$18.37	GOOSEN (25T 51 \$	ECK, DROP I , 50T, AND 10 + Tons 22.33	DECK EQUIPME	NT TRAILER
<u>Cost Breakdown:</u> Available Rig Ca Ownership Operating	pacities	0-25 Tons \$16.63	26-50 Tons	GOOSEN (25T 51 \$ \$	ECK, DROP I , 50T, AND 10 + Tons	DECK EQUIPME	NT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operator	p acities Cost/Hour: Cost/Hour:	0-25 Tons \$16.63 \$44.38	26-50 Tons \$18.37 \$46.13	GOOSEN (25T 51 \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07	DECK EQUIPME	NT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper	pacities Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66	26-50 Tons \$18.37 \$46.13 \$27.66	GOOSEN (25T 51 \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66	DECK EQUIPME	NT TRAILER
<u>Cost Breakdown:</u> Available Rig Ca Ownership Operating Operator Helper	D Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39	GOOSEN (25T 51 \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39	DECK EQUIPME	NT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit	cost/Hour: cost/Hour: cost/Hour: cost/Hour: cost/Hour: cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39	GOOSEN (25T 51 \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39	DECK EQUIPME	NT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operaton Helper Total Unit	Description Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT:	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55	GOOSEN (25T 51 \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45	DECK EQUIPME	
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAH Machine	cost/Hour: cost/Hour: cost/Hour: cost/Hour: cost/Hour: cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39	GOOSEN (25T 51 \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip	DECK EQUIPME	
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAH Machine	vpacities Cost/Hour: Cost/Ho	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45	DECK EQUIPME	DOT Permi
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAH Machine Description	Cost/Hour: Cost/Cost/Hour: Cost/H	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig	GOOSEN (25T 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/	DECK EQUIPME	DOT Permi
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: BLE EQUIP Weight/ Unit (TONS)	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship Cost/hr/ unit	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig Cost/hr/unit	GOOSEN (25T 51 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	ECK, DROP I , 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/ fleet	DECK EQUIPME DOT) Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet

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:	DEL NORTE 45.00 40.00	miles mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	\$2,445.11	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$0.00	

Task # 009

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.13	1.13
Return Time (Hours):	1.13	1.13
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.25	2.25

JOB TIME AND COST

Total job time: 6.50 Hours

Total job cost: **\$2,445.11**