COST SUMMARY WORK

Task description: Bone		Bond update for	AM-1 (EPP)		
te:Topaz Mine		Per	Permit Action: <u>AM-1</u>		M1980055HR
PROJEC	<u>r identifi</u>	<u>CATION</u>			
Task #:	000	State:	Colorado	Abbreviation:	None
Date:	3/15/2012	County:	San Miguel	Filename:	M055-000
User:	RCO				

### TASK LIST (DIRECT COSTS)

Task	Description	Form	Fleet	Task	Cont
	Description	Used	Size	Hours	Cost
001	Demolition of vent collars, removal of fans, onsite disposal	DEMOLISH	1	48.00	\$14,051.86
002	Demolition of structures at portal and pad, onsite	DEMOLISH	1	16.00	\$3,836.27
	disposal				J
003	Excavate at vent collars for capping	EXCAVATE	1	2.80	\$305.00
004	Install atmospheric bulkhead underground	MINESEAL	1	16.00	\$1,500.00
005	Portal closure	MINESEAL	1	40.00	\$1,500.21
006	Recontour vent access roads	EXCAVATE	1	6.25	\$682.00
007	Rip compaction on vent pad areas	RIPPER	1	2.99	\$810.00
008	Grade vent pad areas	DOZER	1	6.14	\$1,592.30
009	Revegetate vent pad areas	REVEGE	1	4.00	\$1,577.84
010	Rip compaction on vent roads	RIPPER	1	4.69	\$1,270.00
011	Grade vent access roads	DOZER	1	4.04	\$1,047.53
012	Revegetate vent access roads	REVEGE	1	8.00	\$2,892.71
013	Grade dump slopes, push up to 2:1	DOZER	1	34.24	\$8,880.75
014	Grade dump pad, push against cut face	DOZER	1	29.19	\$7,570.31
015	Rip compaction on waste dump pad and access road	RIPPER	1	11.26	\$3,049.00
016	Contour portal and cut face, shape pad	DOZER	1	7.67	\$1,989.77
017	Haul topsoil from stockpile to waste dump	TRUCK1	1	12.26	\$3,037.48
018	Spread topsoil on contoured waste dump pad	DOZER	1	2.81	\$728.55
019	Close and seal water quality monitoring wells	BOREHOLE	1	30.00	\$1,144.58
020	Grade and contour access roads	DOZER	1	2.68	\$695.78
021	Recontour upland diversions and runoff catchments	EXCAVATE	1	1.31	\$143.00
022	Revegetate waste dump, access road, and SWMPs	REVEGE	1	20.00	\$8,562.43
023	Grade/shape closed well site surfaces	LOADER		0.22	\$22.00
024	Haul reclamation equipment to and from site	MOBILIZE	1	8.00	\$5,283.96
		<u>SUBTO</u>	TALS:	318.55	\$ \$72,173.33

### **INDIRECT COSTS**

#### OVERHEAD AND PROFIT:

Liability insurance:	2,02
Performance bond:	1.05
Job superintendent:	79.28

Total =	\$1,457.90	
Total =	\$757.82	
Total =	\$4,701.01	

BOND RECALCULATION FOR AMENDMENT AM-1

Profit:	10.00	Total =	\$7,217.33
		TOTAL O & $P =$	\$14,134.06
	CON	TRACT AMOUNT (direct + O & P) = $-$	\$86,307.39
LEGAL - ENGINEERING - PE	ROJECT MANAGEMENT	<u>``</u>	
		500.00 <b></b> . 1	

Financial warranty processing (legal/related costs): Engineering work and/or contract/bid preparation:	<u> </u>	0 Total = Total =	500.00
Reclamation management and/or administration:	5.00		\$4,315.37
CONTINGENCY:	0.00	Total =	\$0.00
		TOTAL INDIRECT COST =	\$22,617.49
TOTAL BO	\$94,790.82		

# **DEMOLITION WORK**

Site:	Topaz Mine	Permit Action:	AM-1	Permit/.	ob#: <u>M1980055HR</u>
PROJEC	CT IDENTIFICAT	ION			
Task #:	001	State: Colorado		Abbreviation:	None
Date:	3/15/2012	County: San Miguel		Filename:	M055-001
User:	RCO				

### UNIT COSTS

# Location adjustment: 96.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Remove steel fans/diffusers	4 ft H x 6 ft Diam	Loading and 2 mile haul, no salvage - Machine loading	24.00	CY	\$15.10	\$362.40
Break concrete collars, push down shafts	12 ft Diam x 1 ft thick	Floor, concrete, demolition only, average reinforcing - 12 in. thick	510.00	SF	\$3.10	\$1,581.00
Cut off steel casings (6)	6 ft Diam x 3 ft H	Welding truck/labor	6.00	EA	\$945.00	\$5,670.00
Weld on steel plates (6)	6' x 6' x 0.5"	Welding truck/labor	6.00	EA	\$315.00	\$1,890.00
Frame/pour reinf'd concrete caps	6' x 6' x 6"	Onsite batch/pour	6.00	EA	\$819.00	\$4,914.00
Set location monuments (6)	NA	Manual install during backfill	6.00	EA	\$14.00	\$84.00

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
Job Hours:	48.00	(unadjusted):	\$14,501.40	location):	\$14,051.86

# **DEMOLITION WORK**

7	Task description:	Demolition of structures at	portal and pad, onsi	te disposal	
Site: _	Topaz Mine	Permit Action:	AM-1	Permit/J	ob#: <u>M1980055HR</u>
<u>PROJEC</u>	CT IDENTIFICATION	<u>N</u>			
Task #:	002	State: Colorado		Abbreviation:	None
Date:	3/15/2012	County: San Miguel		Filename:	M055-002
User:	RCO			-	
	Agency or organizat	ion name: DRMS			

UNIT COSTS

### Location adjustment: 96.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Shop building	35x20x20	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	14,000.00	CF	\$0.16	\$2,184.00
Shop bldg concrete slab	35x20	Demo. and on-site disposal in existing pit, 4 in. thick - Max. 200 ft. push	700.00	SF	\$1.05	\$735.00
Water tanks with cribbing	10x10x10 ft mass	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	1,000.00	CF	\$0.16	\$156.00
Hydrocarbon storage	10x5x5 ft	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	250.00	CF	\$0.16	\$39.00
Electric switch gear	10x5x5 ft	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	250.00	CF	\$0.16	\$39.00
Receiver tank and piping	10x10x5 ft	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	500.00	CF	\$0.16	\$78.00
Portal shed, steel sets, timbers	10x10x15 ft	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 50 ft. push	1,500.00	CF	\$0.15	\$228.00
Backfill ore pad liner and gravel	100x100x1.5 ft	Loader pick up and carry, disposal in adit	1.00	EA	\$500.00	\$500.00

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
Job Hours:	16.00	(unadjusted):	\$3,959.00	location):	\$3,836.27

# HYDRAULIC EXCAVATOR WORK

Task description:	Excavate at vent	collars for c	apping			
e: <u>Topaz Mine</u>	Perr	nit Action:	AM-1	Per	rmit/Job#:	M1980055HR
PROJECT IDENTIFI	CATION					
Task #:         003           Date:         3/15/2012           User:         RCO	County:	Colorado San Migue	1		eviation: llename:	None M055-003
Agency or organ	ization name: DR	MS				
HOURLY EQUIPME	<u>NT COST</u>					
	Cat 320D L 9'-6" S ROPS Cab	tick	·	Horsepower: _ Weight (MT): _ Shift Basis: _ Data Source: _	2 1 p	148 1.55 er day CRG)
Cost Breakdown:						
Ownership Cost/H Operating Cost/H Operator Cost/H	lour: \$45.7 lour: \$38.6	0 7	Utilization % NA 100 NA	 		
Total Unit Cost/H	i					
Total Fleet Cost/I	Hour: \$109.	00				
	9 f estimated volume:		Swell fact			
Source of est	imated swell factor:	Cat Hand	book			
HOURLY PRODUCT	<u>'ION</u>					
Excavator Cycle Time (los	ad bucket, swing load	<u>led, dump b</u>	ucket, swing emp	oty):		
			ondition Descript		AVERAC	<del>JE</del>
	Secondary Job Co	ndition withi	in Basic Descript Cycle Time Va		GE	minutes
Load Bucket Capacity						
Rated Capacity:	1.54	LCY (hea	nad)	Bucket Size Cl	ass: <u>M</u> e	edium
Bucket Fill Factor:			ell Blasted (95%)	-105%) 1.000		
Adjusted Capacity:	1.54	LCY				
Job Condition Correction	Factors		Site	Altitude: <u>7000</u> f	èet	
		Source				
Altitude Adj: Job Efficiency:	0.90	(CAT HB	<u>/</u>			
Net Correction:	0.83	(1 shift/day multiplier	<u>y)</u>			
_		-		T (71/7-		
	ljusted Hourly Unit I ljusted Hourly Unit I		286.07 213.69	_ LCY/Hour LCY/Hour		
	justed Hourly Fleet I		<u>213.69</u>	LCY/Hour		
JOB TIME AND COS	•					
Fleet size: 1	Excavato	r To	tal job time:	2.80		Hours
Unit cost: \$0.5	10 /LCY		Total job cost:	\$305.0	0	

### SAFEGUARDING UNDERGROUND OPENINGS

Task description	on: Inst	all atmospheric bulkhes	ad underground			
Site: <u>Topaz Mine</u>		Permit Action:	AM-1		Permit/Job#:	M1980055HR
PROJECT IDENTI	FICATION					
Task #: 004 Date: 3/15/2012 User: RCO Agency	or organization n	State: <u>Colorado</u> County: <u>San Miguel</u> ame: DRMS		Abbrevi Filer		ne 055-004
UNIT COSTS	-					
<b>Opening Description</b>	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Underground workings	12x15	PUF block wall, non-	1.00	EA	\$1,500.00	\$1,500.00

Job Hours: 16.00

backed

Total Cost: \_\_\_\_\_\$1,500.00

# SAFEGUARDING UNDERGROUND OPENINGS

	Task description:	Portal closure			
Site:	Topaz Mine	Permit Action:	AM-1	Permit/J	ob#:M1980055HR
<u>PROJI</u>	CCT IDENTIFICATION	N			
Task # Date User	: 3/15/2012	State: Colorado County: San Miguel		Abbreviation: Filename:	None M055-005
	Agency or organizat	tion name: DRMS			
<u>UNIT (</u>	COSTS				

Opening Description	Dimensions	Closure Method	Quantity	Unit	Unit Cost	Total Cost
Place debris in adit	10x10	Adit closure - backfilling (per cu. yd.)	600.00	CY	\$2.11	\$1,266.00
Earthen backfill, 30 ft.	10x10	Adit closure - backfilling (per cu. yd.)	111.00	CY	<b>\$2.1</b> 1	\$234.21

Job Hours: \_\_\_\_\_ 40.00

Total Cost: \$1,500.21

# HYDRAULIC EXCAVATOR WORK

Task description:	Recontour	vent ac	ccess roads	i				
: Topaz Mine		Perm	it Action:	AM-1		Per	mit/Job#:	M1980055HR
PROJECT IDENTI	FICATION							
Task #:         006           Date:         3/16/2012           User:         RCO		State: _ unty: _	Colorado San Migue	el			viation:	None M055-006
Agency or org	anization name	: DRM	MS					
HOURLY EQUIPM	ENT COST							
Basic Machine: Attachment 1:	Cat 320D L ROPS Cab	9'-6" St	ick			sepower:		148 1.55
					Sh	ift Basis:	1 p	er day CRG)
Cost Breakdown:					220	. 50uroo	(	
Ownership Cost	Hour:	\$24.63	3	Utilization <sup>o</sup> NA	%			
Operating Cost	/Hour:	\$45.70	)	100				
Operator Cost		\$38.67		NA				
Total Unit Cost	/Hour:	\$109.0	0					
Total Fleet Cos	t/Hour:	\$109.0	00					
MATERIAL QUAN								
	1,110		CCY	Swell	factor:	1.165		
<b>T</b> 1	4		X (XX X					
Loose volume:	1,293		LCY					
	1,293 of estimated vo	olume:		of Reclamatic	on, Minin	ng & Safety		
Source				of Reclamatic	on, Minin	ng & Safety		
Source Source of e	of estimated vo		Division		on, Minin	ng & Safety		
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# BULLDOZER RIPPING WORK

	Task description:	<b>Rip compaction</b> or	vent pad areas		
Site	: Topaz Mine	Perm	it Action: <u>AM-1</u>	Permit/Job#	: M1980055HR
	PROJECT IDE	<b>NTIFICATION</b>			
	Task #: 007	State:	Colorado	Abbreviation:	None
			San Miguel	Filename:	M055-007
	User: RCC				
	Agency of	or organization name:DRM	<u>15</u>		
	HOURLY EQU	IPMENT COST			
	Basic M	fachine: Cat D9T - 9SU		Horsepower:	405
	Ripper Atta	chment: <u>1-Shank Ripper</u>		Shift Basis: 1	per day
				Data Source: (	CRG)
	Cost Breakdown:				
				Utilization %	
		Ownership Cost/Hour:	\$81.85	NA	
		Operating Cost/Hour:	\$140.68	100	
	Rippe	er Operating Cost/Hour:	\$9.64	100	
		Operator Cost/Hour: Total Unit Cost/Hour:	\$38.49	NA	
		<u> </u>	\$270.66		
		Total Fleet Cost/Hour:	\$270.66		
	MATERIAL Q	<u>UANTITIES</u>	Selected estimating	g method: Area	
	Alternate Methods	<u>::</u>			
Seismic:	NA	Bank	Volume: NA	BCY	NA
Area:	1.50	acres Rip De	pth (ft): 1.00	Volume: 2,420	BCY or CCY
		Source of estimated quantity:	Permit mans		
	HOURLY PRO	<b>DUCTION</b>			
	Seismic:				
		Seismic Veloci	ty: NA	feet/second	
	Area:				
	<u>1110u.</u>	Average Ripping Dep	th: 4.05	mph	
		Average Ripping Wid		degrees	
		Average Ripping Leng		feet	
		Average Dozer Spee		feet	
		Average Maneuver Tin	ne: 0.25	feet	
		Production per unit are	ea: 0.604	acres/hour	
	Job Condition Con	rection Factors			
	Una	djusted Hourly Unit Productio	on: 0.604	Acres/hr	
		-			
		Site Altitud	·	feet	
		Altitude A Job Efficience		(CAT HB) (1 shift/day)	
		Net Correctio		(1 shii/day) multiplier	
				-	
		Adjusted Hourly Unit Pr		Acres/hr	
		Adjusted Hourly Fleet Pr	oduction: 0.50	Acres/hr	
	JOB TIME AN	D COST			
	Fleet size:	1 Grader(s)	Total job tin	ne: 2.99	Hours
	Unit cost:	\$539.829 Per acre	Total job co	ost: \$810.00	
	Cint 0031.		10/41 100 00		

# BULLDOZER WORK

Topaz Mine	Permit Action:	AM-1	Permit/Job#:	M1980055HR
PROJECT IDENTIF	ICATION			
Task #: 008	State: Colorado		Abbreviation:	None
Date: 3/15/2012	County: San Migue	el	Filename:	M055-008
User: RCO			i nominito.	111055 000
Agency or orga	nization name:			
HOURLY EQUIPMI	ENT COST			
	t D9T - 9SU			
Horsepower: 40				
	mi-Universal			
	hank ripper	_		
	ber day			
	RG)			
Cost Breakdown:				
		Utilization %		
Ownership Cost/Hour:	\$80.19	NA		
Operating Cost/Hour:	\$140.68	100		
Ripper op. Cost/Hour:	\$7.17	100		
Operator Cost/Hour:	\$38.49	NA		
Total unit Cost/Hour:	\$266.52	<u> </u>		
Total Fleet Cost/Hour:	\$266.52			
Total Fleet Cost/Hour.	\$266.52			
MATERIAL QUANT	TTIES			
MATENIAL QUANT	<u>IIIES</u>			
Initial Volume: 4,35	6			
Swell factor: <u>1.1</u> 2	5			
Loose volume: 4,90	1 LCY			
Source of estimated volu	me: Division of Reclamati	on Mining & Safety		
Source of estimated volu: Source of estimated swel		on, Mining & Safety	<u></u>	
		on, Mining & Safety		
	l factor: Cat Handbook	on, Mining & Safety		
Source of estimated swel	1 factor: Cat Handbook	on, Mining & Safety	<u>_</u>	
Source of estimated swel HOURLY PRODUCT	1 factor: Cat Handbook <u> TION</u> <u> 50 feet</u>	ion, Mining & Safety		
Source of estimated swel	1 factor: Cat Handbook <u> FION</u> 50 feet	on, Mining & Safety		
Source of estimated swel HOURLY PRODUCT	I factor:       Cat Handbook <b>FION</b> 50 feet         ction:       2,110.5 LCY/hr			
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ- Materials consistency des	I factor:       Cat Handbook <b>TION</b> 50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr			
Source of estimated swel <b>HOURLY PRODUC</b> Average push distance: Unadjusted hourly produce Materials consistency des Average push gradient:	1 factor:       Cat Handbook <b>TION</b> 50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr         0 %       0			
Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ- Materials consistency des	I factor:       Cat Handbook <b>TION</b> 50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr			
Source of estimated swel <b>HOURLY PRODUC</b> Average push distance: Unadjusted hourly produce Materials consistency des Average push gradient:	1 factor:       Cat Handbook <b>TION</b> 50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr         0 %       0			
Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude:	1 factor:       Cat Handbook <b>FION</b> 50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr         0 %       7,000 feet	 Dile 1.0		
Source of estimated swel <b>HOURLY PRODUC</b> Average push distance: Unadjusted hourly produce Materials consistency des Average push gradient: Average site altitude: Material weight:	1 factor:       Cat Handbook <b>FION</b> 50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr         0 %       7,000 feet         2,650 lbs/LCY       Decomposed rock - 25% Rock,	 Dile 1.0		
Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produce Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description:	1 factor:       Cat Handbook         FION       50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr         0 %       7,000 feet         2,650 lbs/LCY       Decomposed rock - 25% Rock,         Factor       Easter	pile 1.0		
Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Iob Condition Correction	1 factor:       Cat Handbook <b>FION</b> 50 feet         ction:       2,110.5 LCY/hr         scription:       Consolidated stockr         0 %       7,000 feet         2,650 lbs/LCY       Decomposed rock - 25% Rock,         Factor       Skill:       0.750	 pile 1.0  , 75% Earth <u>Source</u>		

Visibility	r: <u>1.000</u>	(AVG.)
Job efficiency	0.830	(1 SHIFT/DAY)
Spoil pile	. 0.700	(FND-MF)
Push gradient	: 1.000	(CAT HB)
Altitude	: 1.000	(CAT HB)
Material Weight	.: 0.868	(CAT HB)
Blade type	: 1.000	(PAT)
Net correction	: 0.3782	
Adjusted unit production:	798.19 LCY/hr	
Adjusted fleet production:	798.19 LCY/hr	

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.334/LCY	

Total job time:	6.14 Hours	
Total job cost:	\$1,636.33	

### **REVEGETATION WORK**

Task descrip	otion:	Revegetate vent pad areas		
ite: <u>Topaz M</u> i	ine	Permit Action: AM-1 Pe	ermit/Job#: <u>M19800</u>	55HR
<b>PROJECT</b>	IDENTIFI	CATION		
Task #: Date: User:	009 3/16/2012 RCO		reviation: <u>None</u> Filename: <u>M055-00</u>	9
Ag <u>FERTILIZ</u>				
Materials				
		Units /		

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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$92.35
Weed control spraying (MEANS 31 31 16.13 3100)		\$145.20
	Total Tilling Cost/Acre	\$237.55

### <u>SEEDING</u>

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	0.96	15.67	\$9.72
Indian Ricegrass - Native	7.42	24.02	\$48.97
Sand Dropseed	0.14	16.71	\$0.96
Bottlebrush Squirreltail	4.08	17.98	\$99.27
Galleta	4.94	18.03	\$121.87
Muttongrass	0.20	4.13	\$7.20
Sagebrush, Mountain or Big	0.20	10.56	\$6.60
Saltbush, Four Wing	0.50	0.69	\$5.25
Winter Fat	0.50	1.27	\$16.00

Totals Seed Mix	18.94	109.07	\$315.84

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
					\$
		Tota	s Nursery Stoc	<u>k Cost / Acre</u>	\$0.00

	No. of Acres: ed Failure Rate: ng Work Items:	Cost /Acre: Cost /Acre*:	
Initial Job Cost:	\$1,213.73		
Reseeding Job Cost:	\$364.12		
Total Job Cost:	\$1,577.84		
Job Hours:	4.00		

# BULLDOZER RIPPING WORK

	Task descriptio	n: <u>Rip</u>	compaction on vent roa	ds		
Site:	Topaz Mine		Permit Action:	AM-1	Permit/Job#:	M1980055HR
	PROJECT II	DENTIFICAT	ION			
	Task #: 0	10	State: Colorado		Abbreviation:	None
		/15/2012	County: San Migu	el	Filename:	M055-010
		CO				
	Agenc	y or organization	name: DRMS			
	HOURLY EC	QUIPMENT C	<u>OST</u>			
	Basic		t D9T - 9SU		Horsepower:	405
	Ripper A	ttachment: <u>1-8</u>	Shank Ripper		Shift Basis: 1 p	er day
					Data Source: (C	CRG)
	Cost Breakdow	<u>n:</u>				
					Itilization %	
		Ownership C		1.85	NA	
		Operating C		0.68	100	
	Rij	pper Operating C		.64	100	
		Operator C Total Unit C		3.49	NA	
				0.66		
		Total Fleet C	ost/Hour:\$27	0.66		
	MATERIAL	<b>QUANTITIES</b>	Sel	ected estimating m	ethod: Area	
	Alternate Metho	ods:				
ismic:	NA		Bank Volume:	NA	BCY	NA
Area:	2.75	acres	Rip Depth (ft):	1.00	Volume: 4,437	BCY or C
	-					Dor the
		Source of esti-	mated quantity: <u>Permi</u>	maps		
	HOURLY PR	<b>RODUCTION</b>				
	Seismic:					
-			Seismic Velocity:	NA	feet/second	
	A		·			
4	Area:	A 11000	a Dimmin a Douth.	4.05	1·	
			ge Ripping Depth:	4.05	mph	
			e Ripping Width:	<u>6.08</u> 500.00	degrees feet	
			age Dozer Speed:	88.00	feet	
			Maneuver Time:	0.25	feet	
		-	tion per unit area:	0.706	acres/hour	
	Job Condition C	Correction Factors		0.700		
<u>•</u>			_	0.707		
	U	nacjusted Houriy	Unit Production:	0.706	Acres/hr	
			Site Altitude:	7,000	feet	
			Altitude Adj:	1.00	(CAT HB)	
			Job Efficiency:	0.83	(1 shift/day)	
			Net Correction:	0.83	multiplier	
		Adjusted	Hourly Unit Production:	0.59	Acres/hr	
		-	Hourly Fleet Production:	0.59	Acres/hr	
9	<u>JOB TIME A</u>	ND COST				
_	Fleet size:	1	Grader(s)	Total job time:	4.69	Hours
	T Trait agents	¢461.052	Der sere	Tatal :-1		
	Unit cost:	\$461.952	Per acre	Total job cost:	\$1,270.00	

### BULLDOZER WORK

Topaz Mine		Permit Act	ion: <u>AM-1</u>	Permit	/Job#:	M1980055HR
PROJECT IDEN	TIFICATION	[				
Task #: 011		State: Color	rado	Abbrevia	tion:	None
Date: 3/15/2	012	County: San N	liguel	Filen		M055-011
User: RCO	2					
Agency or	organization nar	ne: DRMS				
HOURLY EQUI	PMENT COST	<u>C</u>				
Basic Machine:	Cat D9T - 9SU	r				
Horsepower:	405					
Blade Type:	Semi-Universa	1				
Attachment:	3-shank ripper					
Shift Basis:	1 per day					
Data Source:	(CRG)		·			
Cost Breakdown:						
COSI DICAKOOWII:			Utilizatio	on %		
Ownership Cost/He	our.	\$80.19	NA			
Operating Cost/He		\$140.68	100			
Ripper op. Cost/He		\$0.00	0			
Operator Cost/He		\$38.49	NA			
Operator Coseria	Jui.	\$J0. <del>1</del> 9	NA			
Fotal unit Cost/Hou	:: \$259.35					
Fotal Fleet Cost/Hou	ır: <b>\$259.35</b>					
104111000 00002100						
MATERIAL QU						
MATERIAL QU	ANTITIES					
MATERIAL OU	ANTITIES 2,218					
MATERIAL OU Initial Volume:	ANTITIES 2,218 1.125					
MATERIAL OU Initial Volume:	ANTITIES 2,218					
MATERIAL OU Initial Volume:	ANTITIES 2,218 1.125 2,495 LCY	 Division of Recla	amation, Mining & Sa	lfety		
MATERIAL OU Initial Volume: Swell factor: Loose volume:	ANTITIES 2,218 1.125 2,495 LCY volume:	Division of Recla Cat Handbook	amation, Mining & Sa	ıfety	-	
MATERIAL OU Initial Volume:	ANTITIES 2,218 1.125 2,495 LCY volume:		amation, Mining & Sa	lfety	_	
MATERIAL OU Initial Volume:	ANTITIES           2,218           1.125           2,495 LCY           volume:           swell factor:		amation, Mining & Sa	ıfety	-	
MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	<b>ANTITIES</b> 2,218         1.125 <b>2,495</b> LCY         volume:            swell factor:            UCTION	Cat Handbook	amation, Mining & Sa	ifety	-	
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan	<b>ANTITIES</b> 2,218         1.125 <b>2,495</b> LCY         volume:         swell factor:         UCTION         ce:       70	Cat Handbook	amation, Mining & Sa	ıfety	_	
MATERIAL OU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	<b>ANTITIES</b> 2,218         1.125 <b>2,495</b> LCY         volume:         swell factor:         UCTION         ce:       70	Cat Handbook	amation, Mining & Sa	lfety	-	
MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan	ANTITIES           2,218           1.125           2,495 LCY           volume:           swell factor:           0           UCTION           ce:         70           roduction:         1,6	Cat Handbook		ıfety	_	
MATERIAL OU. Initial Volume:	<b>ANTITIES</b> 2,218         1.125 <b>2,495</b> LCY         volume:         swell factor: <b>UCTION</b> ce:       70         roduction:       1,6         y description:	feet 533.5 LCY/hr		ifety		
MATERIAL OU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly production Materials consistence Average push gradie	<b>ANTITIES</b> 2,218         1.125 <b>2,495</b> LCY         volume:         swell factor: <b>UCTION</b> ce:       70         roduction:       1,6         y description:         nt:       0 %	Cat Handbook feet 533.5 LCY/hr Consolidated s		<u>afety</u>		
MATERIAL OU. Initial Volume:	<b>ANTITIES</b> 2,218         1.125 <b>2,495</b> LCY         volume:         swell factor: <b>UCTION</b> ce:       70         roduction:       1,6         y description:         nt:       0 %	Cat Handbook feet 533.5 LCY/hr Consolidated s		<u>afety</u>		
MATERIAL OU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly production Materials consistence Average push gradie	ANTITIES         2,218         1.125         2,495 LCY         volume:         swell factor:         0         total         total         total         total         total         total         total         volume:         total         total <tdt< td=""><td>Cat Handbook feet 533.5 LCY/hr Consolidated s t</td><td></td><td>1fety</td><td></td><td></td></tdt<>	Cat Handbook feet 533.5 LCY/hr Consolidated s t		1fety		
MATERIAL OU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly production Materials consistence Average push gradie Average site altitude	<b>ANTITIES</b> 2,218         1.125 <b>2,495</b> LCY         volume:         swell factor: <b>UCTION</b> ce:       70         roduction:       1,6         y description:         nt:       0 %         :       7,000 fee         2,650 lbs.	Cat Handbook feet 533.5 LCY/hr Consolidated s t		<u>lfety</u>		
MATERIAL OU. Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly pro- Materials consistence Average push gradie Average site altitude Material weight: Weight description:	ANTITIES         2,218         1.125         2,495 LCY         volume:         swell factor:         0         0         1.125         2,495 LCY         volume:         1.125         2,495 LCY         volume:         1.125         2,495 LCY         volume:         1.6         UCTION         cce:       70         roduction:       1,6         y description:         nt:       0 %         2,650 lbs.         Decompo	Cat Handbook feet 533.5 LCY/hr Consolidated s t	tockpile 1.0 Rock, 75% Earth			
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated <b>HOURLY PROD</b> Average push distan Unadjusted hourly p Materials consistenc Average push gradie Average site altitude Material weight: Weight description: Sob Condition Correct	ANTITIES         2,218         1.125         2,495 LCY         volume:         swell factor:         swell factor:         0         total         y description:         nt:       0 %         2,650 lbs;         Decompo         ction Factor	Cat Handbook feet 533.5 LCY/hr Consolidated s t /LCY sed rock - 25% 1	tockpile 1.0 Rock, 75% Earth			
MATERIAL QUA Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated <b>HOURLY PROD</b> Average push distan Unadjusted hourly p Materials consistenc Average push gradie Average site altitude Material weight: Weight description: Sob Condition Correct	ANTITIES         2,218         1.125         2,495 LCY         volume:         swell factor:         swell factor:         0         ce:       70         roduction:       1,6         y description:         nt:       0 %         2,650 lbs.         Decomposition         ction Factor         ator Skill:	Cat Handbook feet 533.5 LCY/hr Consolidated s t	tockpile 1.0 Rock, 75% Earth			

ty: 1.000	(AVG.)
cy: 0.830	(1 SHIFT/DAY)
le: 0.700	(FND-MF)
nt: 1.000	(CAT HB)
de: 1.000	(CAT HB)
ht: 0.868	(CAT HB)
pe: 1.000	(PAT)
on: 0.3782	
617.79 LCY/hr	
617 79 I CV/br	
	cy:         0.830           ile:         0.700           ant:         1.000           de:         1.000           ht:         0.868           pe:         1.000           on:         0.3782

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.420/LCY	

Total job time:	4.04 Hours	
Total job cost:	\$1,047.53	

### **REVEGETATION WORK**

2

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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)		\$92.35
Weed control spraying (MEANS 31 31 16.13 3100)		\$145.20
	Total Tilling Cost/Acre	\$237.55

# <u>SEEDING</u>

Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
0.96	15.67	\$9.72
7.42	24.02	\$48.97
0.14	16.71	\$0.96
4.08	17.98	\$99.27
4.94	18.03	\$121.87
0.20	4.13	\$7.20
0.20	10.56	\$6.60
0.50	0.69	\$5.25
0.50	1.27	\$16.00
	PLS LBS / Acre 0.96 7.42 0.14 4.08 4.94 0.20 0.20 0.50	PLS         Seeds per SQ. FT           0.96         15.67           7.42         24.02           0.14         16.71           4.08         17.98           4.94         18.03           0.20         4.13           0.20         10.56           0.50         0.69

Totals Seed Mix	18.94	109.07	\$315.84

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 Stock Cost / Acre					\$0.00

Estimate *Selected Replanti	No. of Acres: ed Failure Rate: ng Work Items:	30%	Co	Cost /Acre: ost /Acr <u>e*:</u>	
Initial Job Cost:	\$2,225.16				
Reseeding Job Cost:	\$667.55				
Total Job Cost:	\$2,892.71				
Job Hours:	8.00				

BULLDOZER	WORK
DOLLOUDIC	H OILL

	ask description:	Grade dump slo	pro, publi up			
: _	Topaz Mine	Per	mit Action:	AM-1	Permit/Job#:	M1980055HR
P	ROJECT IDENTIF	CATION				
_	 Task #: 013	State:	Colorado		Abbreviation:	None
	Date: 3/15/2012	County:	San Migue	1	Filename:	M055-013
	User: RCO	County.	u		Pitename.	10000-010
	Agency or organ	ization name:]	RMS			
H	OURLY EQUIPME	NT COST				
	Basic Machine: Cat	D9T - 9SU				
	Horsepower: 405					
	Blade Type: Sen	ni-Universal				
	Attachment: 3-sh	ank ripper				
	Shift Basis: 1 pe	er day				
	Data Source: (CR	G)				
<u>C</u>	ost Breakdown:					
,		#AA		Utilization %		
	Ownership Cost/Hour:	\$80.19		NA		
	Operating Cost/Hour:	\$140.68		100		
1	Ripper op. Cost/Hour:	\$0.00		0		
	Operator Cost/Hour:	\$38.49		NA		
Тс	otal unit Cost/Hour:	\$259.35				
	otal Fleet Cost/Hour:	\$259.35 \$259.35				
10		9437.33		<b></b>		
Μ	ATERIAL QUANT	ITIES				
]	Initial Volume: 7,000					
	Swell factor: 1.215					
	Swell factor: 1.215	5 LCY				
	Swell factor: 1.215 Loose volume: 8,505	LCY	 of Reclamati	on Mining & Safety		
So	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum	LCY ne: Division		on, Mining & Safety		
So	Swell factor: 1.215 Loose volume: 8,505	LCY ne: Division		on, Mining & Safety		
So So	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell	BLCY ne: Division factor: Cat Hand		on, Mining & Safety		
So So <u>H</u> (	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT	BLCY ne: Division factor: Cat Hand		on, Mining & Safety		
So So <u>H(</u> Av	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance:	S LCY ne: <u>Division</u> factor: <u>Cat Hand</u> <u>ION</u> 150 feet	book	on, Mining & Safety		
So So <u>H(</u> Av	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT	S LCY ne: <u>Division</u> factor: <u>Cat Hand</u> <u>ION</u> 150 feet	book	on, Mining & Safety		
So So <u>H</u> ( Av Ur	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance:	5 LCY         ne:       Division         factor:       Cat Hand         ION       150 feet         tion:       910.5 LCY/	book			
So So <u>H(</u> Av Ur Ma	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly produc aterials consistency desc	5 LCY         ne:       Division         factor:       Cat Hand         ION         tion:       150 feet         910.5 LCY/         cription:       Consol	book hr			
So So <u>H</u> Av Ur Ma	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly product aterials consistency description verage push gradient:	S LCY         ne:       Division         factor:       Cat Hand         ION       150 feet         tion:       910.5 LCY/         cription:       Consol         10 %	book hr			
So So <u>H</u> Av Ur Ma	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly produc aterials consistency desc	5 LCY         ne:       Division         factor:       Cat Hand         ION         tion:       150 feet         910.5 LCY/         cription:       Consol	book hr			
So So <u>H</u> ( Av Ur Ma Av	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly product aterials consistency description verage push gradient:	S LCY         ne:       Division         factor:       Cat Hand         ION       150 feet         tion:       910.5 LCY/         cription:       Consol         10 %	book hr			
So So <u>H</u> ( Av Ur Ma Av Av	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly produc aterials consistency desc verage push gradient: verage site altitude:	S LCY         ne:       Division         factor:       Cat Hand         ION       150 feet         tion:       910.5 LCY/         cription:       Consol         10 %       5,800 feet	book hr idated stockr	pile 1.0		
So So <u>H</u> ( Av Ur Ma Av Av Ma Wa	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly produc aterials consistency desc verage push gradient: verage site altitude: aterial weight:	5 LCY         ne:       Division         factor:       Cat Hand         ION       150 feet         tion:       910.5 LCY/         cription:       Consol         10 %       5,800 feet         3,300 lbs/LCY       Decomposed rock	book hr idated stockr	 pile 1.0 25% Earth		
So So <u>H</u> ( Av Ur Ma Av Av Ma Wa	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum burce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly produc aterials consistency desc verage push gradient: verage site altitude: aterial weight: eight description:	5 LCY ne: Division factor: Cat Hand TON tion: 910.5 LCY/ cription: Consol 10 % 5,800 feet 3,300 lbs/LCY Decomposed rock Factor	book hr idated stockr			
So So <u>H</u> ( Av Ur Ma Av Av Ma	Swell factor: 1.215 Loose volume: 8,505 purce of estimated volum purce of estimated swell OURLY PRODUCT verage push distance: hadjusted hourly produc aterials consistency desc verage push gradient: verage site altitude: aterial weight: eight description: b Condition Correction	5 LCY         ne:       Division         factor:       Cat Hand <b>ION</b> 150 feet         tion:       910.5 LCY/         cription:       Consol         10 %       5,800 feet         3,300 lbs/LCY       Decomposed rock         Factor       0.	book hr idated stockp - 75% Rock,	 pile 1.0 25% Earth		

Visibilit	y: 1.000	(AVG.)
Job efficiency	y: 0.830	(1 SHIFT/DAY)
Spoil pil	e: 0.800	(FND-RF)
Push gradien	.t: 0.786	(CAT HB)
Altitud	e: 1.000	(CAT HB)
Material Weigh	t: 0.697	(CAT HB)
Blade type	e: 1.000	(PAT)
Net correction	n:0.2728	
Adjusted unit production:	248.38 LCY/hr	
Adjusted fleet production:	248.38 LCY/hr	

#### JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$1.044/LCY

Total job time:	34.24 Hours
Total job cost:	\$8,880.75

# BULLDOZER WORK

Topaz Mine	Permit Action:	AM-1	Permit/Job#:	M1980055HR
<b>ΒΓ</b> Λ ΠΕΛΈ ΠΛΕΝΤΙΓΙΟ Α ΤΙ	ION			
PROJECT IDENTIFICATI				
Task #: 014 Date: 3/15/2012	State: <u>Colorado</u>	1	Abbreviation:	None
User: RCO	County: <u>San Migue</u>		Filename:	M055-014
Agency or organization	name: DRMS			
HOURLY EQUIPMENT C	<u>OST</u>			
Basic Machine: Cat D9T -	9SU			
Horsepower: 405				
Blade Type: Semi-Univ	ersal			
Attachment: 3-shank rip	per			
Shift Basis: <u>1 per day</u>				
Data Source: (CRG)		_		
Cost Breakdown:	I	Utilization %		
Ownership Cost/Hour:	\$80.19	NA		
Operating Cost/Hour:	\$140.68	100		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.49	NA		
Total unit Cost/Hour: \$259				
Total Fleet Cost/Hour: \$259	35			
MATERIAL QUANTITIES Initial Volume: 6,000				
Swell factor: 1.215				
Loose volume: 7,290 LCY				
Source of estimated volume:	Division of Reclamation	on. Mining & Safety		
Source of estimated swell factor:				
HOUDIN BRODUCTION				
HOURLY PRODUCTION				
Average push distance:	150 feet			
Unadjusted hourly production:	910.5 LCY/hr			
Materials consistency description	Consolidated stockp	ile 1.0		
Average push gradient: 5 %				
Average site altitude: 5,800	feet			
Material weight: 3,300	lbs/LCY			
		9.50/ TL 1		
Weight description:	mposed rock - 75% Rock,	25% Earth		
Job Condition Correction Factor		Source		
Job Condition Correction Factor Operator Skill:	0.750	<u>Source</u> (AVG.)		
Job Condition Correction Factor		Source		

ty:1.000	(AVG.)
ey: 0.830	(1 SHIFT/DAY)
le: 0.700	(FND-MF)
nt: 0.903	(CAT HB)
le: 1.000	(CAT HB)
nt: 0.697	(CAT HB)
ne: 1.000	(PAT)
n: 0.2743	
249.75 LCY/hr	
249.75 LCY/hr	
	y:       0.830         le:       0.700         nt:       0.903         le:       1.000         nt:       0.697         ne:       1.000         om:       0.2743         249.75 LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$1.038/LCY

Total job time:	29.19 Hours
Total job cost:	\$7,570.31

# BULLDOZER RIPPING WORK

	Task description	n: Rip compaction on was	te dump pad and acce	ess road	
Site	Topaz Mine	Permit Act	tion: <u>AM-1</u>	Permit/Job#	M1980055HR
	PROJECT I	DENTIFICATION			
	Task #: 0	15 State: Colo	rado	Abbreviation:	None
			Miguel	Filename:	M055-015
	Agend	cy or organization name: DRMS			
	HOURLY E	QUIPMENT COST			
	Basi	c Machine: Cat D9T - 9SU		Horsepower:	405
	Ripper A	ttachment: 1-Shank Ripper		Shift Basis: 1 p	ber day
				Data Source: (1	CRG)
	Cost Breakdow	<u>n:</u>			
				Jtilization %	
		Ownership Cost/Hour:	\$81.85	NA	
	р:	Operating Cost/Hour:	\$140.68	100	
	KI	pper Operating Cost/Hour: Operator Cost/Hour:	\$9.64 \$38.49	100 NA	
		Total Unit Cost/Hour:	\$270.66		
		Total Fleet Cost/Hour:	\$270.66		
	MATEDIAT				
		QUANTITIES	Selected estimating n	nethod: Area	
	Alternate Metho	<u>ods:</u>			
Seismic:	NA	Bank Volu	ne: NA	BCY	NA
Area:	6.60	acres Rip Depth (	ft): 1.00	Volume: 10,648	BCY or CCY
		Source of estimated quantity: P	ermit maps		
	HOURLY PE	RODUCTION			
	Seismic:				
		Seismic Velocity:	NA	feet/second	
	Area:				
		Average Ripping Depth:	4.05	mph	
		Average Ripping Width:	6.08	degrees	
		Average Ripping Length:	500.00	feet	
		Average Dozer Speed:	88.00	feet	
		Average Maneuver Time:	0.25	feet	
		Production per unit area:	0.706	acres/hour	
	Job Condition C	Correction Factors			
	U	nadjusted Hourly Unit Production:	0.706	Acres/hr	
		Site Altitude:	7,000	feet	
		Altitude Adj:	1.00	(CAT HB)	
		Job Efficiency:	0.83	(1 shift/day)	
		Net Correction:	0.83	multiplier	
		Adjusted Hourly Unit Produc	tion: 0.59	Acres/hr	
		Adjusted Hourly Fleet Produc		Acres/hr	
	JOB TIME A	ND COST		7.7	
	Fleet size:	1 Grader(s)	Total job time:	11.26	Hours
	Unit cost:	\$461.952 Per acre	Total job cost:	\$3,049.00	
	-		J		

# BULLDOZER WORK

Topaz Mine	Permit Action:	AM-1	- Permit/Job#•	M1980055HR
PROJECT IDENTI	<b>FICATION</b>			
Task #: 016	State: Colorado		Abbreviation:	None
Date: $3/15/2012$		1	Filename:	M055-016
User: RCO	<u> </u>	·	i nename.	1/10/05-010
Agency or orga	anization name: <u>DRMS</u>			
HOURLY EQUIPM	ENT COST			
Basic Machine: Ca	at D9T - 9SU			
Horsepower: 40		_		
	emi-Universal			
<u> </u>	shank ripper	_		
	per day	_		
	CRG)			
<b>`</b> `		_		
Cost Breakdown:	1	11412-4-07		
Annarchin Cost/Harrow	¢0A 1A	Utilization %		
Ownership Cost/Hour: Operating Cost/Hour:		<u>NA</u>		
Ripper op. Cost/Hour:		100		
		0		
Operator Cost/Hour:	\$38.49	NA		
Total unit Cost/Hour:	\$259.35			
Total Fleet Cost/Hour:	\$259.35			
MATERIAL QUAN	<u>TITIES</u>			
Initial Volume:3,0	00			
Initial Volume: 3,0 Swell factor: 1.1	00			
Initial Volume: 3,0 Swell factor: 1.1	00			
Initial Volume: 3,0 Swell factor: 1.1	00 65 95 LCY	on, Mining & Safety		
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4	00 65 95 LCY ume: Division of Reclamatic	on, Mining & Safety		
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu	00 65 95 LCY ume: Division of Reclamatic	on, Mining & Safety		
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe	00 65 95 LCY ume: Division of Reclamatic Il factor: Cat Handbook	on, Mining & Safety		
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC	00 65 95 LCY ume: Division of Reclamatic Il factor: Cat Handbook	on, Mining & Safety		
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC	00 65 95 LCY ume: Division of Reclamation Il factor: Cat Handbook	on, Mining & Safety		
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC	00 65 95 LCY ume: Division of Reclamation Il factor: Cat Handbook	on, Mining & Safety		
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ	00 65 95 LCY ume: Division of Reclamatic 11 factor: Cat Handbook CTION action: 80 feet 1,460.1 LCY/hr			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC	00 65 95 LCY ume: Division of Reclamatic 11 factor: Cat Handbook CTION action: 80 feet 1,460.1 LCY/hr			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de	00 65 95 LCY ume: Division of Reclamatic Cat Handbook TION CTION action: 80 feet 1,460.1 LCY/hr escription: Consolidated stockp			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient:	00 65 95 LCY ume: Division of Reclamation Ull factor: Cat Handbook CTION CTION Source 1,460.1 LCY/hr escription: Consolidated stockp 5 %			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de	00 65 95 LCY ume: Division of Reclamatic Cat Handbook TION CTION action: 80 feet 1,460.1 LCY/hr escription: Consolidated stockp			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	00 65 95 LCY ume: Division of Reclamatic 11 factor: Cat Handbook TION action: 80 feet 1,460.1 LCY/hr escription: Consolidated stockp 5 % 5,800 feet			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient:	00 65 95 LCY ume: Division of Reclamation Ull factor: Cat Handbook CTION CTION Source 1,460.1 LCY/hr escription: Consolidated stockp 5 %			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight:	00 65 95 LCY ume: Division of Reclamatic 11 factor: Cat Handbook CTION 20 20 20 20 20 20 20 20 20 20	<u>ile 1.0</u>		
Initial Volume:       3,0         Swell factor:       1,10         Loose volume:       3,4         Source of estimated volu         Source of estimated swe         HOURLY PRODUC         Average push distance:         Unadjusted hourly produ         Materials consistency de         Average site altitude:         Material weight:         Weight description:	00         65         95 LCY         ume:       Division of Reclamatic         11 factor:       Cat Handbook         2TION         action:       1,460.1 LCY/hr         escription:       Consolidated stockp         5 %         5,800 feet         2,900 lbs/LCY         Decomposed rock - 50% Rock,			
Initial Volume:       3,0'         Swell factor:       1.1'         Loose volume:       3,4'         Source of estimated volu         Source of estimated swe         HOURLY PRODUC         Average push distance:         Unadjusted hourly produ         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	00 65 95 LCY ume: Division of Reclamatic 11 factor: Cat Handbook CTION action: 1,460.1 LCY/hr escription: Consolidated stockp 5 % 5,800 feet 2,900 lbs/LCY Decomposed rock - 50% Rock, n Factor			
Initial Volume: 3,0 Swell factor: 1.1 Loose volume: 3,4 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator	00 65 95 LCY ume: Division of Reclamatic 11 factor: Cat Handbook CTION action: 1,460.1 LCY/hr escription: Consolidated stockp 5 % 5,800 feet 2,900 lbs/LCY Decomposed rock - 50% Rock, n Factor Skill: 0.750			
Initial Volume:       3,0'         Swell factor:       1.1'         Loose volume:       3,4'         Source of estimated volu         Source of estimated swe         HOURLY PRODUC         Average push distance:         Unadjusted hourly produ         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	00 65 95 LCY ume: Division of Reclamatic 11 factor: Cat Handbook CTION 2 Cat Handbook 2 Consolidated stockp 2 Solo feet 2,900 lbs/LCY Decomposed rock - 50% Rock, 1 Factor 2 Skill: 0.750 tency: 1.000			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3120	
Adjusted unit production: 45	5.55 LCY/hr	
Adjusted fleet production: 45	5.55 LCY/hr	

Fleet size:	_1 Dozer(s)
Unit cost:	\$0.569/LCY

Total job time:	7.67 Hours
Total job cost:	\$1,989.77

# TRUCK/LOADER TEAM WORK

Site: Topaz Mine		Permit	t Actio	n: <u>AM-1</u>		Permit/Job#: <u>M</u>	1980055HR
<u>PROJECT IDEN</u>	TIFICATION	I					
Task #: 017			Colora		A	bbreviation: <u>No</u>	
Date: <u>3/16/2</u> User: <u>RCO</u>	012	County:	San Mi	iguel		Filename: MO	055-017
·			19				
Agency or	organization nar	me: <u>DRM</u>	15				
HOURLY EQUI	PMENT COST	<u>Γ</u>			Shift ba	asis: <u>1 per day</u>	
				quipment Descri			
Т	ruck Loader Tea	m -Truck: -Loader:		eric 10-12 cy, 6x `938H	4	-	
Suppo	ort Equipment -I		NA	9381			
~~PP		ump Area:	NA				
Road Ma	aintenance –Mot		NA				
	Wa	ter Truck:	NA				
Cost Breakdown:	Truck/Lo	ader Team		Support	Equipment	Maintenan	ce Equipment
<u>COST DI CARUOWII</u> .	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100		NA	NA	NA	NA
Ownership cost/hour:	\$12.32	\$22.07	7		NA NA	NA	NA NA
Operating cost/hour:	\$62.56	\$37.34		NA NA	NA NA	NA NA	NA NA
Ripper op. cost/hour:	NA	\$0.00		NA NA	NA NA	NA	NA NA
Operator cost/hour:	\$0.00	\$38.49		NA	NA	NA	NA NA
Unit Subtotals:	\$74.88	\$97.90		NA	NA NA	NA	NA
Number of Units:	2	1	, 	0	0	0	0
Group Subtotals:		\$247.66		Support:	\$0.00	Maint:	\$0.00
-		~	-	Bupport	40.00	Trianit.	
Total work team cos	t/hour: <u>\$247.66</u>						
MATERIAL QUA	ANTITIES						
Initial volume: Loose volume:	3,254 3,954		CCY LCY	Swell	factor: <u>1.215</u>		
	rce of estimated of estimated swe			on of Reclamatic andbook	on, Mining & Sai	fety	
Sources	Material Purch		\$0.00				
			\$0.00				
HOURLY PRO	<b>DUCTION</b>						
Truck Capacity:							
Truck Payload (weig							
Material w	-			Pounds/LCY			
	•						
-							
Truck Payload (weig	eight: 1,600 ption: Top So yload: 35,400			Pounds/LCY Pounds LCY			

Truck/Loader Worksheet Co	ont'd	<b>Task</b> # 017			Page 2 of 3
Truck Bed (volume) Basis:					
Struck Volume:	10.00	LCY			
Heaped Volume:	12.00	LCY			
Average Volume:	11.00				
Adjusted Volume:	12.00	LCY			
Fina	l Truck Volum	e Based on Number of	f Loader Passes:	8.19	LCY
Loading Tool Capacity					
			Buc	ket Size Class: 1	NA
Rated Capacity:	3.900	LCY (heaped)	Duc	nor 5/20 Ciu33	
Bucket Fill Factor:	1.050		andy clay (100%	<u>- 110%) 1.050</u>	
Adjusted Capacity:	4.095		andy enzy (1007)	5 110/0/ 1.050	
Job Condition Corrections	<u>»:</u>	Si	ite Altitude (ft.):	<u>5800</u> feet	
	Truck	Loader	Source	1	
	1.000	1.000	(CAT HI	3)	
Altitude Adj:	1.000	1.000			
Altitude Adj: Job Efficiency:	0.830	0.830	(CAT HI	<u> </u>	
Job Efficiency:	0.830	0.830	<u> </u>	<u> </u>	
Job Efficiency:			<u> </u>	<u> </u>	
Job Efficiency:	0.830 0.830	0.830	(CAT HI	3)	pa
Job Efficiency:       Net Correction:	0.830 0.830	0.830 0.830	(CAT HI	3)	pa
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove	0.830 0.830 	0.830 0.830 er of Loading Tool Pa	(CAT HI	3)	pa
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:	0.830 0.830 <u>0.830</u> <u>c</u> Numb <u>els:</u> vs. Job Conditi	0.830 0.830 er of Loading Tool Pa on Rating:NA	(CAT HI	3)	pa
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value	0.830 0.830 Numb els: vs. Job Conditi within this Bas	0.830 0.830 er of Loading Tool Pa on Rating: <u>NA</u> sic Rating: <u>NA</u>	(CAT HI	3)	pa
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove         Machine Cycle Time v         Selected Value         Track Loaders –	0.830 0.8300 0.830 0.83000 0.83000 0.83000 0.83000 0.83000 0.83000 0.830000000000	0.830 0.830 er of Loading Tool Pa on Rating: <u>NA</u> sic Rating: <u>NA</u>	(CAT HI	3)	2 pa
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove         Machine Cycle Time v         Selected Value         Track Loaders –         Cycle Time Elements (min.)	0.830 0.8300 0.83000 0.8300 0.83000 0.83000 0.83000 0.83000 0.830000000000	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription:	(CAT HI	3) Fill Truck:	
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove         Machine Cycle Time v         Selected Value         Track Loaders –	0.830 0.8300 0.83000 0.8300 0.83000 0.83000 0.83000 0.83000 0.830000000000	0.830 0.830 er of Loading Tool Pa on Rating: <u>NA</u> sic Rating: <u>NA</u>	(CAT HI	3)	
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove         Machine Cycle Time v         Selected Value         Track Loaders –         Cycle Time Elements (min.)	0.830 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.83000 0.83000 0.83000 0.83000 0.83000 0.83000 0.830000 0.830000000000	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA	CAT HI	3)         Fill Truck:	
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove         Machine Cycle Time v         Selected Value         Track Loaders –         Cycle Time Elements (min.)         Load:       NA	0.830 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.83000 0.83000 0.83000 0.83000 0.83000 0.83000 0.830000 0.830000000000	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA	CAT HI	3)         B)         Fill Truck:         Dump:         0.10         maneuver):	0 minute
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove         Machine Cycle Time v         Selected Value         Track Loaders –         Cycle Time Elements (min.)         Load:       NA         Wheel and Track Loaders -	0.830 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.8300 0.83000 0.83000 0.83000 0.83000 0.83000 0.83000 0.830000 0.830000000000	0.830 0.830 er of Loading Tool Pa on Rating: <u>NA</u> sic Rating: <u>NA</u> cription: <u>NA</u> Maneuver: <u>NA</u> Basic Loader Cycle Tir	CAT HI	3)         Fill Truck:	0
Job Efficiency:         Net Correction:         Loading Tool Cycle Time:         Excavators and Front Shove         Machine Cycle Time v         Selected Value         Track Loaders –         Cycle Time Elements (min.)         Load:       NA         Wheel and Track Loaders –         Cycle Time Factors	0.830 0.830 0.830 Numb els: vs. Job Conditi within this Bas - Material Desc - Unadjusted E	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Tir rial 0.02	CAT HI	3)         Fill Truck:	0 0.483 minute Source (Cat HB)
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 0.	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: Maneuver: NA Basic Loader Cycle Tir rial 0.02 truck 0.02 ent - factor not applica	(CAT HI sses Required to ne (load, dump, 1	3)         Fill Truck:	0 0.483 minute Source
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 0.830 0.830 Numb els: vs. Job Conditi within this Bas Material Desc : Unadjusted E Mixed mate Dumped by No adjustme Constant op	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Tir rial 0.02 truck 0.02 ent - factor not applica eration -0.04	(CAT HI sses Required to ne (load, dump, 1	3)         Fill Truck:	0 0.483 minute Source (Cat HB) (Cat HB)
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership:	0.830 0.	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Tir rial 0.02 truck 0.02 ent - factor not applica eration -0.04 get 0.00	(CAT HI sses Required to ne (load, dump, 1 ble 0.00	3)         Fill Truck:	0 0.483 minute Source (Cat HB) (Cat HB) (Cat HB)
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 0.830 0.830 Numb els: vs. Job Conditi within this Bas Material Desc : Unadjusted E Mixed mate Dumped by No adjustme Constant op	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Tir rial 0.02 truck 0.02 ent - factor not applica eration -0.04 get 0.00 Net Cycle Tir	(CAT HI sses Required to ne (load, dump, 1 ble 0.00	3)         Fill Truck:	0 0.483 minute Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Job Efficiency: Net Correction: Loading Tool Cycle Time: Excavators and Front Shove Machine Cycle Time v Selected Value Track Loaders – Cycle Time Elements (min.) Load: NA Wheel and Track Loaders Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	0.830 0.830 0.830 Numb els: vs. Job Conditi within this Bas Material Desc : Unadjusted E Mixed mate Dumped by No adjustme Constant op	0.830 0.830 er of Loading Tool Pa on Rating: NA sic Rating: NA cription: NA Maneuver: NA Basic Loader Cycle Tir rial 0.02 truck 0.02 ent - factor not applica eration -0.04 get 0.00 Net Cycle Tirr Adjusted Loader	(CAT HI sses Required to ne (load, dump, 1 ble 0.00	3)         Fill Truck:	0 0.483 minute Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	0.583	Minutes	Adjusted for site altitude:	0.583	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time: penetration 4.0

Road Condition: Rutted dirt, little maintenance, no water, 1" tire

	Haul Rou	ite:							
	Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
	1	500.0	0	3.00	4.00	7.00	1568	0.351	
	Determ D	40-				Haul Time:	0.351	minutes	
Г	Return Ro		Distance	$C_{res} = \frac{1}{2} \left( \frac{\theta}{2} \right)$	Roll. Res	Total Res	Vale site	Travel	
	Seg #	(Ft)		Grade (%)	(%)	(%)	Velocity (fpm)	Time (min)	
Ĺ	1	500.0	0	-3.00	4.00	1.00	2913	0.197	
					Total True	Return Time: ck Cycle Time:	0.197	minute	
L	oading Too Produ	ol unit uction	453.95	LCY/Hour		Adjusted for j	ob efficiency:	376.78	LCY/Hour
Truck	Unit Produ	uction	194.19	LCY/Hour		Adjusted for j	ob efficiency:	161.18	LCY/Hour
Optima	al No. of T	rucks:	2	Truck(s)		Selected Numl	ber of Trucks:	2	Truck(s)
				Adjuste	d hourly true	k team productio	on: 322	.36 LCY	/Hour
						r team production		.36 LCY	/Hour
				Adjusted multip	le truck/loade	r team production	on: <u>322</u>	.36 LCY	/Hour
	JOB TI	<u>ME AN</u>	D COST						
	Fleet	size:	1	Team(s)	7	Total job time:	12.2	6 Ho	ours
	Unit	cost: _	\$0.768	/LCY		Fotal job cost:	\$3,037	.48	

#### BULLDOZER WORK

Topaz Mine Permit Action: A	M-1	Permit/Job#:	M1980055HF
PROJECT IDENTIFICATION			
		Abbreviation:	None
Date: <u>3/16/2012</u> County: <u>San Miguel</u> User: RCO		Filename:	M055-018
Agency or organization name: DRMS			
HOURLY EQUIPMENT COST			
Basic Machine: Cat D9T - 9SU			
Horsepower: 405			
Blade Type: Semi-Universal			
Attachment: 3-shank ripper			
Shift Basis: 1 per day			
Data Source: (CRG)			
Cost Breakdown:			
	Utilization %		
Ownership Cost/Hour: \$80.19	NA		
Operating Cost/Hour: \$140.68	100		
Ripper op. Cost/Hour: \$0.00	0		
Operator Cost/Hour: \$38.49	NA		
Total unit Cost/Hour: \$259.35			
Total Fleet Cost/Hour: \$259.35			
MATERIAL QUANTITIES			
Initial Volume: <u>3,954</u>			
Swell factor: 1.000			
Loose volume: 3,954 LCY			
Source of estimated volume: Division of Reclamation,	Mining & Safety		
Source of estimated swell factor: Cat Handbook	, winning the statety		
HOURLY PRODUCTION			
Average push distance: 60 feet			
Unadjusted hourly production: 1,872.0 LCY/hr			
Materials consistency description: Loose stockpile 1.2			
Average push gradient: 0 %			
Average push gradient:       0 %         Average site altitude:       5,800 feet			
		-	
Average site altitude: 5,800 feet		-	
Average site altitude:       5,800 feet         Material weight:       1,600 lbs/LCY         Weight description:       Top Soil	Source		
Average site altitude:       5,800 feet         Material weight:       1,600 lbs/LCY         Weight description:       Top Soil         Job Condition Correction Factor	<u>Source</u> (AVG.)		
Average site altitude:       5,800 feet         Material weight:       1,600 lbs/LCY         Weight description:       Top Soil	Source (AVG.) (CAT HB)		

Visibili	ty: 1.000	(AVG.)
Job efficience	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.700	(FND-MF)
Push gradie	nt: 1.000	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 1.438	(CAT HB)
Blade ty	be: 1.000	(PAT)
Net correction	on: 0.7519	
Adjusted unit production:	1,407.56 LCY/hr	
Adjusted fleet production:	1407.56 LCY/hr	

Fleet size:	1 Dozer(s)
Unit cost:	\$0.184/LCY

Total job time:	2.81 Hours
Total job cost:	\$728.55

# BOREHOLE SEALING WORK

1	Task description:	Close and seal water quality monitoring we	ells	
Site: _	Topaz Mine	Permit Action: AM-1	Permit/.	Job#:
<u>PROJEC</u>	<u>CT IDENTIFICAT</u>	ION		
Task #:		State: Colorado	Abbreviation:	None
Date: User:		County: San Miguel	Filename:	M055-019
	Agency or organ	nization name: DRMS		

# **UNIT COSTS**

Borehole	Sealing/Item Method				T.		
Description		Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Shallow GW well,	Exposed casing removal	2	24	4.00	LF	\$1.30	\$5.20
cut off casing	- 2 to 3.5 in. diameter						
	steel pipe (LF)						
Shallow GW well,	Exposed casing removal	6	4	4.00	LF	\$5.75	\$23.00
remove metal	- 4 to 10 in. diameter						
cover	steel pipe (LF)						
Shallow GW well,	Bentonite seal - 2 in.	2	22	1.00	EA	\$45.32	\$45.32
backfill bentonite	(labor, equip, materials)						
Shallow GW well,	Portland cement grout - 2	2	2	2.00	LF	\$7.21	\$14.42
cement seal top	in. (labor, equip,						
	materials)						
Ambient well,	Exposed casing removal	6	4	4.00	LF	\$5.75	\$23.00
remove metal	- 4 to 10 in. diameter						
cover	steel pipe (LF)						
Ambient well, cut	Exposed casing removal	4.5	700	4.00	LF	\$5.75	\$23.00
off casing	- 4 to 10 in. diameter						
	steel pipe (LF)						
Ambient well,	Bentonite seal - 4 in.	4	100	1.00	ĒA	\$106.87	\$106.87
bentonite thru	(lanor, equip, materials)						
aquifer							
Ambient well,	PVC plug - 4 in.	4	1	1.00	ËA	\$27.85	\$27.85
mech plug	diameter borehole					_	
Ambient well,	Portland cement grout - 4	4	4	4.00	LF	\$7.65	\$30.61
cement seal top	in. (labor, equip,						
	materials)						
Monitoring well	Exposed casing removal	6	4	4.00	LF	\$5.75	\$23.00
(west), remove	- 4 to 10 in. diameter						
metal cover	steel pipe (LF)						
Monitoring well	Exposed casing removal	4.5	700	4.00	LF	\$5.75	\$23.00
(west), cut off	- 4 to 10 in. diameter						
casing	steel pipe (LF)						
Monitoring well	Bentonite seal - 4 in.	4	100	1.00	EA	\$106.87	\$106.87
(west), bentonite	(lanor, equip, materials)				6		
thru aquifer							
Monitoring well	PVC plug - 4 in.	4	1	1.00	EA	\$27.85	\$27.85
(west), mech plug	diameter borehole		<b>.</b>				
Monitoring well	Portland cement grout - 4	4	4	4.00	LF	\$7.65	\$30.61
(west), cement	in. (labor, equip,						
seal top	materials)				I		
Mon well (south),	Exposed casing removal	6	4	4.00	ĹF	\$5.75	\$23.00
remove metal	- 4 to 10 in. diameter						
cover	steel pipe (LF)						

Mon well (south), cut off casing	Exposed casing removal - 4 to 10 in. diameter steel pipe (LF)	4.5	700	4.00	LF	\$5.75	\$23.00
Mon well (south), bentonite thru aquifer	Bentonite seal - 4 in. (lanor, equip, materials)	4	100	1.00	EA	\$106.87	\$106.87
Mon well (south), mech plug	PVC plug - 4 in. diameter borehole	4	1	1.00	EA	\$27.85	\$27.85
Mon well (south), cement seal top	Portland cement grout - 4 in. (labor, equip, materials)	4	4	4.00	LF	\$7.65	\$30.61
Compliance well (west), remove metal cover	Exposed casing removal - 4 to 10 in. diameter steel pipe (LF)	6	4	4.00	LF	\$5.75	\$23.00
Compliance well (west), cut off casing	Exposed casing removal - 4 to 10 in. diameter steel pipe (LF)	4.5	700	4.00	LF	\$5.75	\$23.00
Compliance well (west), bentonite thru aquifer	Bentonite seal - 4 in. (lanor, equip, materials)	4	100	1.00	EA	\$106.87	\$106.87
Compliance well (west), mech plug	PVC plug - 4 in. diameter borehole	4	1	1.00	EA	\$27.85	\$27.85
Compliance well (west), cement seal top	Portland cement grout - 4 in. (labor, equip, materials)	4	4	4.00	LF	\$7.65	\$30.61
Comp well (east), remove metal cover	Exposed casing removal - 4 to 10 in. diameter steel pipe (LF)	6	4	4.00	LF	\$5.75	\$23.00
Comp well (east), cut off casing	Exposed casing removal - 4 to 10 in. diameter steel pipe (LF)	4.5	700	4.00	LF	\$5.75	\$23.00
Comp well (east), bentonite thru aquifer	Bentonite seal - 4 in. (lanor, equip, materials)	4	100	1.00	EA	\$106.87	\$106.87
Comp well (east), mech plug	PVC plug - 4 in. diameter borehole	4	1	1.00	EA	\$27.85	\$27.85
Comp well (east), cement seal top	Portland cement grout - 4 in. (labor, equip, materials)	4	4	4.00	LF	\$7.65	\$30.61

Job Hours: 30.00

Total Cost: \$1,144.59

### BULLDOZER WORK

Topaz Mine	Permit Action:	AM-1	Permit/Job#:	M1980055HR
PROJECT IDENTI	FICATION		10	
Task #: 020	State: Colorado		Abbreviation:	None
Date: 3/15/2012			Filename:	M055-020
User: RCO			T HUIMIIIO.	111000 020
Agency or orga	anization name: DRMS			
HOURLY EQUIPM	ENT COST			
Basic Machine: Ca	at D9T - 9SU			
Horsepower: 40	·			
	mi-Universal			
	shank ripper			
	per day			
	RG)	_		
Cost Breakdown:		_		
		Utilization %		
Ownership Cost/Hour:	\$80.19	NA		
Operating Cost/Hour:	\$140.68	100		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.49	NA		
Total unit Cost/Hour:	\$259.35			
Total Fleet Cost/Hour:	\$259.35			
MATERIAL OUAN	FITIES			
Initial Volume:       1,50         Swell factor:       1.09         Loose volume:       1,63         Source of estimated volu       1,63	00 90 35 LCY une: Division of Reclamatic	on, Mining & Safety		
Initial Volume: $1,50$ Swell factor: $1.09$ Loose volume: $1,63$ cource of estimated volu	00 90 35 LCY ume: Division of Reclamatic Il factor: Cat Handbook	on, Mining & Safety		
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Source of estimated swell HOURLY PRODUC	00 90 35 LCY Ime: Division of Reclamatic Il factor: Cat Handbook TION	on, Mining & Safety		
Initial Volume: $1,50$ Swell factor: $1.09$ Loose volume: $1,62$ Source of estimated voluSource of estimated swell	00 90 35 LCY ume: Division of Reclamation Il factor: Cat Handbook TION 80 feet	on, Mining & Safety		
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Source of estimated swell HOURLY PRODUC	00 00 35 LCY ume: Division of Reclamatic 11 factor: Cat Handbook TION 80 feet action: 1,460.1 LCY/hr			
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Inadjusted hourly produ	00         90         35 LCY         are:       Division of Reclamation         11 factor:       Cat Handbook         TION         action:       80 feet         1,460.1 LCY/hr         scription:       Consolidated stockp			
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,65 Source of estimated volu Source of estimated swell HOURLY PRODUC	00 00 35 LCY ume: Division of Reclamation 11 factor: Cat Handbook TION 80 feet uction: 1,460.1 LCY/hr			
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Inadjusted hourly product Materials consistency de	00 00 035 LCY Ime: Division of Reclamation 11 factor: Cat Handbook TION 80 feet 1,460.1 LCY/hr scription: Consolidated stockp 0 %			
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Inadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	00         90         35 LCY         ame:       Division of Reclamatic         11 factor:       Cat Handbook         TION         80 feet         action:       1,460.1 LCY/hr         scription:       Consolidated stockp         0 %         5,800 feet			
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Cource of estimated swell HOURLY PRODUC Average push distance: Inadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight:	00         90         35 LCY         ame:       Division of Reclamatic         11 factor:       Cat Handbook         TION         action:       1,460.1 LCY/hr         scription:       Consolidated stockp         0 %			
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Cource of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Veight description: Operator	00         90         35 LCY         are:       Division of Reclamation         11 factor:       Cat Handbook         TION         action:       1,460.1 LCY/hr         scription:       Consolidated stockp         0 %			
Initial Volume: 1,50 Swell factor: 1.09 Loose volume: 1,63 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Inadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Veight description: ob Condition Correction	00       00         35 LCY			

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4174	
Adjusted unit production: 60	9.45 LCY/hr	
Adjusted fleet production: 60	9.45 LCY/hr	

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.426/LCY	

Total job time:	2.68 Hours
Total job cost:	\$695.78

### HYDRAULIC EXCAVATOR WORK

it: Topaz Mine Permit Action: AM-1 Permit/Job#, M1980055HK  PROJECT IDENTIFICATION  Tak # 021 County: San Miguel Abbreviation: None Pilename: M055-021 User: RCO Agency or organization name: DRMS  HOURLY EQUIPMENT COST Basic Machine: Cat 3200 L 9-6" Stick Horsepower: 148 Attachment 1: ROPS Cab Stift Basis: 1 per day Derestrip Cost/Hour: 524.63 NA Operating Cost/Hour: 538.67 NA Operating Cost/Hour: 538.67 NA Operating Cost/Hour: 538.67 NA Operating Cost/Hour: 1109.00  MATERAL OLANTITES Initial volume: 250 CCY Swell factor: 1.125 Initial volume: 1281 LCY Source of estimated volume: Division of Reclamation, Mining & Safety Source of estimated swell factor: Cat Handbook  HOURLY PRODUCTION Excavator Cycle Time (Ioad bucket, swing loaded, dump bucket, swing empty): Basic Job Condition Description: AVERAGE Secondary Job Condition Description: AVERAGE Secondary Job Condition Masic Description: AVERAGE Lead Bucket Capacity I.54 LCY (heeped) Bucket Fill Factor: 1.00 Rock - Well Blasted (95%-105%) 1.000 Adjusted Capacity: 1.54 LCY Iob Condition Correction Factors Succe fill Factor: 213.69 LCY/Hour Adjusted Hourly Unit Production: 213.69 LCY/Hour Adjusted Hourly Unit Production: 213.69 LCY/Hour Adjusted Hourly Fleet Production: 213.69 LCY/Hour Adjusted Hourly Unit Production: 213.69 LCY/Hour Adjusted Hourly Unit Production: 213.69 LCY/Hour Adjusted Hourly Fleet Production: 213.69 LCY/Hour Adjusted Hourly Unit Production: 213.69 LCY/Hour LCAT HB) Source Source Source Source Source Source Source Piet size: 1 Condition Tomeretion Factors Source Source Source Source Source Source Source LCY/Hour Adjusted Hourly Fleet Production: 213.69 LCY/Hour LCY/Hour LCAT HB) Source	Task description:	Recontou	r upland divers	ions and runoff cate	chments	
Task #:       021       State:       County:       San Miguel       Abbreviation:       None         Date:       J1(25012       County:       San Miguel       Filename:       M055-021         Date:       J1(25012       County:       San Miguel       Filename:       M055-021         Date:       J1(25012       County:       San Miguel       Filename:       M055-021         More The Point of the	te: <u>Topaz Mine</u>		Permit Actio	on: <u>AM-1</u>	Permit/Job	#: _M1980055HR
Date:       116/2012       County:       San Miguel       Filename:       M055-021         Ageney or organization name:       DRMS         HOURLY EQUIPMENT COST         Basic Machine:       Cat 320D L 9'-6' Stick       Horsepower:       148         Attachment 1:       COPS Cab       Stiff Basis:       1 per day         Data Source:       (CRG)         Ownership Cost/Hour:       524.63       NA         Operator Cost/Hour:       538.67       NA         Operator Cost/Hour:       5109.00       Total Unit Cost/Hour:       5109.00         Total Unit Cost/Hour:       5109.00       Total Fleet Cost/Hour:       5109.00         MATERIAL OUANTITES       Initial volume:       200       CCY       Swell factor:       1.125         Datia Volume:       251       LCY       Source of estimated volume:       Cat Handbook       MORINE ACCONTON         Excavator Cycle Time (load backet, swing loaded, dump backet, swing empty):       Basic Job Condition Description:       M2EAGE         Load Backet Capacity       1.54       LCY (heuped)       Material Capacity:       1.54       LCY         Job Efficiency:       0.33       (1 shift/day)       Net Altitude: 5800 feet       Source of CAT HB)         Job Efficiency:       0.33	PROJECT IDENT	<b>IFICATION</b>				
HOURLY EQUIPMENT COST         Basic Machine:       Cat 320D L 9-6" Stick       Horsepower:       148         Attachment 1:       ROPS Cab       Stift Basic       Jord Stift Basic         Cost Breakdown       Utilization %       Data Source:       (CRG)         Ownership Cost/Hour:       S24.63       NA       Operating Cost/Hour:       Stift Basic         Operating Cost/Hour:       S24.63       NA       Operating Cost/Hour:       GCR)         Total Unit Cost/Hour:       S109.00       Total Viet Cost/Hour:       S109.00         Total Volume:       S109.00       Total Viet Cost/Hour:       S109.00         Total Volume:       S109.00       CCY       Swell factor:       1.125         Loose volume:       281       CCY       Swell factor:       1.125         Loose volume:       281       LCY       Surget Safety       Source         Source of estimated volume:       Division of Reclamation, Mining & Safety       Source       Source         Source of estimated volume:       CY       New Cat Handbook       MOE         Medium:       1.54       LCY       LCY       Mining & Safety       Source         Source of estimated volume:       Cycle Time Value:       0.323       minutes	Date: 3/16/20					
Basic Machine:       Cat 320D L 9-6" Stick       Horsepower:       148         Attachment 1:       ROPS Cab       Sint Basic       Just Source:       (CRG)         Cost Breakdown:       Utilization %       Sint Basic       (CRG)         Ovnership Cost/Hour:       \$24.63       NA       (CRG)         Operating Cost/Hour:       \$38.67       NA       (CRG)         Operator Cost/Hour:       \$109.00       Total Unit Cost/Hour:       \$109.00         Matterial of Na       100       (CRG)       (CRG)         Total Viat Cost/Hour:       \$109.00       (CCY       Swell factor:       1.125         Loose volume:       281       LCY       (CR)       (CR)       (CR)         Source of estimated volume:       Division of Reclamation, Mining & Safety       (CR)       (CR)         Source of estimated volume:       Civi Handbook       (CR)       (CR)       (CR)         HOTRIX PRODUCTION       Basic Job Condition Description:       BELOW AVERAGE       (CR)       (CR)         Secondary Job Condition within Basic Description:       Medium       (CR)       (CR)       (CR)         Maket Fill Pactor:       1.000       Rock-Well Blasted (95%-105%) 1.000       (Adjusted Foarly Unit Production:       (CA' HB)       (CA' HB)	Agency or o	rganization name	: DRMS			
Basic Machine:       Cat 320D L 9-6" Stick       Horsepower:       148         Attachment 1:       ROPS Cab       Sint Basic       Just Source:       (CRG)         Cost Breakdown:       Utilization %       Sint Basic       (CRG)         Ovnership Cost/Hour:       \$24.63       NA       (CRG)         Operating Cost/Hour:       \$38.67       NA       (CRG)         Operator Cost/Hour:       \$109.00       Total Unit Cost/Hour:       \$109.00         Matterial of Na       100       (CRG)       (CRG)         Total Viat Cost/Hour:       \$109.00       (CCY       Swell factor:       1.125         Loose volume:       281       LCY       (CR)       (CR)       (CR)         Source of estimated volume:       Division of Reclamation, Mining & Safety       (CR)       (CR)         Source of estimated volume:       Civi Handbook       (CR)       (CR)       (CR)         HOTRIX PRODUCTION       Basic Job Condition Description:       BELOW AVERAGE       (CR)       (CR)         Secondary Job Condition within Basic Description:       Medium       (CR)       (CR)       (CR)         Maket Fill Pactor:       1.000       Rock-Well Blasted (95%-105%) 1.000       (Adjusted Foarly Unit Production:       (CA' HB)       (CA' HB)	HOURLY EQUIP	MENT COST				
Utilization %         Operating Cost/Hour:       \$24.63       NA         Operating Cost/Hour:       \$35.67       NA         Operator Cost/Hour:       \$33.67       NA         Operator Cost/Hour:       \$33.67       NA         Operator Cost/Hour:       \$33.67       NA         Total Unit Cost/Hour:       \$109.00         Total Fleet Cost/Hour:       \$109.00         MATERIAL OUANTITIES       Initial volume:       \$109.00         Initial volume:       250       CCY       Swell factor:       1.125         Loose volume:       281       LCY       Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell factor:       Cat Handbook       AVERAGE	Basic Machine	: Cat 320D L	9'-6" Stick		Weight (MT): Shift Basis:1	21.55 per day
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:       \$109.00         MATERIAL OUANTITIES       Initial volume:       250       CCY       Swell factor:       1.125         Loose volume:       281       LCY       Swell factor:       1.125         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: <u>AVERAGE</u> / <u>AVERAGE</u> / <u>AVERAGE</u> Load Bucket Capacity:       1.54       LCY (heaped)       Bucket Size Class:       Medium         Rated Capacity:       1.54       LCY (heaped)       Bucket Size Class:       Medium         Job Efficiency:       0.303       (isht/day)       Net Correction Factors       Site Altitude: <u>5800</u> feet         Job Efficiency:       0.303       (isht/day)       Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       213.69       LCY/Hour       Adjusted Hourly Pflet Production:       213.69	Cost Breakdown:			1		
Total Fleet Cost/Hour:       \$109.00         MATERIAL OUANTITIES         Loose volume:       250         Loose volume:       281         Loose volume:       281         Locy       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):         Secondary Job Condition Description:       BELOW AVERAGE         Cycle Time Value:       0.323       minutes         Load Bucket Capacity       1.54       LCY (beaped)         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Edficiency:       0.83       (1 shift/day)         Net Correction       0.75       multiplier         Uradjusted Hourly Unit Production:       213.69       LCY/Hour         Adjusted Hourly Fleet Production:       213.69       LCY/Hour	Operating Co Operator Co	ost/Hour: ost/Hour:	\$45.70 \$38.67	NA 100		
MATERIAL QUANTITIES         Initial volume:       250       CCY       Swell factor:       1.125         Loose volume:       281       LCY         Source of estimated volume:       Division of Reclamation, Mining & Safety         Source of estimated swell factor:       Cat Handbook <b>HOURLY PRODUCTION</b> Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):         Basic Job Condition Description:         Secondary Job Condition within Basic Description:         Cycle Time Value:         0.323         minutes         Load Bucket Capacity:         1.54       LCY (heaped)         Bucket Fill Factor:       1.000         Rated Capacity:       1.54         LCY       Lose         Job Condition Correction Factors       Site Altitude: 5800 feet         Adjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         JOB TIME AND COST       1.02       Hours				_		
Initial volume:       250       CCY       Swell factor:       1.125         Loose volume:       281       LCY       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:       BELOW AVERAGE         Secondary Job Condition within Basic Description:       Cycle Time Value:       0.323         Load Bucket Capacity       Bucket Size Class:       Medium         Rated Capacity:       1.54       LCY (heaped)         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Enfliciency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Pfeet Production:       213.69       LCY/Hour         JOB TIME AND COST       1       Excavator       Total job time:       1.32       Hours			\$109.00	—		
Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):         Basic Job Condition Description:       BLOW AVERAGE         Secondary Job Condition within Basic Description:       AVERAGE         Cycle Time Value:       0.323       minutes         Bucket Capacity         Load Bucket Capacity:       1.54       LCY (heaped)         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Condition Correction Factors       Site Altitude: 5800 feet         Source       Altitude Adj:       0.90         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       213.69       LCY/Hour         Adjusted Hourly Fleet Production:       213.69       LCY/Hour         JOB TIME AND COST       Image: Description       Hours	Loose volume: Sour	281 ce of estimated v	LCY olume: Divisi	ion of Reclamation, N		
Basic Job Condition Description: Secondary Job Condition Within Basic Description: Cycle Time Value: 0.323 minutes         Load Bucket Capacity         Load Bucket Capacity       1.54       LCY (heaped)         Bucket Size Class:       Medium         Rated Capacity:       1.54       LCY (heaped)         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Condition Correction Factors         Source       Source         Altinude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         JOB TIME AND COST       Image: Disce Total job time:       1.32	HOURLY PRODU	UCTION				
Secondary Job Condition within Basic Description:       AVERAGE         Cycle Time Value:       O.323       minutes         Load Bucket Capacity         Bucket Size Class:       Medium         Rated Capacity:       1.54       LCY (heaped)         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Condition Correction Factors       Site Altitude: 5800 feet         Source       Source         Altitude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       213.69       LCY/Hour         JOB TIME AND COST       Iscavator       Total job time:       1.32       Hours	Excavator Cycle Time	e (load bucket, sy	ving loaded, dun	p bucket, swing emp	<u>oty):</u>	
Secondary Job Condition within Basic Description:       AVERAGE         Cycle Time Value:       O.323       minutes         Load Bucket Capacity         Bucket Size Class:       Medium         Bucket Size Class:       Medium         Rated Capacity:       1.54       LCY (heaped)         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Condition Correction Factors       Site Altitude: 5800 feet         Job Condition Correction Factors       Source         Altitude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       213.69       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         JOB TIME AND COST         Fleet size:       1       Excavator       Total job time:       1.32       Hours <td></td> <td></td> <td>Basic Jo</td> <td>b Condition Descript</td> <td>ion: BELOW AVERA</td> <td>AGE</td>			Basic Jo	b Condition Descript	ion: BELOW AVERA	AGE
Load Bucket Capacity         Bucket Size Class: Medium         Bucket Size Class: Medium         Bucket Size Class: Medium         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Condition Correction Factors       Site Altitude: 5800 feet         Source       Source         Altitude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         JOB TIME AND COST       Total job time:       1.32       Hours		Secondary		vithin Basic Descript	ion: AVERAGE	
Rated Capacity:       1.54       LCY (heaped)         Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Condition Correction Factors       Site Altitude: 5800 feet         Altitude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         JOB TIME AND COST       I       Excavator       Total job time:       1.32       Hours	Load Bucket Capacity	7		Cycle Time Va	llue: $0.323$	minutes
Bucket Fill Factor:       1.000       Rock - Well Blasted (95%-105%) 1.000         Adjusted Capacity:       1.54       LCY         Job Condition Correction Factors       Site Altitude: 5800 feet         Altitude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         JOB TIME AND COST       Fleet size:       1       Excavator       Total job time:       1.32       Hours					Bucket Size Class:	Medium
Job Condition Correction Factors       Site Altitude: 5800 feet         Source         Altitude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         Adjusted Hourly Fleet Production:       213.69       LCY/Hour         JOB TIME AND COST         Fleet size:       1       Excavator       Total job time:       1.32       Hours	Bucket Fill Fa	ctor: 1.00	00 Rock		-105%) 1.000	
Source         Altitude Adj:       0.90       (CAT HB)         Job Efficiency:       0.83       (1 shift/day)         Net Correction:       0.75       multiplier         Unadjusted Hourly Unit Production:       286.07       LCY/Hour         Adjusted Hourly Unit Production:       213.69       LCY/Hour         Adjusted Hourly Fleet Production:       213.69       LCY/Hour         JOB TIME AND COST       Excavator       Total job time:       1.32       Hours		-	<u> </u>	Site	Altitude: 5800 feet	
JOB TIME AND COST         Fleet size:       1         Excavator       Total job time:         1.32	Altitude Adj Job Efficiency Net Correction	: 0.90 : 0.83 : 0.75 Unadjusted Hourl Adjusted Hourl	(CAT (1 shif multip y Unit Productio y Unit Productio	rce <u>'HB)</u> t/day) lier on: 286.07 on: 213.69	LCY/Hour LCY/Hour	
Fleet size:     1     Excavator     Total job time:     1.32     Hours			, _ 10001 104404			
			xcavator	Total job time:	1.32	Hours
	Unit cost:	\$0.510 /LC	CY	Total job cost:	\$143.00	_

# **REVEGETATION WORK**

Topaz Mine Permi	Permit Action: AM-1			Permit/Job#:	M1980055HR
PROJECT IDENTIFICATION					
	Colorado			Abbreviation:	
	None M055-022				
	Date:     3/16/2012     County:     San Miguel     Filename:       User:     RCO				
User: <u>RCU</u>					
Agency or organization name: <u>DRM</u>	AS				
TERTILIZING					
Aaterials					
Description	Units /	Unit	Cos	t / Unit	Cost /Acre
Description	Acre	Omt		( / Omt	
			\$		\$
			Tot	al Fertilizer	
			100	Materials	
				Cost/Acre	\$0.00
10	I				
pplication					
Description					Cost /Acre
					\$
	<b>T</b> - 4 - 1		<b>1.</b> /1		
		Fertilizer A	ррисапо	n Cost/Acre	\$0.00
ILLING					
Description					Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.2.	3 6100)				\$92.35
Weed control spraying (MEANS 31 31 16.13	3100)				\$145.20
	)				
		To	tal Tillin	g Cost/Acre	\$237 55
				<u> </u>	
EEDING					
		]	Rate –		
Seed Mix			PLS	Seeds	Cost /Acre
			L <b>BS</b> /	per SQ. FT	
			Acre		
Blue Grama - Native			).96	15.67	\$9.72
Indian Ricegrass - Native			7.42	24.02	\$48.97
				1 4 4 5 4 4	MA A /
Sand Dropseed			0.14	16.71	\$0.96
Sand Dropseed Bottlebrush Squirreltail Galleta		4	).14 1.08 1.94	16.71 17.98 18.03	\$0.96 \$99.27 \$121.87

Muttongrass

Sagebrush, Mountain or Big

Saltbush, Four Wing Winter Fat

\$7.20

\$6.60

\$5.25

\$16.00

0.20

0.20

0.50

0.50

4.13

0.69

1.27

10.56

	Totals Seed Mix	18.94	109.07	\$315.84
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

	No. of Acres: I Failure Rate: g Work Items:	30%	 DING	Cost /Acre: Cost /Acre*:	
Initial Job Cost: Reseeding Job Cost: Total Job Cost: Job Hours:	\$1,975.94 \$8,562.43				

# WHEEL LOADER -- LOAD AND CARRY WORK

PROJECT IDENTIFIC		a: <u>AM-1</u>	Permit/Job#	: M1980055H
	ATION			
Task #: 023	State: Colorad	0	Abbreviation:	None
Date: 3/16/2012	County: San Mig		Filename:	M055-023
User: RCO				
Agency or organiz	ation name: DRMS			
HOURLY EQUIPMEN	T COST			
	AT 938H		power:	172
Attachment 1: <u>Re</u>	OPS Cab			per day
		Data 3	Source:(	CRG)
Cost Breakdown:				
0		Utilization %		
Ownership Cost/Hou Operating Cost/Hou		NA		
Operating Cost/Hot Operator Cost/Hot		100 NA		
Total Unit Cost/Ho		INA		
	ui. <u>\$97.90</u>	-		
Total Fleet Cost/Ho	our:\$97.90	_		
Initial volume: <u>36</u> Loose volume:	41 CCY LCY estimated volume: Divisio	Swell factor:	1.125 & Safety	
Source of e		ndbook	· · · · ·	
Source of estim	DN Unadjusted Basic Cycle Tim	e (load, dump, maneuver):		minutes
Source of estim HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors	Unadjusted Basic Cycle Tin		Factor (min.)	Source
Source of estim HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors Material:	Unadjusted Basic Cycle Tin	ter 0.00	Factor (min.) 0.000	Source (Cat HB)
Source of estim HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors Material: Stockpile:	Unadjusted Basic Cycle Tin Material 3/4" to 6" diame No adjustment - factor no	ter 0.00 t applicable 0.00	Factor (min.) 0.000 0.000	Source (Cat HB) (Cat HB)
Source of estime HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership:	Unadjusted Basic Cycle Tin Material 3/4" to 6" diame No adjustment - factor no No adjustment - factor no	ter 0.00 t applicable 0.00 t applicable 0.00	Factor (min.) 0.000 0.000 0.000	Source (Cat HB) (Cat HB) (Cat HB)
Source of estime HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Basic Cycle Tin Material 3/4" to 6" diame No adjustment - factor no No adjustment - factor no Inconsistent operation 0.0	ter 0.00 t applicable 0.00 t applicable 0.00	Factor (min.) 0.000 0.000 0.000 0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Source of estime HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership:	Unadjusted Basic Cycle Tin Material 3/4" to 6" diame No adjustment - factor no No adjustment - factor no Inconsistent operation 0.0 Nominal target 0.00	ter 0.00 t applicable 0.00 t applicable 0.00 04	Factor (min.) 0.000 0.000 0.000 0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Source of estime HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Basic Cycle Tin Material 3/4" to 6" diame No adjustment - factor no No adjustment - factor no Inconsistent operation 0.0 Nominal target 0.00 Net C	ter 0.00 t applicable 0.00 t applicable 0.00 04 Cycle Time Adjustment:	Factor (min.) 0.000 0.000 0.000 0.040 0.000 0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Source of estime HOURLY PRODUCTIO Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Unadjusted Basic Cycle Tin Material 3/4" to 6" diame No adjustment - factor no No adjustment - factor no Inconsistent operation 0.0 Nominal target 0.00 Net C Adju	ter 0.00 t applicable 0.00 t applicable 0.00 04	Factor (min.) 0.000 0.000 0.000 0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Source of estime HOURLY PRODUCTION Loader Cycle Time: Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Rolling Resistance - Road C	Unadjusted Basic Cycle Tin Material 3/4" to 6" diame No adjustment - factor no No adjustment - factor no Inconsistent operation 0.0 Nominal target 0.00 Net C Adju	ter 0.00 t applicable 0.00 t applicable 0.00 04 Cycle Time Adjustment:	Factor (min.)           0.000           0.000           0.000           0.000           0.040           0.040           0.040           0.523	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	300	5.00	4.00	9.00	0.3608	(Cat HB)
Return Route:	300	5.00	4.00	9.00	0.3204	(Cat HB)

		Total Travel T Total Cycle T		minutes minutes
Load Bucket Capacity				
Rated Capacity: Bucket Fill Factor: Adjusted Capacity:	3.90 1.100 <b>4.29</b>	LCY (heaped) Other - rock/dirt mixtures LCY	(100-120%) 1.100	
<u>Job Condition Correction I</u> Site Altitude: <u>7000</u> feet	Factors			
Ad	1.00 0.83 0.83 justed Hourly Unit I justed Hourly Unit I usted Hourly Fleet I	Production: 177.48	LCY/Hour LCY/Hour LCY/Hour	
Fleet size: 1	Loader(s)	Total job time:	0.23	Hours
Unit cost:\$0.55	52 /LCY	Total job cost:	\$22.00	

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

: <u>Topaz Mine</u>		Permit Action: <u>AM-1</u>			Pe	rmit/Job#:	M1980055HR
PROJECT IDE	ENTIFICAT	ION					
Task #: 024	-	State: Co	olorado		Abbr	eviation:	None
	6/2012		n Miguel	_			M055-024
User: RC	0	-	<u> </u>				
Agency	or organization	n name: DRMS					
EQUIPMENT	TRANSPOR	T RIG COST					
					Shift ba	usis: 1 ·	per day
					Cost Data Sou		RG Data
True	k Tractor Desc	ription: GENI	EDIC ON HIGH				ESEL POWERED,
1140.	a Hactor Desc				2 (2ND HALF,		ESEL POWERED,
True	1 00 11 10						
	k Irailer Desc	rintion (FENE	RIC FOLDING	GOOSEN	IFCK DROPT	VECK EUTI	DMENT TDAILED
114	k Trailer Desc	ription: GENE	RIC FOLDING				IPMENT TRAILER
	k Irailer Desc	ription: GENE	RIC FOLDING		ECK, DROP I 7, 50T, AND 10		IPMENT TRAILER
	k Irailer Desc	ription: GENE	RIC FOLDING				IPMENT TRAILER
Cost Breakdown:		0-25 Tons	26-50 Tons	(251			IPMENT TRAILER
Cost Breakdown: Available Rig Ca				(251	, 50T, AND 10		IPMENT TRAILER
<u>Cost Breakdown:</u> Available Rig Ca Ownership	pacities	0-25 Tons	26-50 Tons	(251 51 \$	', 50T, AND 10		IPMENT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating	pacities	0-25 Tons \$16.63	<b>26-50 Tons</b> \$18.37	(25T) 51 \$ \$	<u>+ Tons</u> 22.33		IPMENT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operator	p <b>acities</b> Cost/Hour: 5 Cost/Hour:	0-25 Tons \$16.63 \$44.38	<b>26-50 Tons</b> \$18.37 \$46.13	(25T) 51 \$ \$ \$ \$	+ Tons 22.33 50.07 27.66		IPMENT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operaton Helper	p <b>acities</b> Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66	(25T 51 \$ \$ \$ \$ \$ \$	+ Tons 22.33 50.07		IPMENT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operaton Helper	pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39	(25T 51 \$ \$ \$ \$ \$ \$	+ Tons 22.33 50.07 27.66 25.39		IPMENT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operaton Helper Total Unit	pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: t Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39	(25T 51 \$ \$ \$ \$ \$ \$	+ Tons 22.33 50.07 27.66 25.39		IPMENT TRAILER
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit	pacities 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	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39	(25T 51 \$ \$ \$ \$ \$ \$	r, 50T, AND 10 + Tons 22.33 50.07 27.66 25.39 125.45	00T)	ip DOT Permi
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAH Machine	pacities Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: t Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT:	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39 \$117.55	(25T 51 \$ \$ \$ \$ \$	+ Tons 22.33 50.07 27.66 25.39	00T)	ip DOT Permi
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAH Machine	pacities Cost/Hour: Co	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig	(25T 51 \$ \$ \$ \$ \$ \$ \$ \$	<b>50T, AND 10 + Tons</b> 22.33 50.07 27.66 25.39 125.45 Haul Trip	00T)	ip DOT Permi
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAH Machine Description	Decision of the second state of the second sta	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship	<b>26-50 Tons</b> \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig	(25T 51 \$ \$ \$ \$ \$ \$ \$ \$	+ Tons 22.33 50.07 27.66 25.39 125.45 Haul Trip Cost/hr/	00T)	ip DOT Permi leet Cost/ fleet
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper	Decost/Hour: Cost/Cost/Cost/Cost/Cost/Cost/Cost/Cost/	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	(251 51 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	+ Tons         22.33         50.07         27.66         25.39         125.45	Return Tr Cost/hr/ f	ip DOT Permi
Cost Breakdown: Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAH Machine Description Cat D9T - 9SU Cat 320D L 9'-6"	ypacities Cost/Hour: Cost/Ho	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship Cost/hr/ unit \$80.19	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig Cost/hr/unit \$125.45	(251 51 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	+ Tons         22.33         50.07         27.66         25.39         125.45	Return Tr Cost/hr/ f \$125.45	ip DOT Permi leet Cost/ fleet \$250.00

### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 10-12 cy, 6x4	\$97.17	2	\$194.34	\$194.34
Drill/Broadcast Seeder with Tractor	\$105.81	1	\$105.81	\$105.81
		Subtotals:	\$300.15	\$300.15

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

	NATURITA	Nearest Major City or Town within project area region:
miles	40.00	Total one-way travel distance:
mph	40.00	Average Travel Speed:
	\$4,683.66	Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:
	\$600.30	Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:

Transportation Cycle Time:

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

### JOB TIME AND COST

Total job time: **8.00** Hours

Total job cost: \$5,283.96