COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

1313 Sherman Street, Room 215
Denver, CO 80203

February 5, 2015

Dan Collins
B-Mining Company
1417 S. Grand View Dr.
Tempe, AZ 85281
Buena Vista, CO 81211

Re: Deep Creek Placer, Permit M-1986-102, Notice of Surety Increase, SI-03.

Dear Mr. Collins,

The Division of Reclamation, Mining, and Safety (Division) has conducted an audit of the reclamation liability for the above referenced site. Staff notes the reclamation liability was updated in 2009 under SI-02 and repeated requests for submission of the proper amount have not been addressed by B-Mining. Division staff should have taken enforcement action then but for some reason did not. Therefore, instead of pursuing any action on an outdated estimate the Division has updated the 2009 estimate using annual reports. (copy enclosed) The estimate shows inflation has increased the liability to $18,394.00.

In an effort to ensure the financial warranty remains adequate to reclaim this site per the requirements of the approved reclamation plan, the Division has updated the reclamation cost estimate (copy enclosed). Based on the current conditions noted above, the estimated reclamation liability is now $18,894.00. This is an increase of $6,394.00 from the current amount of $12,000.00 held. Clearly, the site is under-bonded. **Therefore, pursuant to Section 34-32.5-117(4) of the Colorado Land Reclamation Act, adequate financial warranty must be submitted to DRMS within 60 days of the mailing date of this notice. The due date for submission and acceptance is April 6, 2015.**

Please note failure to submit the increase by the date specified shall result in the matter being scheduled for an enforcement hearing in May 2015 that may result in civil penalties of $100 to $1000 per day, permit revocation, and financial warranty forfeiture. This is a path the Division does not wish to pursue so your prompt attention will be appreciated.

If you need additional information please visit our website @ http://mining.state.co.us. You may also contact me directly at the Division of Reclamation, Mining and Safety, Grand Junction Field Office, by telephone at 970.241.1117, or by e-mail at russ.means@state.co.us.

Sincerely,

G. Russell Means
Senior Environmental Protection Specialist
West Slope Field Office Supervisor

Enclosure: SI-03, Reclamation Liability Update, GRM, 10/15/2014

COST SUMMARY WORK

Task description: **2014 Bond Update**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-000
User: GRM

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Rip asphalt on access road	RIPPER	1	0.25	$42.00
002	Distribute soil and fines for spreading	LOADER	1	1.03	$100.00
003	Pull down unstable spoil material onto operating pad	EXCAVATE	1	14.88	$957.00
004	Pull in berm at edge of operating pad, for backfill	EXCAVATE	1	2.77	$178.00
005	Push coarse material (berms, limestone spoils) into portals	DOZER	1	3.35	$550.00
006	Remove or dispose of onsite debris, Etc.	DEMOLISH	1	0.00	$3,961.57
007	Push loadout fill material to portals, across operating pad	DOZER	1	0.70	$116.00
008	Rip operating pad prior to spreading fines and soil	RIPPER	1	2.71	$446.00
009	Build waterbars on access road, per plan	DOZER	1	0.06	$10.00
010	Spread available soil and fines on operating pad and road	DOZER	1	0.92	$151.00
011	Revegetate 1.8 acres per plan	REVEGE	1	8.00	$2,354.00
012	Mobilize reclamation equipment to site	MOBILIZE	1	7.00	$3,924.00
		SUBTOTALS:		**41.67**	**$12,790**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02%	Total =	$258.36
Performance bond:	1.05%	Total =	$134.30
Job superintendent:	20.84 hrs	Total =	$1,565.96
Profit:	10.00%	Total =	$1,279.00
		TOTAL O & P =	$3,237.62
		CONTRACT AMOUNT (direct + O & P) =	$16,027.62

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	4.25%	Total =	$681.17
Reclamation management and/or administration:	5.00%		$801.38
CONTINGENCY:	3.00	Total =	$383.70
		TOTAL INDIRECT COST =	$5,603.87

TOTAL BOND AMOUNT (direct + indirect) = $18,393.87

BULLDOZER RIPPING WORK

Task description: **Rip asphalt on access road**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-001
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II Horsepower: 238
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$46.88	NA
Operating Cost/Hour:	$79.23	100
Ripper Operating Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA
Total Unit Cost/Hour:	$164.12	
Total Fleet Cost/Hour:	**$164.12**	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 0.15 acres Rip Depth (ft): 0.50 Volume: 121 BCY or CCY

Source of estimated quantity: 30% of Road Surface

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	0.50	mph
Average Ripping Width:	6.50	degrees
Average Ripping Length:	200.00	feet
Average Dozer Speed:	88.00	feet
Average Maneuver Time:	0.25	feet
Production per unit area:	0.710	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.710 Acres/hr

Site Altitude:	8,000	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
Adjusted Hourly Fleet Production: **0.59** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **0.25** Hours

Unit cost: $278.578 Per acre Total job cost: **$42**

WHEEL LOADER – LOAD AND CARRY WORK

Task description: **Distribute soil and fines for spreading**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-002
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 938H Horsepower: 172
Attachment 1: ROPS Cab Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$21.63	NA
Operating Cost/Hour:	$38.09	100
Operator Cost/Hour:	$37.13	NA
Total Unit Cost/Hour:	$96.85	
Total Fleet Cost/Hour:	$96.85	

MATERIAL QUANTITIES

Initial volume: 200 CCY Swell factor: 1.000
Loose volume: **200** LCY

Source of estimated volume: Permit map, plans
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.483 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 3/4" to 6" diameter 0.00	0.000	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Dump Target:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
	Net Cycle Time Adjustment:	0.000	minutes
	Adjusted Basic Cycle Time:	0.483	minutes

Rolling Resistance – Road Conditions

Haul: Very hard, smooth, asphalt or concrete, no tire penetration 1.2
Return: Very hard, smooth, asphalt or concrete, no tire penetration 1.2

Haul and Return Time

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	250	0.00	1.20	1.20	0.1761	(Cat HB)
Return Route:	250	0.00	1.20	1.20	0.1680	(Cat HB)

Total Travel Time:	0.3440	minutes
Total Cycle Time:	**0.8265**	minutes

Load Bucket Capacity

Rated Capacity:	3.90	LCY (heaped)
Bucket Fill Factor:	0.825	Blasted rock - avg. blasted (75 - 90%) 0.825
Adjusted Capacity:	**3.22**	LCY

Job Condition Correction Factors
Site Altitude: 8000 feet

		Source
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier

Unadjusted Hourly Unit Production:	233.57	LCY/Hour
Adjusted Hourly Unit Production:	193.86	LCY/Hour
Adjusted Hourly Fleet Production:	**193.86**	LCY/Hour

JOB TIME AND COST

Fleet size:	1	Loader(s)	Total job time:	**1.03**	Hours
Unit cost:	$0.500	/LCY	Total job cost:	**$100**	

HYDRAULIC EXCAVATOR WORK

Task description: **Pull down unstable spoil material onto operating pad**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-003
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 307D 7'-3" Stick
Attachment 1: ROPS Cab

Horsepower: 56
Weight (MT): 7.23
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$15.43	NA
Operating Cost/Hour:	$20.67	100
Operator Cost/Hour:	$28.17	NA
Total Unit Cost/Hour:	$64.27	

Total Fleet Cost/Hour: $64.27

MATERIAL QUANTITIES

Initial volume: 500 CCY Swell factor: 1.695
Loose volume: **848** LCY

Source of estimated volume: Permit map
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: AVERAGE
Cycle Time Value: 0.274 minutes

Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity: 0.40 LCY (heaped)
Bucket Fill Factor: 0.900 Rock - Poorly Blasted (85%-95%) 0.900
Adjusted Capacity: **0.36** LCY

Job Condition Correction Factors

Site Altitude: 8000 feet

		Source
Altitude Adj:	0.87	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.72	multiplier

Unadjusted Hourly Unit Production: 78.83 LCY/Hour
Adjusted Hourly Unit Production: 56.92 LCY/Hour
Adjusted Hourly Fleet Production: **56.92** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: **14.89** Hours

Unit cost: $1.129 /LCY Total job cost: **$957**

HYDRAULIC EXCAVATOR WORK

Task description: **Pull in berm at edge of operating pad, for backfill**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-004
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 307D 7'-3" Stick Horsepower: 56
Attachment 1: ROPS Cab Weight (MT): 7.23
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$15.43	NA
Operating Cost/Hour:	$20.67	100
Operator Cost/Hour:	$28.17	NA
Total Unit Cost/Hour:	$64.27	

Total Fleet Cost/Hour: $64.27

MATERIAL QUANTITIES

Initial volume: 150 CCY Swell factor: 1.125
Loose volume: **169** LCY

Source of estimated volume: Permit map
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE
Secondary Job Condition within Basic Description: AVERAGE
Cycle Time Value: 0.242 minutes

Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity: 0.40 LCY (heaped)
Bucket Fill Factor: 0.850 Hard, tough clay (80% - 90%) 0.850
Adjusted Capacity: **0.34** LCY

Job Condition Correction Factors Site Altitude: 8000 feet

		Source
Altitude Adj:	0.87	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.72	multiplier

Unadjusted Hourly Unit Production: 84.30 LCY/Hour
Adjusted Hourly Unit Production: 60.87 LCY/Hour
Adjusted Hourly Fleet Production: **60.87** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: **2.77** Hours

Unit cost: $1.056 /LCY Total job cost: **$178**

BULLDOZER WORK

Task description: **Push coarse material (berms, limestone spoils) into portals**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 005 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-005
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II
Horsepower: 238
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$46.88	NA
Operating Cost/Hour:	$79.23	100
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA

Total unit Cost/Hour: 0
Total Fleet Cost/Hour: **$164.12**

MATERIAL QUANTITIES

Initial Volume: 1,029
Swell factor: 1.000
Loose volume: **1,029** LCY

Source of estimated volume: Backfill volumes on tasks 3 & 4
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 100 feet
Unadjusted hourly production: 714.3 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 0 %
Average site altitude: 8,000 feet

Material weight: 3,300 lbs/LCY

Weight description: Decomposed rock - 75% Rock, 25% Earth

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)

Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4295

Adjusted unit production: 306.79 LCY/hr
Adjusted fleet production: **306.79** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.535/LCY

Total job time: **3.35** Hours
Total job cost: **$550**

DEMOLITION WORK

Task description: **Remove or dispose of onsite debris, Etc.**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 006 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-006
User: GRM

Agency or organization name: DRMS

UNIT COSTS **Location adjustment: 89.00 %**

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Overhead powerlines	415 LF single pole lines	Powerline or telephone line, overhead, wood - Single pole	415.00	LF	$2.67	$1,108.05
Electric transformers, non-PCB type	3 @ 5 cfr or more, ea	Loading and 2 mile haul, no salvage - Machine loading	1.00	CY	$17.05	$17.05
Drums of waste oil and other fluid	2 @55 gal, nonleaky	Liquid pickup - 55 gal. drums (non-leaking drums only)	2.00	EA	$225.00	$450.00
Fuel Tank, Diesel, 300 gal	1 @ 300 gal	Solid transport, small truck (max. 6 drums, 4 cy, or 1.5 tons) - Average	30.00	MI	$1.27	$38.10
Portal Demo on shop door	10 x 10 x 1 ft	Excavate disposal pit with dozer (includes completed pit backfilling/grading)	100.00	CY	$1.65	$165.00
Shop structures, interior demo	10 CY push into adit	Excavate disposal pit with dozer (includes completed pit backfilling/grading)	270.00	CY	$1.65	$445.50
Loadout cribbing, metal debris, backfill	10 Cy push into adit	Excavate disposal pit with dozer (includes completed pit backfilling/grading)	270.00	CY	$1.65	$445.50
Ripped asphalt from road, backfill	40 CY. push into adit	Excavate disposal pit with dozer (includes completed pit backfilling/grading)	1,080.00	CY	$1.65	$1,782.00

Job Hours: **0.00** **Subtotal (unadjusted):** **$4,451.20** **Total Cost (adjusted for location):** **$3,961.57**

BULLDOZER WORK

Task description: **Push loadout fill material to portals, across operating pad**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 007 State: Colorado Abbreviation: None
Date: 10/15/2014 County: San Miguel Filename: M102-007
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II
Horsepower: 238
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$46.88	NA
Operating Cost/Hour:	$79.23	100
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA

Total unit Cost/Hour: 0
Total Fleet Cost/Hour: **$164.12**

MATERIAL QUANTITIES

Initial Volume: 100
Swell factor: 1.215
Loose volume: **122** LCY

Source of estimated volume: Site maps
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 200 feet
Unadjusted hourly production: 410.8 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 0 %
Average site altitude: 8,000 feet

Material weight: 3,300 lbs/LCY

Weight description: Decomposed rock - 75% Rock, 25% Earth

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)

Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4200

Adjusted unit production: 172.54 LCY/hr
Adjusted fleet production: **172.54** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.951/LCY

Total job time: **0.70** Hours
Total job cost: **$116**

BULLDOZER RIPPING WORK

Task description: **Rip operating pad prior to spreading fines and soil**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 008 State: Colorado Abbreviation: None
Date: 10/16/2014 County: San Miguel Filename: M102-008
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II Horsepower: 238
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$46.88	NA
Operating Cost/Hour:	$79.23	100
Ripper Operating Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA
Total Unit Cost/Hour:	$164.12	
Total Fleet Cost/Hour:	**$164.12**	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 1.60 acres Rip Depth (ft): 0.50 Volume: 1,291 BCY or CCY

Source of estimated quantity: Permit map, application, reclamation map

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	0.50	mph
Average Ripping Width:	6.50	degrees
Average Ripping Length:	200.00	feet
Average Dozer Speed:	88.00	feet
Average Maneuver Time:	0.25	feet
Production per unit area:	0.710	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production:	0.710	Acres/hr
Site Altitude:	8,000	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
Adjusted Hourly Fleet Production:	**0.59**	Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **2.72** Hours

Unit cost: $278.578 Per acre Total job cost: **$446**

BULLDOZER WORK

Task description: **Build waterbars on access road, per plan**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 009 State: Colorado Abbreviation: None
Date: 10/16/2014 County: San Miguel Filename: M102-009
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II
Horsepower: 238
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$46.88	NA
Operating Cost/Hour:	$79.23	100
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA

Total unit Cost/Hour: 0
Total Fleet Cost/Hour: **$164.12**

MATERIAL QUANTITIES

Initial Volume: 20
Swell factor: 1.215
Loose volume: **24** LCY

Source of estimated volume: Division of Reclamation, Mining & Safety
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 65 feet
Unadjusted hourly production: 921.6 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 0 %
Average site altitude: 8,000 feet

Material weight: 3,300 lbs/LCY

Weight description: Decomposed rock - 75% Rock, 25% Earth

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)

Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4200

Adjusted unit production: 387.07 LCY/hr
Adjusted fleet production: **387.07** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.424/LCY

Total job time: **0.06** Hours
Total job cost: **$10**

BULLDOZER WORK

Task description: **Spread available soil and fines on operating pad and road**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 010 State: Colorado Abbreviation: None
Date: 10/16/2014 County: San Miguel Filename: M102-010
User: GRM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II
Horsepower: 238
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$46.88	NA
Operating Cost/Hour:	$79.23	100
Ripper op. Cost/Hour:	$0.00	100
Operator Cost/Hour:	$38.01	NA

Total unit Cost/Hour: 0
Total Fleet Cost/Hour: **$164.12**

MATERIAL QUANTITIES

Initial Volume: 200
Swell factor: 1.125
Loose volume: **225** LCY

Source of estimated volume: 4 waterbars, 5 CY each
Source of estimated swell factor: Approved reclamation plan

HOURLY PRODUCTION

Average push distance: 150 feet
Unadjusted hourly production: 518.9 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 5 %
Average site altitude: 8,000 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% Earth

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4723

Adjusted unit production: 245.08 LCY/hr
Adjusted fleet production: **245.08** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.670/LCY

Total job time: **0.92** Hours
Total job cost: **$151**

REVEGETATION WORK

Task description: **Revegetate 1.8 acres per plan**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 011 State: Colorado Abbreviation: None
Date: 10/16/2014 County: San Miguel Filename: M102-011
User: GRM

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Composted manure {MEANS 32 91 13.23 4400}	50.00	pound	$0.48	$23.90
			Total Fertilizer Materials Cost/Acre	**$23.90**

Application

Description	Cost /Acre
Manure, tractor spreader (MEANS 32 91 13.23 4450)	$94.09
Total Fertilizer Application Cost/Acre	**$94.09**

TILLING

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

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Crested Wheatgrass - Ephraim	5.00	22.96	$11.15
Western Wheatgrass - Arriba	8.00	20.20	$29.44
Totals Seed Mix	13.00	43.16	**$40.59**

Application

Description	Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)	$847.24
	$847.24

Total Seed Application Cost/Acre	

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**

JOB TIME AND COST

No. of Acres: 1.8 Cost /Acre: $1,005.82
Estimated Failure Rate: 30% Cost /Acre*: $1,005.82
*Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: **$1,810.48**
Reseeding Job Cost: **$543.14**
Total Job Cost: **$2,354**
Job Hours: **8.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mobilize reclamation equipment to site**

Site: **Deep Creek Placer** Permit Action: 2014 Bond Update Permit/Job#: M1986102

PROJECT IDENTIFICATION

Task #: 012 State: Colorado Abbreviation: None
Date: 10/16/2014 County: San Miguel Filename: M102-012
User: GRM

Agency or organization name: DRMS

EQUIPMENT TRANSPORT RIG COST

Shift basis: 1 per day
Cost Data Source: CRG Data

Truck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED, 400 HP (2ND HALF, 2006)

Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT TRAILER (25T, 50T, AND 100T)

Cost Breakdown:

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

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D7R DS XR Series II	35.93	$0.00	$117.55	1	$117.55	$117.55	$250.00
Cat 307D 7'-3" Stick	7.95	$15.43	$88.67	1	$104.10	$88.67	$250.00
CAT 938H	16.34	$21.63	$88.67	1	$110.30	$88.67	$250.00
Subtotals:					**$331.95**	**$294.89**	**$750.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	$15.30	1	$15.30	$15.30
Hydroseeder with Tractor	$88.67	1	$88.67	$88.67
Subtotals:			**$103.97**	**$103.97**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	NORWOOD	
Total one-way travel distance:	30.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$3,768.06	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$155.96	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.75	0.75
Return Time (Hours):	0.75	0.75
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	3.50	1.50

JOB TIME AND COST

Total job time:	**7.00**	Hours
Total job cost:	**$3,924**	