

# STATE OF COLORADO

## DIVISION OF RECLAMATION, MINING AND SAFETY

Department of Natural Resources

1313 Sherman St., Room 215

Denver, Colorado 80203

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July 11, 2012

Christy Woodward  
Denison Mines (USA) Corp.  
1050 17th Street, Suite 950  
Denver, CO 80265

John W. Hickenlooper  
Governor

Mike King  
Executive Director

Loretta E. Piñeda  
Director

**Re:   Carnation Mine, Permit No. M-1977-416, Financial Warranty Reduction  
Approval, Revision No. SR-1**

Dear Ms. Woodward:

On July 10, 2012 the Division of Reclamation, Mining and Safety approved your request for a Financial Warranty Reduction to \$22,468.00.

Recall, the Division's bond recalculation resulting from changes approved under amendment AM-1 showed a reduction of the required bond amount from \$33,409.00 to \$32,137.00. Denison did not request a bond reduction at that time, therefore the actual bond amount posted was \$1,272.00 in excess of the required bond amount. Approval of this bond reduction SR-1 constitutes a reduction of the required bond in the amount of \$9,669.00. However, since the actual bond amount is currently \$1,272.00 higher than the amount required, this approval reflects an effective bond reduction of \$10,941.00 of the bond amount currently posted. The updated costs are shown on the enclosed cost summary sheets. (Note: Only the tasks that were changed from those under amendment AM-1 are enclosed herewith.)

Since the actual amount of the financial warranty that is presently posted is more than the required amount (as shown above), you may provide a rider to the current Financial Warranty, or submit a new Financial Warranty reflecting this reduction, at your convenience. If you wish to submit a different type of Financial Warranty, please contact our office for the applicable form, or you may find it at our website online: [www.mining.state.co.us/](http://www.mining.state.co.us/).

If you have any questions, you may reach me at the Division's Durango Field Office: 691 CR 233, Room A-2, Durango, CO 81301; telephone 970-247-5193.

Sincerely,

Bob Oswald  
Environmental Protection Specialist

Encl:   Cost summary sheets, revised 7/10/12.

Cc(w/o encl):   Russ Means, DRMS Grand Junction  
Barbara Coria, DRMS Denver

(c:\12-07 docs\Carnation SR-1 appr\rcs)

## COST SUMMARY WORK

Task description: Cost summary (revised on 7/10/12 for SR-1)

Site: Carnation Mine

Permit Action: Amendment AM-1

Permit/Job#: M1977416

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 12/5/2011

County: San Miguel

Filename: M416-000

User: RCO

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Demolition of onsite structures	DEMOLISH	1	10.00	\$8,350.45
002	Portal closure (backfilling)	MINESEAL	1	12.00	\$2,532.00
003	Grading SW dump to 2:1	DOZER	1	5.79	\$904.75
004	Grading main dump area to 2:1	DOZER	1	1.02	\$160.02
005	Ripping compaction on mine roads and dumps	RIPPER	1	5.19	\$813.00
006	Revegetate 3.1 acre disturbance	REVEGE	1	8.00	\$2,049.17
007	Haul reclamation equipment to and from site	MOBILIZE	1	8.00	\$2,644.90
<b><u>SUBTOTALS:</u></b>				<b>50</b>	<b>\$ \$17,454.29</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 20.00  
Profit: 10.00

Total = \$352.58

Total = \$183.27

Total = \$1,186.00

Total = \$1,745.43

TOTAL O & P = \$3,467.28

CONTRACT AMOUNT (direct + O & P) = \$20,921.57

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00

Total = 500.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.00

\$1,046.08

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$5,013.36

**TOTAL BOND AMOUNT (direct + indirect) = \$22,467.65**

This recalculation of the bond amount, as part of bond reduction request SR-1, accounts for the demolition and removal of the shop/office building and a significant portion of the dump grading tasks that have been completed.

## DEMOLITION WORK

Task description: Demolition of onsite structures (revised 7/10/12 for SR-1)

Site: Carnation Mine

Permit Action: Amendment AM-1

Permit/Job#: M1977416

### PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 12/5/2011

County: San Miguel

Filename: M416-001

User: RCO

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 96.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Shop/office bldg.	32x28x15	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 50 ft. push	0.00	CF	\$0.15	\$0.00
Portal shed structure	10x20x10	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 50 ft. push	2,000.00	CF	\$0.15	\$304.00
Overhead electric line & poles	3200 LF	Powerline or telephone line, overhead, wood - Single pole	3,200.00	LF	\$2.60	\$8,313.60

Job Hours: 10.00

Subtotal  
(unadjusted): \$8,617.60

Total Cost  
(adjusted for location): \$8,350.45

Note: As part of bond reduction SR-1, the cost of demolition of the shop/office has been removed from the estimate, since the building was removed from the site, leaving only the concrete slab.

BULLDOZER WORKTask description: Grading SW dump to 2:1 (revised 7/10/12 for SR-1)Site: Carnation MinePermit Action: Amendment AM-1Permit/Job#: M1977416PROJECT IDENTIFICATIONTask #: 003State: ColoradoAbbreviation: NoneDate: 12/5/2011County: San MiguelFilename: M416-003User: RCOAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D6T LGPHorsepower: 200Blade Type: StraightAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$49.25	NA
Operating Cost/Hour:	\$68.58	100
Ripper op. Cost/Hour:	\$0.00	100
Operator Cost/Hour:	\$38.49	NA

Total unit Cost/Hour: \$0.00Total Fleet Cost/Hour: \$156.32MATERIAL QUANTITIESInitial Volume: 807Swell factor: 1.000Loose volume: 807 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 100 feetUnadjusted hourly production: 303.3 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: -15 %Average site altitude: 5,800 feetMaterial weight: 2,550 lbs/LCYWeight description: SandstoneJob Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	0.800	(POOR)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4597

Adjusted unit production: 139.43 LCY/hr  
Adjusted fleet production: **139.43 LCY/hr**

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$1.121/LCY

Total job time: **5.79 Hours**  
Total job cost: **\$904.75**

Note: The SW dump is separate and apart from the main dump, the SW dump being located west of the bend in the access road crossing the site. The dump slope is steeper than 2:1, and the grading of the dump is a necessary part of the final reclamation. Grading will involve pushing material up onto the top of the dump, since there is no room available at the present toe of the dump. The material quantity of the grading task has been recalculated and incorporated into this cost revision.

BULLDOZER WORKTask description: Grading main dump area to 2:1 (revised 7/10/12 for SR-1)Site: Carnation MinePermit Action: Amendment AM-1Permit/Job#: M1977416PROJECT IDENTIFICATIONTask #: 004State: ColoradoAbbreviation: NoneDate: 12/5/2011County: San MiguelFilename: M416-004User: RCOAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: Cat D6T LGPHorsepower: 200Blade Type: StraightAttachment: 3-shank ripperShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$49.25	NA
Operating Cost/Hour:	\$68.58	100
Ripper op. Cost/Hour:	\$0.00	100
Operator Cost/Hour:	\$38.49	NA

Total unit Cost/Hour: \$0.00Total Fleet Cost/Hour: \$156.32MATERIAL QUANTITIESInitial Volume: 100Swell factor: 1.000Loose volume: 100 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat HandbookHOURLY PRODUCTIONAverage push distance: 150 feetUnadjusted hourly production: 212.5 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: -15 %Average site altitude: 5,800 feetMaterial weight: 2,550 lbs/LCYWeight description: SandstoneJob Condition Correction Factor

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	0.800	(POOR)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4597

Adjusted unit production: 97.69 LCY/hr  
Adjusted fleet production: 97.69 LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$1.600/LCY

Total job time: 1.02 Hours  
Total job cost: \$160.02

Note: During the 5/15/12 inspection for bond reduction request SR-1, the main dump was found to be graded to a 2:1 slope. Material quantities were therefore reduced to 100 cubic yards, to account for the completed earthwork, leaving minimal funds to perform remedial earthwork on the dump during final reclamation at the site.