

November 17, 2015

Joseph Cogan  
P.O. Box 113  
Nathrop, CO 81236



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

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: Arnold Gulch Pit, Permit No. M-1998-091, Reclamation Costs Update and Notice of Surety Increase (SI-1)***

Mr. Cogan:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed). ***Therefore, pursuant to Section 34-32.5-117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.*** The additional amount needs to be accepted prior to **Monday, January 18, 2016**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be \$17,500.00. This is an increase of \$5,500.00 over the \$12,500.00 currently held by the Division. This estimate is based on conditions observed during the November 4, 2015 inspection.

Please make arrangements with Barbara Coria at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Barbara Coria.

If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field Office.

Sincerely,

**Dustin Czaplak**  
Environmental Protection Specialist  
Department of Natural Resources  
Division of Reclamation, Mining and Safety  
101 South 3<sup>rd</sup>, Suite 301  
Grand Junction, CO 81501  
Phone: (970) 243-6299  
Fax: (970) 241-1516

Enc: Financial Warranty Cost Estimate



## COST SUMMARY WORK

Task description: Update FW based on current conditions

Site: Arnold Gulch

Permit Action: 2015-11-04 Inspection

Permit/Job#: M1998091

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 11/17/2015

County: Chaffee

Filename: M091-000

User: DMC

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Reduce HW to 3H:1V, Finish grade	DOZER	1	16.98	\$2,438.00
02a	Revegetate slopes and upland disturbance	REVEGE	1	8.00	\$9,743.00
03a	Mobilize equipment	MOBILIZE	1	2.68	\$2,497.00
<b><u>SUBTOTALS:</u></b>				<b>27.66</b>	<b>\$14,678</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$296.50

Performance bond: 1.05

Total = \$154.12

Job superintendent: 0.00

Total = \$0.00

Profit: 10.00

Total = \$1,467.80

TOTAL O & P = \$1,918.42

CONTRACT AMOUNT (direct + O & P) = \$16,596.42

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 0.00

Total = 0.00

Engineering work and/or contract/bid preparation: 0.00

Total = \$0.00

Reclamation management and/or administration: 5.00

\$829.82

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$2,748.24

**TOTAL BOND AMOUNT (direct + indirect) = \$17,500.00**

**BULLDOZER WORK**Task description: Reduce HW to 3H:1VSite: Arnold GulchPermit Action: 2015-11-04 InspectionPermit/Job#: M1998091**PROJECT IDENTIFICATION**Task #: 01AState: ColoradoAbbreviation: NoneDate: 11/17/2015County: ChaffeeFilename: M091-01aUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D6T LGPHorsepower: 200Blade Type: StraightAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$38.47	NA
Operating Cost/Hour:	\$67.16	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA
Total unit Cost/Hour:	\$143.63	
Total Fleet Cost/Hour:	\$143.63	

**MATERIAL QUANTITIES**Initial Volume: 3,241Swell factor: 1.000Loose volume: 3,241 LCYSource of estimated volume: 3,500 lft, 10' ht, 1H:1V to 3H:1V, cut and fillSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feet

Unadjusted hourly

production:

444.6 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 7,800 feetMaterial weight: 2,400 lbs/LCYWeight description: Sand - Dry, loose**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))

Dozing method:	1.000	(GEN.)
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:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4294

Adjusted unit  
production: 190.91 LCY/hr

Adjusted fleet  
production: **190.91 LCY/hr**

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.752/LCY

Total job time: **16.98 Hours**  
Total job cost: **\$2,438**

**REVEGETATION WORK**Task description: Revegetate slopes and upland disturbanceSite: Arnold GulchPermit Action: 2015-11-04 InspectionPermit/Job#: M1998091**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 11/17/2015County: ChaffeeFilename: M091-02aUser: DMCAgency or organization name: DRMS**FERTILIZING****Materials**

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

**Application**

Description	Cost /Acre
	\$
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$0.00</b>

**TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$98.01
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
<b>Total Tilling Cost/Acre</b>	<b>\$243.21</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	6.00	97.93	\$62.10
<b>Totals Seed Mix</b>	<b>6.00</b>	<b>97.93</b>	<b>\$62.10</b>

**Application**

Description	Cost /Acre
Broadcast seeding [DMG]	\$261.28
<b>Total Seed Application Cost/Acre</b>	<b>\$261.28</b>

**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$530.00</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Power mulcher (MEANS 32 91 13.16 0250)	\$86.68
<b>Total Mulch Application Cost/Acre</b>	<b>\$152.57</b>

**NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
<b>Totals Nursery Stock Cost / Acre</b>					<b>\$0.00</b>

**JOB TIME AND COST**

No. of Acres:	6	Cost /Acre:	\$1,249.16
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,249.16
*Selected Replanting Work Items:	TILLING, SEEDING, MULCHING		
Initial Job Cost:	\$7,494.96		
Reseeding Job Cost:	\$2,248.49		
Total Job Cost:	\$9,743		
Job Hours:	8.00		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Mobilize equipmentSite: Arnold GulchPermit Action: 2015-11-04 InspectionPermit/Job#: M1998091**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 11/17/2015County: ChaffeeFilename: M091-03aUser: DMCAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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 D6T LGP	26.87	\$38.47	\$117.55	1	\$156.02	\$117.55	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Power Mulcher (Reinco M90)	6.00	\$7.03	\$88.67	1	\$95.70	\$88.67	\$250.00

Subtotals: **\$379.98** **\$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

Subtotals: **\$15.30** **\$15.30**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>BUENA VISTA</u>	
Total one-way travel distance:	<u>6.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$2,491.34</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$5.25</u>
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.17	0.17
Return Time (Hours):	0.17	0.17
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.34	0.34

**JOB TIME AND COST**

Total job time: 2.69 Hours

Total job cost: \$2,497