

September 7, 2016

Julie Sevier
Wayne Brantley
Pioneer Sand Company, Inc.
P.O. Box 7650
Colorado Springs, CO 80933



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

1313 Sherman Street, Room 215
Denver, CO 80203

RE: Rock Pit Mine, Permit No. M-1985-082, Reclamation Costs Update and Notice of Surety Increase (SI-2)

Dear Ms. Sevier and Mr. Brantley:

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).

Division calculations estimate the cost to reclaim the above referenced site to be \$14,438 rounded up from \$14,437.70. This is an increase of \$3,638 over the \$10,800 currently held by the Division. This estimate is based on conditions observed during the May 10, 2016 inspection. ***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, November 07, 2016**. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

It is noted that in the inspection report dated May 19, 2016 the Division delayed issuing a surety increase in lieu of beginning final reclamation. The Division stated that if reclamation begun in 2016 that we would consider the bond amount of \$10,800 adequate. On August 30, 2016 the Division received a temporary cessation (TC) request. Prior to considering the TC request per the Act adequate bond must be posted. If a succession of operator (SO) request is submitted the successive operator would be required to post the required financial warranty amount. Please submit the SO request as soon as possible to allow the Division time to process the request and allow for the new operator to post the required bond amount of \$14,438 prior to the November 7, 2016 due date. If an SO is not possible, then Pioneer will need to submit the increase by the due date.

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, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us



Sincerely,



Amy Yeldell

Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
Phone: (970) 254-8511

Ec: Russ Means, Senior EPS, Grand Junction DRMS
Enc: Financial Warranty Cost Estimate

COST SUMMARY WORK

Task description: May 2016 inspection

Site: Rock Pit Mine

Permit Action: 2016-05

Permit/Job#: M1985082

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 5/16/2016

County: Moffat

Filename: M082-000

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Highwall reduction	DOZER	1	7.14	\$1,216.00
02a	Rip bench area	RIPPER	1	2.02	\$352.00
03a	Distribute topsoil	DOZER	1	6.05	\$969.00
04a	Revegetate disturbed area	REVEGE	1	8.00	\$4,251.00
05a	Initial mobilize reclamation crew and equipment	MOBILIZE	1	2.66	\$2,582.00
06a	Secondary mobilize reclamation crew and equipment	MOBILIZE	1	2.66	\$1,595.00
<u>SUBTOTALS:</u>				28.53	\$10,965

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$221.49

Performance bond: 1.05

Total = \$115.13

Job superintendent: 11.76

Total = \$875.88

Profit: 10.00

Total = \$1,096.50

TOTAL O & P = \$2,309.00

CONTRACT AMOUNT (direct + O & P) = \$13,274.00

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

\$663.70

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$3,472.70

TOTAL BOND AMOUNT (direct + indirect) = \$14,437.70

BULLDOZER WORKTask description: **Highwall reduction**Site: **Rock Pit Mine** Permit Action: **2016-05** Permit/Job#: **M1985082****PROJECT IDENTIFICATION**

Task #: **01A** State: **Colorado** Abbreviation: **None**
 Date: **5/16/2016** County: **Moffat** Filename: **M082-01a**
 User: **ACY**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **Cat D8T - 8U**
 Horsepower: **305**
 Blade Type: **Universal**
 Attachment: **3-shank ripper**
 Shift Basis: **1 per day**
 Data Source: **(CRG)**

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$52.86	NA
Operating Cost/Hour:	\$68.35	100
Ripper own. Cost/Hour:	\$8.40	NA
Ripper op. Cost/Hour:	\$1.69	30
Operator Cost/Hour:	\$38.89	NA

Total unit Cost/Hour: **\$170.19**
 Total Fleet Cost/Hour: **\$170.19**

MATERIAL QUANTITIES

Initial Volume: **4,167**
 Swell factor: **1.165**
 Loose volume: **4,855 LCY**

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

HOURLY PRODUCTION

Average push distance: **60 feet**
 Unadjusted hourly production: **1,438.4 LCY/hr**

Materials consistency description: **Compacted fill or embankment 0.9**

Average push gradient: **-15 %**
 Average site altitude: **6,450 feet**

Material weight: **2,900 lbs/LCY**Weight description: **Decomposed rock - 50% Rock, 50% Earth****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:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4724

Adjusted unit production: 679.50 LCY/hr

Adjusted fleet production: **679.5** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.250/LCY

Total job time: **7.14** Hours

Total job cost: **\$1,216**

BULLDOZER RIPPING WORK

Task description: Rip bench area

Site: Rock Pit Mine Permit Action: 2016-05 Permit/Job#: M1985082

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 5/16/2016 County: Moffat Filename: M082-02a
User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8U Horsepower: 305
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$52.86	NA
Operating Cost/Hour:	\$68.35	100
Ripper Ownership Cost/Hour:	\$8.40	NA
Ripper Operating Cost/Hour:	\$5.62	100
Operator Cost/Hour:	\$38.89	NA
Total Unit Cost/Hour:	\$174.12	
Total Fleet Cost/Hour:	\$174.12	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 1.00 acres Rip Depth (ft): 2.00 Volume: 3,227 BCY or CCY

Source of estimated quantity: Site map

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 mph
Average Ripping Width: 7.08 degrees
Average Ripping Length: 50.00 feet
Average Dozer Speed: 88.00 feet
Average Maneuver Time: 0.25 feet
Production per unit area: 0.596 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.596 Acres/hr
Site Altitude: 6,450 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.49 Acres/hr
Adjusted Hourly Fleet Production: **0.49** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **2.02** Hours

Unit cost: \$352.009 Per acre Total job cost: **\$352**

BULLDOZER WORKTask description: **Distribute topsoil**Site: **Rock Pit Mine** Permit Action: **2016-05** Permit/Job#: **M1985082****PROJECT IDENTIFICATION**

Task #: **03A** State: **Colorado** Abbreviation: **None**
 Date: **5/16/2016** County: **Moffat** Filename: **M082-03a**
 User: **ACY**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **Cat D8T - 8U**
 Horsepower: **305**
 Blade Type: **Universal**
 Attachment: **NA**
 Shift Basis: **1 per day**
 Data Source: **(CRG)**

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$52.86	NA
Operating Cost/Hour:	\$68.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.89	NA

Total unit Cost/Hour: **\$160.10**
 Total Fleet Cost/Hour: **\$160.10**

MATERIAL QUANTITIES

Initial Volume: **3,227**
 Swell factor: **1.000**
 Loose volume: **3,227 LCY**

Source of estimated volume: **3 ac. @ 8" depth**
 Source of estimated swell factor: **Cat Handbook**

HOURLY PRODUCTION

Average push distance: **100 feet**
 Unadjusted hourly production: **931.6 LCY/hr**

Materials consistency description: **Loose stockpile 1.2**

Average push gradient: **15 %**
 Average site altitude: **6,450 feet**

Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(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:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5723

Adjusted unit production: 533.15 LCY/hr

Adjusted fleet production: **533.15** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.300/LCY

Total job time: **6.05** Hours

Total job cost: **\$969**

REVEGETATION WORKTask description: Revegetate disturbed areaSite: Rock Pit MinePermit Action: 2016-05Permit/Job#: M1985082**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 5/16/2016County: MoffatFilename: M082-04aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

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

Application

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

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$107.59
Total Tilling Cost/Acre	\$107.59

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Bluebunch Wheatgrass - Secar	3.00	9.64	\$20.55
Indian Ricegrass - Native	2.00	6.47	\$13.50
Western Wheatgrass - Native	3.50	8.84	\$10.68
Needlegrass, Green - Lodorm	2.50	10.39	\$13.50
Flax, Lewis Blue	1.00	6.63	\$16.55
Totals Seed Mix	12.00	41.98	\$74.78

Application

--	--

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$1.25	\$1.25
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$246.00	\$492.00
Total Mulch Materials Cost/Acre				\$493.25

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Power mulcher (MEANS 32 91 13.16 0350)	\$97.14
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$225.88

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: 3 Cost /Acre: \$1,133.50
 Estimated Failure Rate: 25% Cost /Acre*: \$1,133.50
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **\$3,400.50**
 Reseeding Job Cost: **\$850.13**
 Total Job Cost: **\$4,251**
 Job Hours: **8.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Initial mobilize reclamation crew and equipmentSite: Rock Pit MinePermit Action: 2016-05Permit/Job#: M1985082**PROJECT IDENTIFICATION**

Task #: 05A State: Colorado Abbreviation: None
 Date: 5/16/2016 County: Moffat Filename: M082-05a
 User: ACY

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 D8T - 8U	53.70	\$65.28	\$125.45	1	\$190.73	\$125.45	\$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	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00

Subtotals: **\$414.38** **\$302.79** **\$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, 1 T. Crew	\$42.14	1	\$42.14	\$42.14

Subtotals: **\$42.14** **\$42.14**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: CRAIG
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 30.00 mph

Total Non-Roadable Mob/Demob Cost * \$2,567.82
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$14.05
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.17</u>	<u>0.17</u>
Return Time (Hours):	<u>0.17</u>	<u>0.17</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.33</u>	<u>0.33</u>

JOB TIME AND COST

Total job time: 2.67 Hours

Total job cost: \$2,582

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary mobilize reclamation crew and equipmentSite: Rock Pit MinePermit Action: 2016-05Permit/Job#: M1985082**PROJECT IDENTIFICATION**

Task #: 06A State: Colorado Abbreviation: None
 Date: 5/16/2016 County: Moffat Filename: M082-06a
 User: ACY

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
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00
Power Mulcher (Reinco M90)	6.00	\$6.72	\$88.67	1	\$95.39	\$88.67	\$250.00
Subtotals:					\$223.65	\$177.34	\$500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$42.14	1	\$42.14	\$42.14
Subtotals:			\$42.14	\$42.14

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: CRAIG
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 30.00 mph

Total Non-Roadable Mob/Demob Cost * \$1,580.96
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$14.05
 ** 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:	1.33	0.33

JOB TIME AND COST

Total job time: 2.67 Hours

Total job cost: \$1,595