



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

1313 Sherman St. Room 215  
Denver, CO 80203

October 23, 2020

Mr. Dan E. Long  
Platte Valley Real Estate, LLC  
116 Spruce Road  
Sterling, CO 80751

**Re: PVRE Pit #1, Permit No. M-2017-009, Technical Revision Approval, Revision No. TR-1**

Dear Mr. Long:

On October 23, 2020 the Division of Reclamation, Mining and Safety approved the Technical Revision application submitted to the Division on August 27, 2020, addressing the following:

- 1. Augmentation plan to cover 6.5 acres of exposed ground water has been approved. The cost estimate was updated to include the 6.5 acre pond, reclamation of 2.9 acres and 0.5 acres for Jack's Lane (permanent feature). Upon further review, the maps submitted with the original application are sufficient.*
- 2. A seed mix designed to protect the shoreline below the topsoil stockpile has been submitted and approved by the Division.*
- 3. The operator has seeded the topsoil stockpile.*

The terms of the Technical Revision No. 1 approved by the Division are hereby incorporated into Permit No. M-2017-009. All other conditions and requirements of Permit No. M-2017-009 remain in full force and effect.

The Division evaluated the reclamation cost estimate as part of the technical review. The proposed change in liability is listed below.

Bond Held:	\$46,200.00
Prior Liability:	\$46,181.89
Change in Liability:	(\$21,844.89)
<b>Revised Liability:</b>	<b>\$24,337.00</b>

The operator can request a surety reduction by completing and submitting the attached application. A surety reduction request must be submitted to the Division with an estimate of the actual cost to reclaim the site as required by Rule 4.14.1. A copy of the Division's cost estimate has been attached for your reference.



If you have any questions, please contact me.

Sincerely,

A handwritten signature in blue ink, reading "Brock Bowles". The signature is fluid and cursive, with the first name "Brock" and last name "Bowles" clearly distinguishable.

Brock F. Bowles  
Environmental Protection Specialist

## COST SUMMARY WORK

Task description: \_\_\_\_\_

Site: PVRE Pit #1

Permit Action: TR-1

Permit/Job#: M2017009

### PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 9/9/2020

County: Logan

Filename: M009-001

User: BFB

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
100	Backfill and Grade Affected Area	DOZER	1	2.85	\$982
101	Replace Topsoil	TRUCK1	1	18.37	\$10,586
102	Revegetation of the affected area	REVEGE	1	2.90	\$3,607
103	Mobilization of Equipment	MOBILIZE	1	2.20	\$4,655
<b><u>SUBTOTALS:</u></b>				<b>26.32</b>	<b>\$19,830</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02  
Performance bond: 1.05  
Job superintendent: 10.87  
Profit: 10.00

Total = \$401

Total = \$208

Total = \$756

Total = \$1,983

TOTAL O & P = \$3,348

CONTRACT AMOUNT (direct + O & P) = \$23,178

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0  
Engineering work and/or contract/bid preparation: 0.00  
Reclamation management and/or administration: 5.00

Total = \$0

Total = \$0

\$1,159

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$4,507

**TOTAL BOND AMOUNT (direct + indirect) = \$24,337**

**BULLDOZER WORK**Task description: **Backfill and Grade Affected Area**Site: **PVRE Pit #1** Permit Action: **TR-1** Permit/Job#: **M2017009****PROJECT IDENTIFICATION**

Task #: **100** State: **Colorado** Abbreviation: **None**  
 Date: **9/9/2020** County: **Logan** Filename: **M009-100**  
 User: **BFB**

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:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$156.88	NA
Operating Cost/Hour:	\$127.87	100
Ripper own. Cost/Hour:	\$15.59	NA
Ripper op. Cost/Hour:	\$2.56	25
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$344.19**  
 Total Fleet Cost/Hour: **\$344.19**

**MATERIAL QUANTITIES**

Initial Volume: **2,340**  
 Swell factor: **1.000**  
 Loose volume: **2,340 LCY**

Source of estimated volume: **6 inches over 2.9 acres**  
 Source of estimated swell factor: **Cat Handbook**

**HOURLY PRODUCTION**

Average push distance: **100 feet**  
 Unadjusted hourly production: **1,243.2 LCY/hr**

Materials consistency description: **Partly consolidated stockpile 1.1**

Average push gradient: **0 %**  
 Average site altitude: **3,940 feet**

Material weight: **2,100 lbs/LCY**Weight description: **Earth - Loam****Job Condition Correction Factor**

		<u>Source</u>
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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6598

Adjusted unit production: 820.26 LCY/hr

Adjusted fleet production: **820.26** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.420/LCY

Total job time: **2.85** Hours

Total job cost: **\$982**

**TRUCK/LOADER TEAM WORK**Task description: **Replace Topsoil**Site: **PVRE Pit #1**Permit Action: **TR-1**Permit/Job#: **M2017009****PROJECT IDENTIFICATION**Task #: **101**State: **Colorado**Abbreviation: **None**Date: **9/9/2020**County: **Logan**Filename: **M009-101**User: **BFB**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Shift basis: **1 per day**

	Equipment Description
Truck Loader Team -Truck:	Cat 725
-Loader:	CAT 962H
Support Equipment -Load Area:	NA
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

**Cost Breakdown:****Truck/Loader Team****Support Equipment****Maintenance Equipment**

	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
% Utilization-machine:	100	100	NA	50	NA	NA
Ownership cost/hour:	\$56.08	\$28.67	NA	\$116.22	NA	NA
Operating cost/hour:	\$45.18	\$37.06	NA	\$44.88	NA	NA
% Utilization-ripper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	NA	\$0.00	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	\$0.00	NA	NA
Operator cost/hour:	\$32.54	\$40.71	NA	\$41.30	NA	NA
Unit Subtotals:	\$133.80	\$106.44	NA	\$202.40	NA	NA
Number of Units:	2	1	0	1	0	0
Group Subtotals:	Work: \$374.04		Support: \$202.40		Maint: \$0.00	

Total work team cost/hour: **\$576.44****MATERIAL QUANTITIES**Initial volume: **6,644**

CCY

Swell factor: **1.215**Loose volume: **8,072**

LCY

Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook**Material Purchase Cost: **\$0.00**Total Cost: **\$0.00****HOURLY PRODUCTION****Truck Capacity:****Truck Payload (weight) Basis:**Material weight: **1,600**

Pounds/LCY

Description: **Top Soil**Rated Payload: **52,000**

Pounds

Payload Capacity: **32.50**

LCY

**Truck Bed (volume) Basis:**

Struck Volume:	14.50	LCY
Heaped Volume:	18.70	LCY
Average Volume:	16.60	LCY
Adjusted Volume:	18.70	LCY

Final Truck Volume Based on Number of Loader Passes: 16.77 LCY

**Loading Tool Capacity**

Bucket Size Class: NA

Rated Capacity:	4.300	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - uniform aggregates to 1/8" (95-100%) 0.975
Adjusted Capacity:	<b>4.193</b>	LCY

**Job Condition Corrections:**

Site Altitude (ft.): 3940 feet

	<b>Truck</b>	<b>Loader</b>	<b>Source</b>
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	<b>0.830</b>	<b>0.830</b>	

**Loading Tool Cycle Time:** Number of Loading Tool Passes Required to Fill Truck: 4 passes

**Excavators and Front Shovels:**

Machine Cycle Time vs. Job Condition Rating: NA  
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: \_\_\_\_\_

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 1/8" to 3/4" diameter -0.02	-0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.090	minutes
Adjusted Loader Cycle Time:		<b>0.410</b>	minutes
Net Load Time per Truck:		<b>1.330</b>	minutes

**Truck Cycle Time:**

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.330	Minutes	Adjusted for site altitude:	1.330	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 Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	4.00	4.00	1817	0.622

Haul Time: **0.622** minutes

## Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	0.00	4.00	4.00	2742	0.448

Return Time: **0.448** minutesTotal Truck Cycle Time: **3.800** minutes

## Loading Tool unit

Production	<u>549.84</u>	LCY/Hour	Adjusted for job efficiency:	<u>456.36</u>	LCY/Hour
Truck Unit Production	<u>264.79</u>	LCY/Hour	Adjusted for job efficiency:	<u>219.78</u>	LCY/Hour

Optimal No. of Trucks:	<u>2</u>	Truck(s)	Selected Number of Trucks:	<u>2</u>	Truck(s)
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Adjusted hourly truck team production:	<u>439.55</u>	LCY/Hour
Adjusted single truck/loader team production:	<u>439.55</u>	LCY/Hour
Adjusted multiple truck/loader team production:	<b><u>439.55</u></b>	LCY/Hour

**JOB TIME AND COST**

Fleet size:	<u>1</u>	Team(s)	Total job time:	<b><u>18.37</u></b>	Hours
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Unit cost:	<u>\$1.311</u>	/LCY	Total job cost:	<b><u>\$10,586</u></b>
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**REVEGETATION WORK**Task description: Revegetation of the affected areaSite: PVRE Pit #1Permit Action: TR-1Permit/Job#: M2017009**PROJECT IDENTIFICATION**Task #: 102State: ColoradoAbbreviation: NoneDate: 9/9/2020County: LoganFilename: M009-102User: BFBAgency 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)	\$107.16
<b>Total Tilling Cost/Acre</b>	<b>\$107.16</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Common	0.40	1.93	\$1.02
Sideoats Grama - Butte	1.37	4.50	\$12.33
Intermediate Wheatgrass - Oahe	3.00	6.40	\$8.40
Tall Wheatgrass - Jose	5.10	9.25	\$17.21
Western Wheatgrass - Arriba	4.80	12.12	\$31.20
<b>Totals Seed Mix</b>	<b>14.67</b>	<b>34.20</b>	<b>\$70.16</b>

**Application**

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

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

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$301.00	\$602.00
<b>Total Mulch Materials Cost/Acre</b>				<b>\$602.00</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$70.17
Power mulcher (MEANS 32 91 13.16 0350)	\$101.93
<b>Total Mulch Application Cost/Acre</b>	<b>\$172.10</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: 2.9                      Cost /Acre: \$1,183.42  
 Estimated Failure Rate: 20%                      Cost /Acre\*: \$302.16  
 \*Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$3,431.92**  
 Reseeding Job Cost: **\$175.25**  
 Total Job Cost: **\$3,607**  
 Job Hours: **2.90**

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mobilization of Equipment**Site: **PVRE Pit #1**Permit Action: **TR-1**Permit/Job#: **M2017009****PROJECT IDENTIFICATION**Task #: **103**State: **Colorado**Abbreviation: **None**Date: **9/9/2020**County: **Logan**Filename: **M009-103**User: **BFB**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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
Ownership Cost/Hour:	\$17.20	\$29.63	\$38.69
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$67.39	\$123.81	\$141.54

**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 - 8SU	53.08	\$128.22	\$141.54	1	\$269.76	\$141.54	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.72	\$67.39	1	\$74.11	\$67.39	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$11.19	\$67.39	1	\$78.58	\$67.39	\$250.00
CAT 962H	20.95	\$28.67	\$67.39	1	\$96.06	\$67.39	\$250.00
Cat 725	24.54	\$56.08	\$67.39	2	\$246.94	\$134.78	\$500.00

Subtotals: **\$765.45** **\$478.49** **\$1,500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
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Subtotals: **\$0.00** **\$0.00**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	STERLING	
Total one-way travel distance:	1.00	miles
Average Travel Speed:	20.00	mph

Total Non-Roadable Mob/Demob Cost *	\$4,655.29
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	\$0.00
** one round trip, no haul rig:	

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.05	0.05
Return Time (Hours):	0.05	0.05
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.10	0.10

**JOB TIME AND COST**

Total job time: 2.20 Hours

Total job cost: \$4,655



COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

**REQUEST FOR FULL OR PARTIAL RELEASE OF PERMIT AREA/SURETY REDUCTION**

Please indicate if you are requesting:

FULL/FINAL RELEASE OF ENTIRE PERMITTED AREA (per Rule 4.17)

\_\_\_\_\_

ACREAGE REDUCTION (PARTIAL RELEASE per Rule 4.17)

\_\_\_\_\_

I wish to release \_\_\_\_\_ acres at this time.

You will need to submit with this request: a map showing the acreage to be released from the current permit and updated mining and reclamation plan maps that will accurately depict the new permit boundary if the release is approved.

SURETY (Bond) REDUCTION (per Rule 4.14)

\_\_\_\_\_

If you are requesting a surety (bond) reduction you will need to include with this request a new estimate of the actual cost to reclaim the site based on what it would cost an independent contractor to complete reclamation, including unit costs for reclamation activities as appropriate to the operation to comply with the provisions of Rule 3.1 and the Permit's approved Reclamation Plan.

File No.: M \_\_\_\_\_

Site Name: \_\_\_\_\_

County: \_\_\_\_\_

Permittee: \_\_\_\_\_

Permittee Address: \_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(City)

\_\_\_\_\_  
(State)

\_\_\_\_\_  
(Zip)



Operator (If Other than Permittee): \_\_\_\_\_

Permittee Representative: \_\_\_\_\_

Certified Mail # \_\_\_\_\_

In accordance with Rule 4.17.1(2) the Operator shall include the names, addresses and phone numbers of all owners of record to the affected land. Please attach additional sheets for this information if required.

<u>Name</u>	<u>Address</u>	<u>Phone Number</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

In accordance with Rule 4.17.1(4), if requesting a partial acreage release the Operator or their agent MUST sign that they have complied with the following statement: “All applicable portions of the Reclamation Plan requirements have been satisfied in accordance with these Rules and all applicable requirements under the Act.”

\_\_\_\_\_  
Signature of Permittee, Operator or their authorized agent      Date

Important: In accordance with Rules 4.14.2(a) and 4.17.1(3) This release request must be submitted to the Division via certified mail and separate from any other correspondence to the Division.