

November 9, 2018

Peter Freedman  
AuPt Industries LLC  
P.O. Box 1424  
Edwards, CO 81632



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

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: West Side Placer, Permit No. M-2016-081, Technical Revision (TR-1) Approval***

Dear Mr. Freedman:

On November 9, 2018 the Division of Reclamation, Mining and Safety (Division) approved the Technical Revision request (TR-1) submitted on August 28, 2018, addressing the following:

*Revision of Mining and Reclamation Plan for the addition of a water treatment system (Rapid Thickener) and used of flocculant (DAF-30)*

The terms of the TR-1 approved by the Division are hereby incorporated into Permit No. M-2016-081. All other conditions and requirements of the permit remain in full force and effect.

The estimated liability amount of \$39,160 exceeds the \$ 34,383 Financial Warranty currently held for this site. If you have not already done so, please submit additional bond in the amount of \$ 4,677. The revision will not be final until the bond is approved by the Division.

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

Enclosed: Updated Financial Warranty Cost Estimate

Cc: Wally Erickson, Senior EPS, Grand Junction DRMS



## COST SUMMARY WORK

Task description: Changes w/ Flocculant use

Site: West Side Placer

Permit Action: TR-1

Permit/Job#: M2016081

### PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 11/9/2018

County: Moffat

Filename: M081-ACY

User: ACY

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Plug water well	BOREHOLE	1	4.00	\$1,999.42
02a	Demo Rapid Thickener Pillars	DEMOLISH	1	4.00	\$51.40
03a	Regrading Pond (1x)	DOZER	1	1.77	\$368.00
03b	Overburden replacement and grading of mining phases	SCRAPER1	1	21.17	\$16,308.00
04a	Topsoil replacement of mining phases	SCRAPER1	1	2.94	\$2,265.00
04b	Grading topsoil in mining phase	DOZER	1	2.91	\$606.00
05a	Seed mining phases	REVEGE	1	8.00	\$1,120.00
05b	Seed roads, pond and operating areas	REVEGE	1	8.00	\$747.00
06a	Initial Mobilization	MOBILIZE	1	5.78	\$4,604.00
06b	Secondary Mobilization	MOBILIZE	1	5.78	\$1,149.00
<b><u>SUBTOTALS:</u></b>				<b>64.35</b>	<b>\$29,217</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$590.18

Performance bond: 1.05

Total = \$306.78

Job superintendent: 32.17

Total = \$2,350.02

Profit: 10.00

Total = \$2,921.70

TOTAL O & P = \$6,168.68

CONTRACT AMOUNT (direct + O & P) = \$35,385.68

#### 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 = \$1,503.89

Reclamation management and/or administration: 5.00

\$1,769.28

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$9,941.86

TOTAL BOND AMOUNT (direct + indirect) = \$39,158.86

**TOTAL BOND AMOUNT (Rounded) = \$39,160.00**

## BOREHOLE SEALING WORK

Task description: Plug water well

Site: West Side Placer

Permit Action: TR-1

Permit/Job#: M2016081

### PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 11/9/2018

County: Moffat

Filename: M081-01a

User: ACY

Agency or organization name: DRMS

### UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Plug lower portion of well	Bentonite seal - 8 in. (labor, equip, materials)	7.875	295	295.00	LF	\$6.65	\$1,961.75
Plug upper portion of well	Portland cement grout - 10 in. (labor, equip, materials)	8.625	5	5.00	LF	\$6.80	\$34.00
Marker	Borehole location/identification marker (EA, material cost only)	8.625	1	1.00	EA	\$3.67	\$3.67

Job Hours: 4.00

Total Cost: \$1,999.00

## DEMOLITION WORK

Task description: Deme Rapid Thickener Pillars

Site: West Side Placer

Permit Action: TR-1

Permit/Job#: M2016081

### PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 11/9/2018

County: Moffat

Filename: M081-02a

User: ACY

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 95.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
6 Pillars	12"D x 6'L	Footing, concrete, 1.0 ft. x 2 ft. - No reinforcing	18.00	LF	\$2.99	\$53.82

Job Hours: 4.00

Subtotal  
(unadjusted): \$53.82

Total Cost  
(adjusted for  
location): \$51.40

**BULLDOZER WORK**Task description: **Regrading Pond (1x)**Site: **West Side Placer**Permit Action: **TR-1**Permit/Job#: **M2016081****PROJECT IDENTIFICATION**Task #: **03A**State: **Colorado**Abbreviation: **None**Date: **11/9/2018**County: **Moffat**Filename: **M081-03a**User: **ACY**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8SU**Horsepower: **310**Blade Type: **Semi-Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.52	NA

Total unit Cost/Hour: **\$208.49**Total Fleet Cost/Hour: **\$208.49****MATERIAL QUANTITIES**Initial Volume: **887**Swell factor: **1.060**Loose volume: **940 LCY**Source of estimated volume: **1 pond-2993 sqft x 8' deep**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**Unadjusted hourly production: **1,400.0 LCY/hr**Materials consistency description: **Partly consolidated stockpile 1.1**Average push gradient: **0 %**Average site altitude: **6,225 feet**Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry****Job Condition Correction Factor**

		<u>Source</u>
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:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3801

Adjusted unit production: 532.14 LCY/hr

Adjusted fleet production: **532.14** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.392/LCY

Total job time: **1.77** Hours

Total job cost: **\$368**

**SCRAPER TEAM WORK**Task description: Overburden replacement and grading of mining phasesSite: West Side PlacerPermit Action: TR-1Permit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 11/9/2018County: MoffatFilename: M081-03bUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G
-Dozer:	NA
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

**Cost Breakdown:**

## Scraper Work Team

## Support Equipment

## Maintenance Equipment

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	100	100	NA	NA
Ownership cost/hour:	\$155.61	NA	\$93.62	\$93.62	NA	NA
Operating cost/hour:	\$166.86	NA	\$73.35	\$73.35	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	NA	NA
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	NA	NA
Operator cost/hour:	\$31.05	NA	\$41.52	\$41.52	NA	NA
Unit Subtotals:	\$353.51	NA	\$208.49	\$208.49	NA	NA
Number of Units:	1	0	1	1	0	0
Group Subtotals:	Work: \$353.51		Support: \$416.98		Maint:	\$0.00

Total work team cost/hour: **\$770.49****MATERIAL QUANTITIES**Initial volume: 9,999

CCY

Swell factor: 1.000Loose volume: **9,999**

LCY

Source of estimated volume: 72" x 75' x 600' stripsSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Scraper Bowl (volume) Basis:

Material weight: 3,400 lbs/LCY  
 Material description: Sand and gravel - Wet  
 Rated Payload: 81,600 pounds  
 Payload Capacity: 24.00 LCY

Struck Volume: 24.00 LCY  
 Heaped Volume: 34.00 LCY  
 Average Volume: 29.00 LCY  
 Adjusted Capacity: **24.00** LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 6225 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Loose sand or gravel 10Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	10.00	10.00	922	0.68

Haul Time: 0.68 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	10.00	10.00	1476	0.45

Return Time: 0.45 minutesTotal Scraper team cycle time: 2.53 minutesAdjusted for job conditions: 472.41 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 472.41 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 472.41 LCY/HourUnadjusted unit production/hour: 569.17 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: 21.17 HoursUnit cost: \$1.631 /LCYTotal job cost: \$16,308



**SCRAPER TEAM WORK**Task description: Topsoil replacement of mining phasesSite: West Side PlacerPermit Action: TR-1Permit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 11/9/2018County: MoffatFilename: M081-04aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G
-Dozer:	NA
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	Cat D8T - 8SU
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

**Cost Breakdown:**

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	100	100	NA	NA
Ownership cost/hour:	\$155.61	NA	\$93.62	\$93.62	NA	NA
Operating cost/hour:	\$166.86	NA	\$73.35	\$73.35	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	\$0.00	NA	NA
Ripper op. cost/hour:	NA	NA	\$0.00	\$0.00	NA	NA
Operator cost/hour:	\$31.05	NA	\$41.52	\$41.52	NA	NA
Unit Subtotals:	\$353.51	NA	\$208.49	\$208.49	NA	NA
Number of Units:	1	0	1	1	0	0
Group Subtotals:	Work:	\$353.51	Support:	\$416.98	Maint:	\$0.00

Total work team cost/hour: **\$770.49****MATERIAL QUANTITIES**Initial volume: 1,389

CCY

Swell factor: 1.000Loose volume: 1,389

LCY

Source of estimated volume: 10" x 75' x 600' stripsSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>3,400 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Sand and gravel - Wet</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>24.00 LCY</u>	Adjusted Capacity:	<u>24.00</u>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 6225 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Loose sand or gravel 10Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	10.00	10.00	922	0.68

Haul Time: 0.68 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	0.00	10.00	10.00	1476	0.45

Return Time: 0.45 minutesTotal Scraper team cycle time: 2.53 minutesAdjusted for job conditions: 472.41 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 472.41 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 472.41 LCY/HourUnadjusted unit production/hour: 569.17 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: 2.94 HoursUnit cost: \$1.631 /LCYTotal job cost: \$2,265

**BULLDOZER WORK**Task description: Grading topsoil in mining phaseSite: West Side PlacerPermit Action: TR-1Permit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 04BState: ColoradoAbbreviation: NoneDate: 11/9/2018County: MoffatFilename: M081-04bUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$93.62	NA
Operating Cost/Hour:	\$73.35	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.52	NA

Total unit Cost/Hour: \$208.49Total Fleet Cost/Hour: **\$208.49****MATERIAL QUANTITIES**Initial Volume: 695Swell factor: 1.215Loose volume: **844 LCY**Source of estimated volume: Half of transported amountSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 200 feetUnadjusted hourly production: 491.9 LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 6,225 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
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:	0.600	(FND-SF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5908

Adjusted unit production: 290.61 LCY/hr

Adjusted fleet production: **290.61** LCY/hr

### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)

Unit cost: \$0.717/LCY

Total job time: **2.91** Hours

Total job cost: **\$606**

**REVEGETATION WORK**Task description: Seed mining phasesSite: West Side PlacerPermit Action: TR-1Permit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 11/9/2018County: MoffatFilename: M081-05aUser: ACYAgency 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
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.85	5.99	\$12.95
Galleta	2.19	7.99	\$55.39
Western Wheatgrass - Arriba	2.76	6.97	\$22.85
Needle and Thread	3.03	8.00	\$128.78
Globemallow, Scarlet (or copper)	0.25	2.83	\$34.69
Basin Wildrye - Trailhead	3.03	12.31	\$46.69
<b>Totals Seed Mix</b>	<b>13.11</b>	<b>44.09</b>	<b>\$301.34</b>

**Application**

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
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</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:	1.5	Cost /Acre:	\$533.34
Estimated Failure Rate:	40%	Cost /Acre*:	\$533.34
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	<b>\$800.01</b>
Reseeding Job Cost:	<b>\$320.00</b>
Total Job Cost:	<b>\$1,120</b>
Job Hours:	<b>8.00</b>

**REVEGETATION WORK**Task description: Seed roads, pond and operating areasSite: West Side PlacerPermit Action: TR-1Permit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 05BState: ColoradoAbbreviation: NoneDate: 11/9/2018County: MoffatFilename: M081-05bUser: ACYAgency 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
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	1.85	5.99	\$12.95
Galleta	2.19	7.99	\$55.39
Western Wheatgrass - Arriba	2.76	6.97	\$22.85
Needle and Thread	3.03	8.00	\$128.78
Globemallow, Scarlet (or copper)	0.25	2.83	\$34.69
Basin Wildrye - Trailhead	3.03	12.31	\$46.69
<b>Totals Seed Mix</b>	<b>13.11</b>	<b>44.09</b>	<b>\$301.34</b>

**Application**

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
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</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:	1	Cost /Acre:	\$533.34
Estimated Failure Rate:	40%	Cost /Acre*:	\$533.34
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	<b>\$533.34</b>
Reseeding Job Cost:	<b>\$213.34</b>
Total Job Cost:	<b>\$747</b>
Job Hours:	<b>8.00</b>



**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Initial Mobilization**Site: **West Side Placer**Permit Action: **TR-1**Permit/Job#: **M2016081****PROJECT IDENTIFICATION**Task #: **06A**State: **Colorado**Abbreviation: **None**Date: **11/9/2018**County: **Moffat**Filename: **M081-06a**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:**

<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 637G	57.28	\$155.61	\$125.45	1	\$281.06	\$125.45	\$250.00
Cat D8T - 8SU	53.08	\$102.55	\$125.45	1	\$228.00	\$125.45	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00
Subtotals:					<b>\$613.27</b>	<b>\$339.57</b>	<b>\$750.00</b>

**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.	\$40.03	1	\$40.03	\$40.03
Subtotals:			<b>\$40.03</b>	<b>\$40.03</b>

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: CRAIG  
 Total one-way travel distance: 52.00 miles  
 Average Travel Speed: 55.00 mph

Total Non-Roadable Mob/Demob Cost \* \$4,528.27  
 \*\* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$75.69  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.95	0.95
Return Time (Hours):	0.95	0.95
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.89	1.89

**JOB TIME AND COST**

Total job time: 5.78 Hours

Total job cost: \$4,604

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Secondary MobilizationSite: West Side PlacerPermit Action: TR-1Permit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 06BState: ColoradoAbbreviation: NoneDate: 11/9/2018County: MoffatFilename: M081-06bUser: ACYAgency 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
Drill/Broadcast Seeder with Tractor	25.00	\$15.54	\$88.67	1	\$104.21	\$88.67	\$250.00

Subtotals: **\$104.21** **\$88.67** **\$250.00****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.	\$40.03	1	\$40.03	\$40.03

Subtotals: **\$40.03** **\$40.03**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: CRAIG  
 Total one-way travel distance: 52.00 miles  
 Average Travel Speed: 55.00 mph

Total Non-Roadable Mob/Demob Cost \* \$1,073.14  
 \* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$75.69  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.95	0.95
Return Time (Hours):	0.95	0.95
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.89	1.89

**JOB TIME AND COST**

Total job time: 5.78 Hours

Total job cost: \$1,149