




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety has conducted an inspection of the mining operation noted below. This report documents observations concerning compliance with the terms of the permit and applicable rules and regulations of the Mined Land Reclamation Board.

MINE NAME: West Side Placer	MINE/PROSPECTING ID#: M-2016-081	MINERAL: Gold, niobium (colorado) rare earths	COUNTY: Moffat
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: July 10, 2024	INSP. TIME: 8:00
OPERATOR: AuPt Industries LLC	OPERATOR REPRESENTATIVE: Peter Freedman	TYPE OF OPERATION: 110(2) - Hard Rock Limited Impact	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE:	BOND AMOUNT: \$46,110.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Zach Trujillo	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: July 29, 2024	

The following inspection topics were identified as having Problems or Possible Violations. OPERATORS SHOULD READ THE FOLLOWING PAGES CAREFULLY IN ORDER TO ASSURE COMPLIANCE WITH THE TERMS OF THE PERMIT AND APPLICABLE RULES AND REGULATIONS. If a Possible Violation is indicated, you will be notified under separate cover as to when the Mined Land Reclamation Board will consider possible enforcement action.

INSPECTION TOPIC: Revegetation

PROBLEM/POSSIBLE VIOLATION: Problem: There are state-listed noxious weeds present on site. This is a problem for failure to employ weed control methods for state listed noxious weed species within the permitted area, and to reduce the spread of weeds to nearby areas as required by Section 3.1.10 (6) of the rule.

CORRECTIVE ACTIONS: Provide proof to the Division that noxious weeds have been treated onsite. If the problem persists, the Operator may be required to develop a weed control and management plan in accordance with Section 3.1.10 (6) of the Rule. This plan should be developed in consultation with the county extension agency, or weed control district office and should include specific control measures to be applied, a schedule for when control measures will be applied and a post-treatment monitoring plan.

CORRECTIVE ACTION DUE DATE: 10/14/24

OBSERVATIONS

This inspection was conducted by Hunter Ridley with the Colorado Division of Reclamation, Mining and Safety (Division) as part of the normal monitoring program. Peter Freedman, representing AuPt Industries, LLC accompanied the Division on the inspection. The West Side Placer mine is a 110(2) permitted site that includes a total of 9.9 acres on State Land Board land. This site is located on the 15 miles southwest of Baggs, WY and

is accessed from Moffat County Road 88. The active mining is located in the southernmost portion of the permit boundary. The current excavated cut is ~20 feet deep. The site was not active at the time of inspection.

Availability of Records: Annual reports are current, having been filed through May 2024, stating the last mining activity was in November of 2021. The previous inspection was on June 8, 2022. There are no open infractions related to previous inspections.

Backfilling and Grading: Minimal backfilling has occurred in the currently open pit area. Slopes remain at a 3H:1V grade or lower (Photo 4). The Operator inquired about the need for a revision to allow the remaining pit area to be backfilled with inert material. The Operator was instructed to submit an inert fill notice to the Division via a Technical Revision request, ensuring compliance with the requirements of Rule 3.1.5(9).

Financial Warranty: The Division currently holds a financial warranty amount of \$46,110.00 for this site. In an effort to ensure the Financial Warranty adequately reflects the actual current cost of fulfilling the requirements of the approved reclamation plan, the Division has updated the reclamation cost estimate. The Division has found the current bond to be **inadequate** for reclamation of the site. The updated required bond amount is \$48,833.00. This is an **increase of \$2,723.00**. A copy of staff calculations has been attached with this report. A notice of surety increase will be sent under separate cover.

Fish and Wildlife: No impact to wildlife was observed.

Hydrologic Balance: A permitted well is located on site for access to additional water but is not currently being utilized. The existing settling pond located on the east side of the mine remains in place.

Processing Waste: No processing waste was observed.

On site Support Facilities: Plant facilities were removed from the middle portion of the permit in 2023 (Photo 3). This area is planned for reclamation in 2024.

Revegetation: Northern (Photo 5), eastern, and southern portions (Photo 2) of the mine area have been reclaimed in previous years. The Operator stated that the most recent seeding occurred last fall. Vegetation establishment was observed, however large swathes of cheatgrass were observed in these areas among patches of native shrubs and grasses. Topsoil remains on site and is vegetated (Photo 7). A Colorado List C noxious weed species, Halogeton (*Halogeton glomeratus*) was also observed (Photo 6). Therefore, the Division is citing a problem for failure to employ weed control methods for state listed noxious weed species within the permitted area, and to reduce the spread of weeds to nearby areas as required by Section 3.1.10 (6) of the rule. The Operator will be required to provide proof to the Division that these noxious weeds have been treated onsite by the above listed corrective action due date.

Sediment Control: No BMPs were determined to be needed at the time of the inspection.

Signs and Markers: The mine identification sign remains in place in compliance with Rule 3.1.12 and is located at the northern part of the permit boundary along County Road 88 (Photo 1). Affected area boundary markers were observed throughout the boundary of the site.

Permit Stipulations: There are no permit stipulations.

Photographs taken during the inspection have been included below. Responses to this inspection report should be directed to: Hunter Ridley at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 720-868-7757 or via email at hunter.ridley@state.co.us

PHOTOGRAPHS



Photo 1: Mine identification sign.



Photo 2: View northeast of reclamation efforts in the southern portion of the permit.



Photo 3: View south from the middle of the permit area, this area has been recently cleared of the site's processing plant.



Photo 4: View south into the pit area, stockpiles and stored equipment are visible.



Photo 5: View north of the partially reclaimed northern permit area.



Photo 6: Colorado List C noxious weed species Halogeton was observed onsite.



Photo 7: Topsoil for use in reclamation remains onsite.

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>PB</u>
(SM) SIGNS AND MARKERS----- <u>Y</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- <u>Y</u>
(ES) OVERBURDEN/DEV. WASTE----- <u>N</u>	(SC) EROSION/SEDIMENTATION--- <u>N</u>	(ST) STIPULATIONS----- <u>N</u>
(AT) ACID OR TOXIC MATERIALS----- <u>N</u>	(OD) OFF-SITE DAMAGE----- <u>N</u>	

Y = Inspected / N = Not inspected / NA = Not applicable to this operation / PB = Problem cited / PV = Possible violation cited

Inspection Contact Address

Peter Freedman
AuPt Industries LLC
PO Box 1424
Edwards, CO 81632

COST SUMMARY WORK

Task description: Post Inspection Update 2024

Site: West Side Placer

Permit Action: 2024 Update

Permit/Job#: M2016081

PROJECT IDENTIFICATION

Task #: HCR

State: Colorado

Abbreviation: None

Date: 7/1/2024

County: Moffat

Filename: M081-HCR

User: HR1

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	\$4,028
02a	Demo Rapid Thickener Pillars	DEMOLISH	1	4.00	\$53
03a	Regrading Pond (1x)	DOZER	1	1.77	\$402
04a	Overburden replacement and grading of mining phases	SCRAPER1	1	21.17	\$17,615
04b	Topsoil replacement of mining phases	SCRAPER1	1	2.94	\$2,447
05a	Grading in mining phase	DOZER	1	2.91	\$661
05b	Ripping compacted areas	RIPPER	1	5.14	\$1,266
06a	Seed mining phases	REVEGE	1	9.00	\$4,679
07a	Initial Mobilization	MOBILIZE	1	5.78	\$4,749
07b	Secondary Mobilization	MOBILIZE	1	5.78	\$1,037
<u>SUBTOTALS:</u>				62.49	\$36,937

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 31.24
Profit: 10.00

Total = \$746

Total = \$388

Total = \$2,476

Total = \$3,694

TOTAL O & P = \$7,304

CONTRACT AMOUNT (direct + O & P) = \$44,241

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$1,880

Reclamation management and/or administration: 5.00

\$2,212

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$11,896

TOTAL BOND AMOUNT (direct + indirect) = \$48,833

BOREHOLE SEALING WORK

Task description: Plug water well

Site: West Side Placer

Permit Action: 2024 Update

Permit/Job#: M2016081

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 7/1/2024

County: Moffat

Filename: M081-01a

User: HR1

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	\$13.29	\$3,921.35
Plug upper portion of well	Portland cement grout - 10 in. (labor, equip, materials)	8.625	5	5.00	LF	\$12.05	\$60.25
Marker	Borehole location/identification marker (EA, material cost only)	8.625	1	1.00	EA	\$46.00	\$46.00

Job Hours: 4.00

Total Cost: \$4,028.00

DEMOLITION WORK

Task description: **Demo Rapid Thickener Pillars**

Site: **West Side Placer**

Permit Action: 2024 Update

Permit/Job#: M2016081

PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 7/1/2024

County: Moffat

Filename: M081-02a

User: HR1

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	\$3.66	\$65.88

Job Hours: **4.00**

Subtotal
(unadjusted): **\$65.88**

Total Cost
(adjusted for
location): **\$62.92**

BULLDOZER WORKTask description: **Regrading Pond (1x)**Site: **West Side Placer**Permit Action: **2024 Update**Permit/Job#: **M2016081****PROJECT IDENTIFICATION**Task #: **03A**State: **Colorado**Abbreviation: **None**Date: **7/1/2024**County: **Moffat**Filename: **M081-03a**User: **HR1**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:	<u>\$173.32</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$109.71</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$38.59</u>	<u>NA</u>

Total unit Cost/Hour: **\$321.62**Total Fleet Cost/Hour: **\$321.62****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:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.100</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>
Job efficiency:	<u>0.830</u>	<u>(1 SHIFT/DAY)</u>

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: \$0.604/LCY

Total job time: **1.77** Hours

Total job cost: **\$568**

SCRAPER TEAM WORKTask description: **Overburden replacement and grading of mining phases**Site: **West Side Placer**Permit Action: 2024 UpdatePermit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 7/1/2024County: MoffatFilename: M081-04aUser: HR1Agency 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:	\$329.66	NA	\$173.32	\$173.32	NA	NA
Operating cost/hour:	\$347.48	NA	\$109.71	\$109.71	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:	\$30.90	NA	\$38.59	\$38.59	NA	NA
Unit Subtotals:	\$708.04	NA	\$321.62	\$321.62	NA	NA
Number of Units:	1	0	1	1	0	0
Group Subtotals:	Work: \$708.04		Support: \$643.24		Maint:	\$0.00

Total work team cost/hour: **\$1,351.28****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:	<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 COSTFleet size: 1 Team(s)Total job time: 21.17 HoursUnit cost: \$2.860 /LCYTotal job cost: \$28,601

SCRAPER TEAM WORKTask description: Topsoil replacement of mining phasesSite: West Side PlacerPermit Action: 2024 UpdatePermit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 04BState: ColoradoAbbreviation: NoneDate: 7/1/2024County: MoffatFilename: M081-04bUser: HR1Agency 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:	\$329.66	NA	\$173.32	\$173.32	NA	NA
Operating cost/hour:	\$347.48	NA	\$109.71	\$109.71	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:	\$30.90	NA	\$38.59	\$38.59	NA	NA
Unit Subtotals:	\$708.04	NA	\$321.62	\$321.62	NA	NA
Number of Units:	1	0	1	1	0	0
Group Subtotals:	Work: \$708.04		Support: \$643.24		Maint:	\$0.00

Total work team cost/hour: \$1,351.28**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 COSTFleet size: 1 Team(s)Total job time: 2.94 HoursUnit cost: \$2.860 /LCYTotal job cost: \$3,973

BULLDOZER WORKTask description: Grading in mining phaseSite: West Side PlacerPermit Action: 2024 UpdatePermit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 7/1/2024County: MoffatFilename: M081-05aUser: HR1Agency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$321.62**MATERIAL QUANTITIES**Initial Volume: 695Swell factor: 1.215Loose volume: 844 LCYSource 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: \$1.107/LCY

Total job time: **2.91** Hours

Total job cost: **\$935**

BULLDOZER RIPPING WORK

Task description: Ripping compacted areas

Site: West Side Placer

Permit Action: 2024 Update

Permit/Job#: M2016081

PROJECT IDENTIFICATION

Task #: 05B

State: Colorado

Abbreviation: None

Date: 7/1/2024

County: Moffat

Filename: M081-05b

User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Ripper Attachment: 3-Shank Ripper

Horsepower: 310

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper Ownership Cost/Hour:	\$14.53	NA
Ripper Operating Cost/Hour:	\$7.95	100
Operator Cost/Hour:	\$38.59	NA
Total Unit Cost/Hour:	\$344.10	
Total Fleet Cost/Hour:	\$344.10	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 3.30 acres Rip Depth (ft): 2.00 Volume: 10,648 BCY or CCY

Source of estimated quantity: Staff estimates, 2018 annual report - 2.7 ac 2019 work

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 feet/pass
Average Ripping Width: 7.08 feet/pass
Average Ripping Length: 200.00 feet/pass
Average Dozer Speed: 88.00 feet/minute
Average Maneuver Time: 0.25 minutes/pass
Production per unit area: 0.773 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.773 Acres/hr
Site Altitude: 6,225 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.64 Acres/hr
Adjusted Hourly Fleet Production: **0.64** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **5.14** Hours

Unit cost: \$536.229 Per acre Total job cost: **\$1,770**

REVEGETATION WORKTask description: Seed mining phasesSite: West Side PlacerPermit Action: 2024 UpdatePermit/Job#: M2016081PROJECT IDENTIFICATIONTask #: 06AState: ColoradoAbbreviation: NoneDate: 7/1/2024County: MoffatFilename: M081-06aUser: HR1Agency or organization name: DRMSFERTILIZING**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
	\$
Total Tilling Cost/Acre	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	8.00	25.90	\$138.34
Slender Wheatgrass - Pryor	8.00	29.20	\$49.44
Needle and Thread	1.00	2.64	\$81.43
Bluebunch Wheatgrass - Goldar	8.00	25.71	\$91.68
Rabbitbrush, Douglas	1.00	14.92	\$40.98
Totals Seed Mix	26.00	98.37	\$401.86

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.13	\$4.13
Total Mulch Materials Cost/Acre				\$4.13

Application

Description	Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]	\$83.26
Total Mulch Application Cost/Acre	\$83.26

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: 7.2 Cost /Acre: \$725.89
 Estimated Failure Rate: 40% Cost /Acre*: \$638.50
 *Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$5,226.41**
 Reseeding Job Cost: **\$1,838.88**
 Total Job Cost: **\$7,065**
 Job Hours: **9.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Initial Mobilization**Site: **West Side Placer**Permit Action: **2024 Update**Permit/Job#: **M2016081****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **7/1/2024**County: **Moffat**Filename: **M081-07a**User: **HR1**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:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

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	\$329.66	\$125.64	1	\$455.30	\$125.64	\$250.00
Cat D8T - 8SU	53.08	\$187.85	\$125.64	1	\$313.49	\$125.64	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00

Subtotals: **\$869.25** **\$310.72** **\$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.	\$35.84	1	\$35.84	\$35.84

Subtotals: **\$35.84** **\$35.84**

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 * \$5,469.72
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$67.77
 ** 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: \$5,537

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary MobilizationSite: West Side PlacerPermit Action: 2024 UpdatePermit/Job#: M2016081**PROJECT IDENTIFICATION**Task #: 07BState: ColoradoAbbreviation: NoneDate: 7/1/2024County: MoffatFilename: M081-07bUser: HR1Agency 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:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

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	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00

Subtotals: **\$100.46** **\$59.44** **\$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.	\$35.84	1	\$35.84	\$35.84

Subtotals: **\$35.84** **\$35.84**

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 * \$1,003.28
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$67.77
 ** one round trip, no haul rig:

Transportation Cycle Time:

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

JOB TIME AND COST

Total job time: 5.78 Hours

Total job cost: \$1,071