



STATE OF
COLORADO

Ridley - DNR, Hunter <hunter.ridley@state.co.us>

Inspection Report, McCoy Pit, M-1981-088

1 message

Ridley - DNR, Hunter <hunter.ridley@state.co.us>

Tue, Jul 11, 2023 at 7:50
AM

To: brattonent@gmail.com

Travis and Stephanie Bratton Pinnt,

Please find attached the Division's report on the McCoy Pit (M-1981-088) from the inspection on June 27, 2023. Please let me know if you have any questions or concerns.

Kind regards,
Hunter Ridley
Environmental Protection Specialist



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

P 720.868.7757 | F 303.832.8106

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216

hunter.ridley@state.co.us | <https://drms.colorado.gov>




InspReport_Mccoy.pdf
6569K



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: McCoy Pit	MINE/PROSPECTING ID#: M-1981-088	MINERAL: Volcanic materials (ash, cinders)	COUNTY: Routt
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: June 27, 2023	INSP. TIME: 11:00
OPERATOR: Bratton Enterprises, Inc.	OPERATOR REPRESENTATIVE: Ben Bratton	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$208,944.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Hunter Ridley	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: July 11, 2023	

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: Implement approved weed control plan and provide proof to the Division that this has been done.

CORRECTIVE ACTION DUE DATE: 9/11/23

INSPECTION TOPIC: Gen. Compliance With Mine Plan

PROBLEM/POSSIBLE VIOLATION: Problem: The current mine plan map needs to be updated and clarified pursuant to C.R.S. 34-32.5-112 (1)(c)(VI). The operator must provide sufficient information to identify the updated lease ownership.

CORRECTIVE ACTIONS: The operator shall submit a Technical Revision, with the required \$216 revision fee, to update and clarify the current approved mine plan map to reflect the update to lease ownership by the corrective action date.

CORRECTIVE ACTION DUE DATE: 10/10/23

OBSERVATIONS

The McCoy Pit was inspected as part of the Colorado Division of Reclamation, Mining and Safety (Division) normal monitoring program. McCoy Pit is a 112c operation which is permitted for 73.7 acres. It is located approximately 4 miles northeast of McCoy, Colorado and is accessed from Routt County Road 4a. The McCoy Pit mines black and red volcanic rock from atop a cinder cone volcano (Photo 1). Ben Bratton represented Travis and Stephanie Bratton as the operators of Bratton Enterprises, Inc. and accompanied Hunter Ridley of the Division on the inspection.

Affected area boundary markers and the mine identification sign are both in place (Photo 2). Permit boundaries are marked by t-posts.

A load scale and railroad tracks are located at the entrance to the pit. Fuel is stored to the south near the entrance in secondary containment along with an office trailer. In a follow up call post inspection, the Operator stated that the railroad tracks located at the site entrance to the southeast as well as to the northeast had been removed. Material stockpiles are kept near the office area (Photos 16 and 17). There is no discernable pattern of mining, but currently active mining is occurring in the northern portion of the pit (Photos 11 -13). Market demands shape where material is mined from at the site. NO erosional issues were noted in this area or any other areas of the pit. Two screeners are kept onsite to sort materials into four sizes (Photo 14 and 15). Uses range from decorative rock to grading of roads.

Reclamation of the site consists of filling in mined areas and reshaping the slopes of the cinder cone back to their approximate original contours. No topsoil in its usual form is present on this size given its geology. However, overburden piles located at the site are readily growing volunteer vegetation (Photos 3 and 4). The Operator representative stated that Routt County sprays for weeds at the site in July. Noxious weeds such as thistle were noted to be present at the site (Photo 5). This is cited 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. A weed control plan was approved in 2015 under TR1. The Operator is encouraged to reference this when treating weeds at the site. Fine cinders from the site, not suitable for sale, will be used in conjunction with overburden to create final reclaimed slopes. These slopes will be seeded for reclamation as usual. Fine cinders, overburden, and material stockpiles are located all around the site (Photos 6-10). Fine cinder and material stockpiles are indiscernible from one another unless specified by the operator.

The previous inspection report, dated August 6, 2015 noted that approximately 1.7 acres of area to the southwest of the permit boundary had been partially reclaimed. However, the Operator did not have legal right of entry in 2015 to complete reclamation due to an ongoing litigation with the landowner, the State Land Board, and the Operator. During a follow up call with the Operator, post inspection in 2023, an update on the litigation was submitted to the Division. This letter is attached to this inspection report. As of the date of this inspection, the litigation has been resolved and Bratton Enterprises, Inc. now retains legal right of entry for its entire permitted acreage. In response to this change of land lease/ownership, the Division requests that an update be made to the Mining Plan Map submitted in 2004 which outlines the various leases of the site. For tracking purposes, this has been cited as a problem. Please submit a Technical Revision (TR) to the Division by the corrective action due date which updates the lease ownership shown on the mine plan map. As part of this TR, please also update Exhibit B-1 'Property, Mineral Interest, and Easement Owners within 200 feet' if this information has changed post litigation.

The Division currently holds a financial warranty amount of \$208,944.00 for this site. The bond was last updated post inspection in 2015. 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 \$433,290.00. This is an **increase of \$224,346.00**. A copy of staff calculations has been attached with this report. A notice of surety increase will be sent under separate cover.

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

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>N</u>	(FN) FINANCIAL WARRANTY-----	<u>Y</u>	(RD) ROADS-----	<u>Y</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>N</u>	(TS) TOPSOIL-----	<u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE-	<u>Y</u>	(FW) FISH & WILDLIFE-----	<u>Y</u>	(RV) REVEGETATION----	<u>Y</u>
(SM) SIGNS AND MARKERS-----	<u>Y</u>	(SP) STORM WATER MGT PLAN----	<u>N</u>	(RS) RECL PLAN/COMP--	<u>N</u>
(ES) OVERBURDEN/DEV. WASTE-----	<u>N</u>	(SC) EROSION/SEDIMENTATION---	<u>Y</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

PHOTOGRAPHS



Photo 1: View northwest of the entire pit area, volcanic rock is mined from the remnants of a cinder cone volcano.



Photo 2: Appropriate signage is located at the mine entrance, a scale, scale house, and office are seen in the background.



Photo 3: View south of the eastern side of the pit where mainly overburden is stored, taken from the upper road



Photo 4: View north of stockpiled overburden, volunteer vegetation occupies most of the pile



Photo 5: State listed noxious weeds are present onsite.



Photo 6: Various stockpiles and excess fine cinder, non-saleable material located in the northeast corner of the pit



Photo 7: Material stockpiles



Photo 8: Material stockpiles



Photo 9: A mix of fine cinders and overburden materials stockpiled in the northeastern corner of the pit, volunteer vegetation grows on overburden material.



Figure 10: View west of the volcanic crater and various stockpiles, this area is being backfilled contemporaneously as mining progresses.



Photo 11: View north of the pit's active mining area. The permit boundary sits on the other side of the highwall crest.



Photo 12: View east into the main mining pit, an old rail line which extends around the pit has been exhumed during mining.



Photo 13: Road down into the active mining area, overburden material is stockpiled along the northern pit edge.



Photo 14: Two screeners are kept onsite to sort material into four different sizes.

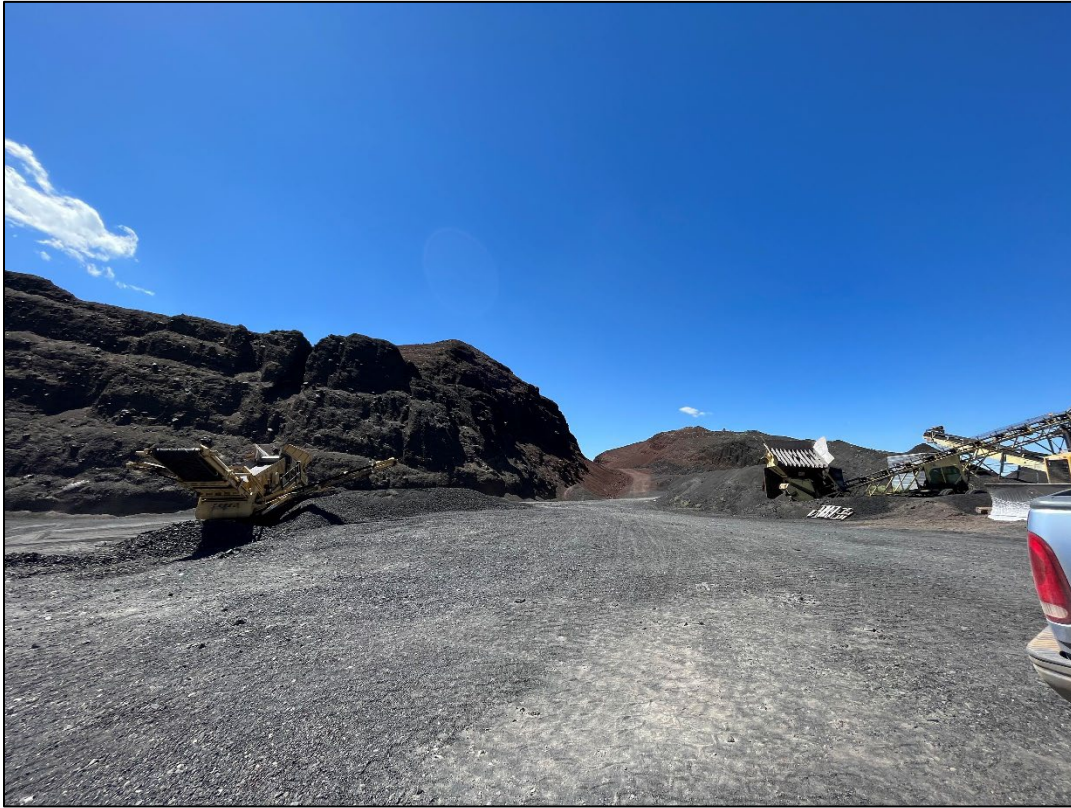


Photo 15: Additional onsite screener.



Photo 16: View east of stockpiled material located in the northwestern, flattened corner of the pit.



Photo 17: View north of previously mined area, fuel is stored here in secondary containment. Volunteer vegetation is growing atop the layer of overburden.

Inspection Contact Address

Travis / Stephanie Bratton Pinnt
Bratton Enterprises, Inc.
Po Box 43
Yampa, CO 80483

CC: Michael Cunningham, DRMS

COST SUMMARY WORK

Task description: Updated post inspection 6/27/2023

Site: McCoy Pit

Permit Action: Inspection 06/2023

Permit/Job#: M1981088

PROJECT IDENTIFICATION

Task #: HCR

State: Colorado

Abbreviation: None

Date: 7/5/2023

County: Routt

Filename: M088-HCR

User: HR1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demo/removal of onsite structures and equipment	DEMOLISH	1	48.00	\$71,927
02a	Slope reduction to 3H:1V	DOZER	2	53.06	\$45,275
03a	Rip compacted areas	RIPPER	1	39.68	\$17,968
04a	Placement of topsoil/overburden	LOADER	2	42.12	\$13,035
05a	Spread topsoil/overburden	DOZER	2	29.83	\$25,449
06a	Revegetate affected area	REVEGE	1	60.00	\$164,566
07a	Mobilize reclamation crew and equipment	MOBILIZE	1	6.00	\$8,265
08a	Secondary mobilize reclamation crew and equipment	MOBILIZE	1	6.00	\$1,076
<u>SUBTOTALS:</u>				284.69	\$347,561

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$7,021

Performance bond: 1.05

Total = \$3,649

Job superintendent: 142.34

Total = \$9,263

Profit: 10.00

Total = \$34,756

TOTAL O & P = \$54,690

CONTRACT AMOUNT (direct + O & P) = \$402,251

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$500

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$20,113

CONTINGENCY: 3.00

Total = \$10,427

TOTAL INDIRECT COST = \$85,729

TOTAL BOND AMOUNT (direct + indirect) = \$433,290

DEMOLITION WORK

Task description: Demo/removal of onsite structures and equipment

Site: McCoy Pit

Permit Action: Inspection 06/2023

Permit/Job#: M1981088

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 7/5/2023

County: Routt

Filename: 01a

User: HR1

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 91.30 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Office building and shed	30'x8'x8'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 30 mile haul	1,920.00	CF	\$0.46	\$881.66
Removal of railroad spur	4,800'	Railroad track - Ties and track	4,800.00	LF	\$15.60	\$74,880.00
Scale	20'x40'	Loading and 5 mile haul, salvage allowed - Steel frame structures	11.70	CY	\$12.50	\$146.25
Scale house	10' x 20' x 10'	Bldg. (SN) demo./on-site disposal in excavated pit - Max. 200 ft. push	2,000.00	CF	\$0.24	\$470.60
Scale and Scale house concrete	2 bldg	Demo. and on-site disposal in existing pit, 2.0 ft. x 3 ft. - Max. 200 ft. push	160.00	LF	\$15.01	\$2,402.18

Job Hours: 48.00

Subtotal
(unadjusted): \$78,780.69

Total Cost
(adjusted for location): \$71,926.77

BULLDOZER WORKTask description: Slope reduction to 3H:1VSite: McCoy Pit Permit Action: Inspection 06/2023 Permit/Job#: M1981088**PROJECT IDENTIFICATION**

Task #: 02A State: Colorado Abbreviation: None
 Date: 7/5/2023 County: Routt Filename: 02a
 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:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$426.60
 Total Fleet Cost/Hour: \$853.20

MATERIAL QUANTITIES

Initial Volume: 127,083
 Swell factor: 1.255
 Loose volume: 159,489 LCY

Source of estimated volume: Attached
 Source of estimated swell factor: N/A

HOURLY PRODUCTION

Average push distance: 100 feet
 Unadjusted hourly production: 852.6 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: -15 %
 Average site altitude: 7,800 feet

Material weight: 950 lbs/LCYWeight description: Cinders**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:	0.800	(FND-RF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	2.421	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.7626

Adjusted unit production: 1,502.79 LCY/hr

Adjusted fleet production: **3005.58 LCY/hr**

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.284/LCY

Total job time: **53.06 Hours**

Total job cost: **\$45,275**

BULLDOZER RIPPING WORK

Task description: Rip compacted areas

Site: McCoy Pit Permit Action: Inspection 06/2023 Permit/Job#: M1981088

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 7/5/2023 County: Routt Filename: 03a
User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310
Ripper Attachment: 1-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper Ownership Cost/Hour:	\$17.40	NA
Ripper Operating Cost/Hour:	\$8.74	100
Operator Cost/Hour:	\$41.30	NA
Total Unit Cost/Hour:	\$452.74	
Total Fleet Cost/Hour:	\$452.74	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 20.00 acres Rip Depth (ft): 2.00 Volume: 64,533 BCY or CCY

Source of estimated quantity: AM2 Exhibit L

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 3.71 feet/pass
Average Ripping Width: 5.56 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: 0.607 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.607 Acres/hr
Site Altitude: 7,800 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.50 Acres/hr
Adjusted Hourly Fleet Production: **0.50** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **39.69** Hours

Unit cost: \$898.407 Per acre Total job cost: **\$17,968**

WHEEL LOADER – LOAD AND CARRY WORKTask description: Placement of topsoil/overburdenSite: McCoy Pit Permit Action: Inspection 06/2023 Permit/Job#: M1981088**PROJECT IDENTIFICATION**

Task #: 04A State: Colorado Abbreviation: None
 Date: 7/5/2023 County: Routt Filename: 04a
 User: HR1

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

Basic Machine: CAT 972H Horsepower: 287
 Attachment 1: ROPS Cab Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$57.78	NA
Operating Cost/Hour:	\$56.23	100
Operator Cost/Hour:	\$40.71	NA
Total Unit Cost/Hour:	\$154.72	
Total Fleet Cost/Hour:	\$309.43	

MATERIAL QUANTITIES

Initial volume: 16,134 CCY Swell factor: 1.000
 Loose volume: 16,134 LCY

Source of estimated volume: AM2 Exhibit L
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTIONLoader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(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:		-0.020	minutes
Adjusted Basic Cycle Time:		0.505	minutes

Rolling Resistance – Road Conditions

Haul: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0
 Return: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0

Haul and Return Time

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	500	0.00	8.00	8.00	0.5808	(Cat HB)
Return Route:	500	0.00	8.00	8.00	0.5162	(Cat HB)

Total Travel Time: 1.0970 minutes
 Total Cycle Time: 1.6020 minutes

Load Bucket Capacity

Rated Capacity: 5.60 LCY (heaped)
 Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100
 Adjusted Capacity: 6.16 LCY

Job Condition Correction Factors

Site Altitude: 7800 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production: 230.71 LCY/Hour
 Adjusted Hourly Unit Production: 191.49 LCY/Hour
 Adjusted Hourly Fleet Production: 382.98 LCY/Hour

JOB TIME AND COST

Fleet size: 2 Loader(s) Total job time: 42.13 Hours
 Unit cost: \$0.808 /LCY Total job cost: \$13,035

BULLDOZER WORKTask description: Spread topsoil/overburdenSite: McCoy Pit Permit Action: Inspection 06/2023 Permit/Job#: M1981088**PROJECT IDENTIFICATION**

Task #: 05A State: Colorado Abbreviation: None
 Date: 7/5/2023 County: Routt Filename: 05a
 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>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</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>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour: \$426.60
 Total Fleet Cost/Hour: **\$853.20**

MATERIAL QUANTITIES

Initial Volume: 16,134
 Swell factor: 1.000
 Loose volume: **16,134 LCY**

Source of estimated volume: AM2 Exhibit L
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 200 feet
 Unadjusted hourly production: 491.9 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
 Average site altitude: 7,800 feet

Material weight: 2,500 lbs/LCYWeight description: Clay - Dry**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.200</u>	<u>(CAT HB)</u>
Dozing method:	<u>1.000</u>	<u>(GEN.)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

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:	0.920	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5498

Adjusted unit production: 270.45 LCY/hr

Adjusted fleet production: **540.9** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$1.577/LCY

Total job time: **29.83** Hours

Total job cost: **\$25,449**

REVEGETATION WORKTask description: Revegetate affected areaSite: McCoy PitPermit Action: Inspection 06/2023Permit/Job#: M1981088**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 7/5/2023County: RouttFilename: 06aUser: HR1Agency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	20.00	pound	\$0.50	\$9.93
			Total Fertilizer Materials Cost/Acre	\$9.93

Application

Description	Cost /Acre
Tractor spreader (MEANS 32 91 13.16 0950)	\$29.62
Total Fertilizer Application Cost/Acre	\$29.62

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Pubescent Wheatgrass - Luna	8.40	17.36	\$28.56
Needle and Thread	3.00	7.92	\$125.55
Western Wheatgrass - Native	9.60	24.24	\$57.60
Basin Wildrye - Trailhead	6.60	26.82	\$101.71
Totals Seed Mix	27.60	76.34	\$313.42

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 - Curtail @ 4.0 pt/ac	1.00	ACRE	\$35.09	\$35.09
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$894.66

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$137.18

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: 63.43 Cost /Acre: \$1,729.63
 Estimated Failure Rate: 50% Cost /Acre*: \$1,729.63
 *Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MULCHING

Initial Job Cost: **\$109,710.43**
 Reseeding Job Cost: **\$54,855.22**
 Total Job Cost: **\$164,566**
 Job Hours: **60.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mobilize reclamation crew and equipment**Site: **McCoy Pit**Permit Action: **Inspection 06/2023**Permit/Job#: **M1981088****PROJECT IDENTIFICATION**Task #: **07A**State: **Colorado**Abbreviation: **None**Date: **7/5/2023**County: **Routt**Filename: **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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

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	47.71	\$241.38	\$158.17	2	\$799.10	\$316.34	\$250.00
CAT 972H	28.00	\$57.78	\$158.17	2	\$431.90	\$316.34	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00

Subtotals: **\$1,320.02** **\$714.97** **\$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	\$27.44	1	\$27.44	\$27.44

Subtotals: **\$27.44** **\$27.44**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: EAGLE
 Total one-way travel distance: 35.00 miles
 Average Travel Speed: 35.00 mph

Total Non-Roadable Mob/Demob Cost * \$8,210.02
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$54.88
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.00	1.00
Return Time (Hours):	1.00	1.00
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.00	2.00

JOB TIME AND COST

Total job time: 6.00 Hours

Total job cost: \$8,265

COST SUMMARY WORK

Task description: Updated post inspection 6/27/2023

Site: McCoy Pit

Permit Action: Inspection 06/2023

Permit/Job#: M1981088

PROJECT IDENTIFICATION

Task #: HCR

State: Colorado

Abbreviation: None

Date: 7/5/2023

County: Routt

Filename: M088-HCR

User: HR1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demo/removal of onsite structures and equipment	DEMOLISH	1	48.00	\$71,927
02a	Slope reduction to 3H:1V	DOZER	2	53.06	\$45,275
03a	Rip compacted areas	RIPPER	1	39.68	\$17,968
04a	Placement of topsoil/overburden	LOADER	2	42.12	\$13,035
05a	Spread topsoil/overburden	DOZER	2	29.83	\$25,449
06a	Revegetate affected area	REVEGE	1	60.00	\$164,566
07a	Mobilize reclamation crew and equipment	MOBILIZE	1	6.00	\$8,265
08a	Secondary mobilize reclamation crew and equipment	MOBILIZE	1	6.00	\$1,076
<u>SUBTOTALS:</u>				284.69	\$347,561

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$7,021

Performance bond: 1.05

Total = \$3,649

Job superintendent: 142.34

Total = \$9,263

Profit: 10.00

Total = \$34,756

TOTAL O & P = \$54,690

CONTRACT AMOUNT (direct + O & P) = \$402,251

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$500

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$20,113

CONTINGENCY: 3.00

Total = \$10,427

TOTAL INDIRECT COST = \$85,729

TOTAL BOND AMOUNT (direct + indirect) = \$433,290