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

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: Vermillion Creek Borrow Area	**MINE/PROSPECTING ID#:** M-2015-027	**MINERAL:** Borrow material for and reclamation only	**COUNTY:** Moffat
INSPECTION TYPE: Monitoring	**WEATHER:** Clear	**INSP. DATE:** August 4, 2025	**INSP. TIME:** 14:00
OPERATOR: Rancho Greco Limited	**OPERATOR REPRESENTATIVE:** None	**TYPE OF OPERATION:** 110c - Construction Limited Impact	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $29,206.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** U.S.BLM	**JOINT INSP. AGENCY:** U.S.BLM
INSPECTOR(S): Hunter Ridley	**INSPECTOR'S SIGNATURE:** Hunter Ridley	**SIGNATURE DATE:** August 12, 2025

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. If a weed control plan is not already in place, the operator shall 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. This weed control plan shall be submitted to the Division as a Technical Revision to the approved plan with the appropriate Technical Revision fee of $216.00 by the corrective action date.
CORRECTIVE ACTION DUE DATE: 10/15/25

INSPECTION TOPIC: Signs & Markers
PROBLEM/POSSIBLE VIOLATION: Problem: The mine identification sign and affected area boundary markers were not observed per the requirements of Rule 3.1.12. The Operator shall, at the entrance of the mine site

post a sign, which shall be clearly visible from the access road, with a minimum size equaling one hundred and eighty-seven (187) square inches, such as eleven (11) inches in height and seventeen (17) inches in width, with appropriate font size, with the following: the name of the Operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number.
CORRECTIVE ACTIONS: The operator must post a sign at the entrance to the mine site which shall be clearly visible from the access road and specify the following; the name of the operator, indicate that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board, and the permit number. The boundaries of the affected area must be marked by monuments or other markers that are clearly visible and adequate to delineate such boundaries.
CORRECTIVE ACTION DUE DATE: 10/15/25

OBSERVATIONS

This inspection was conducted by Hunter Ridley of the Colorado Division of Reclamation, Mining and Safety (Division) as part of the normal monitoring program. The operator was notified prior to the inspection but did not accompany the Division on the inspection. The Vermillion Creek Borrow Area is a 110(c) reclamation only permit that includes a total of 4.3 acres on Bureau of Land Management land. Tom Cummings, with the BLM, was present during the inspection. This site is located 45 miles northwest of Maybell, CO and is accessed from State Highway 318. The site was not active at the time of inspection and is currently in final reclamation. This site was initially permitted after the BLM enforcement for trespassing. The entirety of the trespassing infraction is comprised of ~9 acres. However, the Division's permit is only related to 4.3 acres.

Availability of Records: Annual reports are current, having been filed through March 2025. The previous inspection was on June 8, 2022. There are no open infractions related to previous inspections.

Signs and Markers: The mine identification sign was not in place as required by Rule 3.1.12. Boundary markers for the whole 'project site' of 9 acres (see introduction text) is staked by orange posts. However, Rule 3.1.12(2) requires that the "**affected area** will be marked by monuments or other markers that are clearly visible and adequate to delineate such boundaries". Meaning, at minimum, the corner posts of the 4.3 acres are required to have boundary markers in place. **The Division is citing a problem for failure to the required mine sign and affected area markers. The Operator shall, by the above corrective action due date, provide proof to the Division that the prescribed corrective action has been satisfied.**

Backfilling and Grading & Revegetation: The affected area is split into two regions by a creek. The concrete pad and supporting beams, which acted as a bridge crossing from one side to the other has been completely removed and reclaimed with the creek allowed to flow back into its natural alignment.

The highwall cut, which is located in the eastern region within the permit boundary, has been sloped to an approximate 3H:1V slope. The slope remains stable with no signs of slumping. There are, however, erosional rills cutting along the entire hillside. Vegetation on this hillslope is limited and very sparse. Weeds like kochia and Russian thistle are predominant (Photos 4 and 5). Greasewood (Photo 1) was observed and made of most of the vegetation that was present. A small patch of unidentified grasses, which had browned for the season, were at the toe of the slope and along the eastern side of the road (Photo 2).

A Colorado List C noxious weed species, Halogeton (*Halogeton glomeratus*) was also observed (Photo 3).

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.

The western region is relatively flat and no erosional features were observed (Photos 6 and 7). Vegetation from native encroachment has begun to establish itself along the entire affected area. The land adjacent to the creek is well vegetated with cat tails and other riparian vegetation. No stockpiles or equipment were observed on site.

Financial Warranty: The Division currently holds a financial warranty amount of $29,206.00 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 $37,805.00. This is an **increase of $8,599.00**. A copy of staff calculations has been attached with this report. A notice of surety increase will be sent under separate cover. This operation is currently bonded for backfill, grading, and reseeding costs. A majority of the required backfill and grading work has been completed. Should the Operator wish to request a revision to the bond amount, a Surety Reduction (SR) revision request can be submitted to the Division using the form provided below.

Fish and Wildlife: No impact to wildlife was observed.

Hydrologic Balance & Sediment Control: No exposed groundwater was observed and no BMPs were determined to be needed at the time of the inspection. However, the Operator should ensure that erosion of the eastern hillslope does not progress with the intent to protect the adjacent Vermillion Creek from sediment deposition.

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

Figure 1: Greasewood observed on site.

Figure 2: Grasses growing at the toe of the slope.

Figure 3: Colorado List C Noxious Weed Species Halogeton identified on site.

Figure 4: View southeast of the hillslope.

Figure 5: View northwest of the hillslope.

Figure 6: View northwest of the riparian area.

Figure 7: View south of the riparian area.

GENERAL INSPECTION TOPICS

The following list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each

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

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

Inspection Contact Address
Angelo Raftopoulos
Rancho Greco Limited
351 School St
Craig, CO 81625

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.

Name	**Address**	**Phone Number**

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.

COST SUMMARY WORK

Task description: **2025 Inspection**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: M027-000
User: HR1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
010a	Secondary mob of reclamation crew and equipment	MOBILIZE	1	7.67	$2,396
01a	Bridge Removal-Demo and Disposal	DEMOLISH	1	8.00	$2,621
02a	Grading HW in Phase 1	DOZER	1	2.79	$972
03a	Placing topsoil in Phase 1	DOZER	1	2.93	$962
04a	Phase 1 reveg	REVEGE	1	4.00	$3,623
04b	Phase 1 remove silt fence	REVEGE	1	2.00	$885
05a	Excavate new creek channel	EXCAVATE	1	4.54	$679
06a	Backfill existing channel and grade Phase 2	DOZER	1	1.23	$425
07a	Placing topsoil in Phase 2.95	DOZER	1	3.33	$1,151
08a	Phase 2 reveg	REVEGE	1	8.00	$7,916
08b	Phase 2 remove silt fence	REVEGE	1	3.00	$1,388
09a	Initial Mob of reclamation crew and equipment	MOBILIZE	1	7.67	$6,216
		SUBTOTALS:		**55.16**	**$29,234**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$591
Performance bond:	1.05	Total =	$307
Job superintendent:	27.58	Total =	$2,072
Profit:	10.00	Total =	$2,923
		TOTAL O & P =	$5,893
		CONTRACT AMOUNT (direct + O & P) =	$35,127

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:	6.20		$2,178
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$8,571
		TOTAL BOND AMOUNT (direct + indirect) =	**$37,805**

DEMOLITION WORK

Task description: **Bridge Removal-Demo and Disposal**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 01A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 01a
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
Retaining wall around bridge Demo	2x 40'L x 10'H	Wall, concrete, demolition only, average reinforcing - 24 in. thick	400.00	SF	$5.40	$2,159.64
Steel Disposal	15"W X 25'L X1'H	Loading and 5 mile haul, salvage allowed - Steel frame structures	13.89	CY	$14.15	$196.54
Inert Material Disposal	1,767 cu.ft.	Push demolished materials/rubble/debris into pit - Max. 50 ft. push	65.00	CY	$1.46	$94.64
Busting concrete in steel bridge	15'W x 25'L	Floor, concrete, demolition only, average reinforcing - 4 in. thick	375.00	SF	$0.78	$293.25

Job Hours: **8.00** **Subtotal (unadjusted):** **$2,744.07** **Total Cost (adjusted for location):** **$2,620.59**

BULLDOZER WORK

Task description: **Grading HW in Phase 1**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 02a
User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Horsepower: 310
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$15.28	NA
Ripper op. Cost/Hour:	$4.57	50
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $347.92
Total Fleet Cost/Hour: **$347.92**

MATERIAL QUANTITIES

Initial Volume: 1,389
Swell factor: 1.230
Loose volume: **1,708** LCY

Source of estimated volume: 300' L avg. 20'H @ 0.5:1 going to 3:1 mostly cut & fill
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

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

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -15 %
Average site altitude: 5,430 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7175

Adjusted unit production: 611.74 LCY/hr
Adjusted fleet production: **611.74** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.569/LCY

Total job time: **2.79** Hours
Total job cost: **$972**

BULLDOZER WORK

Task description: **Placing topsoil in Phase 1**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 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:

		Utilization %
Ownership Cost/Hour:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$0.00	NA
Ripper op. Cost/Hour:	$0.00	30
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $328.07
Total Fleet Cost/Hour: **$328.07**

MATERIAL QUANTITIES

Initial Volume: 1,089
Swell factor: 1.000
Loose volume: **1,089** LCY

Source of estimated volume: 6" of soil placed over 1.35 ac
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

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

Materials consistency description: Loose stockpile 1.2

Average push gradient: 15 %
Average site altitude: 5,430 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4358

Adjusted unit production: 371.56 LCY/hr
Adjusted fleet production: **371.56** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.883/LCY

Total job time: **2.93** Hours
Total job cost: **$962**

REVEGETATION WORK

Task description: **Phase 1 reveg**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 04a
User: HR1

Agency or organization name: DRMS

FERTILIZING

Materials

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

Application

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

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	$114.13
Total Tilling Cost/Acre	**$114.13**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	$29.78
Western Wheatgrass - Rosanna	1.00	2.53	$8.98
Globemallow, Scarlet (or copper)	0.50	5.66	$94.99
Winter Fat	1.00	2.55	$47.84
Basin Wildrye - Trailhead	2.00	8.13	$26.65
Totals Seed Mix	5.50	57.89	**$208.25**

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	$242.30
Total Seed Application Cost/Acre	**$242.30**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered	2.00	TON	$504.56	$1,009.12
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$5.22	$5.22
Total Mulch Materials Cost/Acre				**$1,014.34**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$239.35
Power mulcher (MEANS 32 91 13.16 0350)	$141.57
Weed spray, truck, non-aquatic areas, ann. [DMG]	$27.84
Total Mulch Application Cost/Acre	**$408.76**

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: 1.35 Cost /Acre: $1,987.78
Estimated Failure Rate: 35% Cost /Acre*: $1,987.78
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$2,683.50**
Reseeding Job Cost: **$939.23**
Total Job Cost: **$3,623**
Job Hours: **4.00**

REVEGETATION WORK

Task description: **Phase 1 remove silt fence**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 04B State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 04b
User: HR1

Agency or organization name: DRMS

FERTILIZING

Materials

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

Application

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

TILLING

Description	Cost /Acre
	$
Total Tilling Cost/Acre	**$0.00**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
			$
Totals Seed Mix	0.00	0.00	**$0.00**

Application

Description	Cost /Acre

	$
Total Seed Application Cost/Acre	**$0.00**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Silt fence, Materials (MEANS 31 25 14.16 1000)	1,090.00	LINEAR FOOT	$0.81	$882.90
Total Mulch Materials Cost/Acre				**$882.90**

Application

Description	Cost /Acre
Silt fence, Labor (MEANS 31 25 14.16 1000)	$2.44
Total Mulch Application Cost/Acre	**$2.44**

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: 1
Estimated Failure Rate: 0%
*Selected Replanting Work Items: NONE

Cost /Acre: $885.34
Cost /Acre*: $0.00

Initial Job Cost: **$885.34**
Reseeding Job Cost: **$0.00**
Total Job Cost: **$885**
Job Hours: **2.00**

HYDRAULIC EXCAVATOR WORK

Task description: **Excavate new creek channel**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 05a
User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 319D L 8'-10" Stick
Attachment 1: ROPS Cab

Horsepower: 125
Weight (MT): 19.55
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$56.65	NA
Operating Cost/Hour:	$33.40	100
Operator Cost/Hour:	$59.31	NA
Total Unit Cost/Hour:	$149.36	

Total Fleet Cost/Hour: $149.36

MATERIAL QUANTITIES

Initial volume: 694 CCY Swell factor: 1.230
Loose volume: **854** LCY

Source of estimated volume: See attached
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: AVERAGE
Secondary Job Condition within Basic Description: AVERAGE
Cycle Time Value: 0.282 minutes

Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity: 1.10 LCY (heaped)
Bucket Fill Factor: 1.050 Other - moist loam (100-110%) 1.050
Adjusted Capacity: **1.16** LCY

Job Condition Correction Factors

Site Altitude: 5430 feet

		Source
Altitude Adj:	0.92	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.76	multiplier

Unadjusted Hourly Unit Production: 245.74 LCY/Hour
Adjusted Hourly Unit Production: 187.65 LCY/Hour
Adjusted Hourly Fleet Production: **187.65** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: **4.55** Hours

Unit cost: $0.796 /LCY Total job cost: **$679**

BULLDOZER WORK

Task description: **Backfill existing channel and grade Phase 2**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 06A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 06a
User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Horsepower: 310
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$15.28	NA
Ripper op. Cost/Hour:	$2.74	30
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $346.09
Total Fleet Cost/Hour: **$346.09**

MATERIAL QUANTITIES

Initial Volume: 750
Swell factor: 1.000
Loose volume: **750** LCY

Source of estimated volume: See atached
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 75 feet
Unadjusted hourly production: 1,017.1 LCY/hr

Materials consistency description: Partly consolidated stockpile 1.1

Average push gradient: 0 %
Average site altitude: 5,430 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
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:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5998

Adjusted unit production: 610.06 LCY/hr
Adjusted fleet production: **610.06** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.567/LCY

Total job time: **1.23** Hours
Total job cost: **$425**

BULLDOZER WORK

Task description: **Placing topsoil in Phase 2.95**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 07A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 07a
User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU
Horsepower: 310
Blade Type: Semi-Universal
Attachment: 3-shank ripper
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$179.60	NA
Operating Cost/Hour:	$110.45	100
Ripper own. Cost/Hour:	$15.28	NA
Ripper op. Cost/Hour:	$2.74	30
Operator Cost/Hour:	$38.02	NA

Total unit Cost/Hour: $346.09
Total Fleet Cost/Hour: **$346.09**

MATERIAL QUANTITIES

Initial Volume: 2,381
Swell factor: 1.000
Loose volume: **2,381** LCY

Source of estimated volume: 6" of soil placed over 2.95 ac
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 70 feet
Unadjusted hourly production: 1,093.7 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
Average site altitude: 5,430 feet

Material weight: 2,100 lbs/LCY

Weight description: Earth - Loam

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 715.72 LCY/hr
Adjusted fleet production: **715.72** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.484/LCY

Total job time: **3.33** Hours
Total job cost: **$1,151**

REVEGETATION WORK

Task description: **Phase 2 reveg**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 08A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 08a
User: HR1

Agency or organization name: DRMS

FERTILIZING

Materials

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

Application

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

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	$114.13
Total Tilling Cost/Acre	**$114.13**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	$29.78
Western Wheatgrass - Rosanna	1.00	2.53	$8.98
Globemallow, Scarlet (or copper)	0.50	5.66	$94.99
Winter Fat	1.00	2.55	$47.84
Basin Wildrye - Trailhead	2.00	8.13	$26.65
Totals Seed Mix	5.50	57.89	**$208.25**

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	$242.30
Total Seed Application Cost/Acre	**$242.30**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered	2.00	TON	$504.56	$1,009.12
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	$5.22	$5.22
Total Mulch Materials Cost/Acre				**$1,014.34**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$239.35
Power mulcher (MEANS 32 91 13.16 0350)	$141.57
Weed spray, truck, non-aquatic areas, ann. [DMG]	$27.84
Total Mulch Application Cost/Acre	**$408.76**

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: 2.95 Cost /Acre: $1,987.78
Estimated Failure Rate: 35% Cost /Acre*: $1,987.78
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$5,863.95**
Reseeding Job Cost: **$2,052.38**
Total Job Cost: **$7,916**
Job Hours: **8.00**

REVEGETATION WORK

Task description: **Phase 2 remove silt fence**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 08B State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 08b
User: HR1

Agency or organization name: DRMS

FERTILIZING

Materials

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

Application

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

TILLING

Description	Cost /Acre
	$
Total Tilling Cost/Acre	**$0.00**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
			$
Totals Seed Mix	0.00	0.00	**$0.00**

Application

Description	Cost /Acre

	$
Total Seed Application Cost/Acre	**$0.00**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Silt fence, Materials (MEANS 31 25 14.16 1000)	1,710.00	LINEAR FOOT	$0.81	$1,385.10
Total Mulch Materials Cost/Acre				**$1,385.10**

Application

Description	Cost /Acre
Silt fence, Labor (MEANS 31 25 14.16 1000)	$2.44
Total Mulch Application Cost/Acre	**$2.44**

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: 1
Estimated Failure Rate: 0%
*Selected Replanting Work Items: NONE

Cost /Acre: $1,387.54
Cost /Acre*: $0.00

Initial Job Cost: **$1,387.54**
Reseeding Job Cost: **$0.00**
Total Job Cost: **$1,388**
Job Hours: **3.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Initial Mob of reclamation crew and equipment**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 09A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 09a
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:	$21.47	$38.32	$48.96
Operating Cost/Hour:	$31.47	$60.11	$65.86
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$22.25	$22.25
Total Unit Cost/Hour:	$75.46	$143.20	$159.59

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	$179.60	$143.20	1	$322.80	$143.20	$250.00
Cat 319D L 8'-10" Stick	21.50	$56.65	$75.46	1	$132.11	$75.46	$250.00
Drill/Broadcast Seeder with Tractor	25.00	$5.99	$75.46	1	$81.45	$75.46	$250.00
Power Mulcher (Bowie LD-90)	6.00	$29.91	$75.46	1	$105.37	$75.46	$250.00
Subtotals:					**$641.73**	**$369.58**	**$1,000.00**

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.	$22.72	1	$22.72	$22.72
Subtotals:			**$22.72**	**$22.72**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	CRAIG, CO	
Total one-way travel distance:	78.00	miles
Average Travel Speed:	55.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$6,151.90	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$64.44	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.42	1.42
Return Time (Hours):	1.42	1.42
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.84	2.84

JOB TIME AND COST

Total job time:	**7.67**	Hours
Total job cost:	**$6,216**	

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Secondary mob of reclamation crew and equipment**

Site: **Vermillion Creek Borrow Area** Permit Action: 2025 Inspection Permit/Job#: M2015027

PROJECT IDENTIFICATION

Task #: 010A State: Colorado Abbreviation: None
Date: 8/7/2025 County: Moffat Filename: 010a
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:	$21.47	$38.32	$48.96
Operating Cost/Hour:	$31.47	$60.11	$65.86
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$22.25	$22.25
Total Unit Cost/Hour:	$75.46	$143.20	$159.59

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	$5.99	$75.46	1	$81.45	$75.46	$250.00
Power Mulcher (Bowie LD-90)	6.00	$29.91	$75.46	1	$105.37	$75.46	$250.00
Subtotals:					**$186.82**	**$150.92**	**$500.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	$22.72	1	$22.72	$22.72
Subtotals:			**$22.72**	**$22.72**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	CRAIG, CO	
Total one-way travel distance:	78.00	miles
Average Travel Speed:	55.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$2,331.59
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$64.44

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.42	1.42
Return Time (Hours):	1.42	1.42
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.84	2.84

JOB TIME AND COST

Total job time:	**7.67**	Hours
Total job cost:	**$2,396**	