




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: Van Valkenburg Gravel Pit	MINE/PROSPECTING ID#: M-2005-003	MINERAL: Sand and gravel	COUNTY: Jackson
INSPECTION TYPE: Monitoring	WEATHER: Cloudy	INSP. DATE: July 19, 2023	INSP. TIME: 09:00
OPERATOR: Van Valkenburg Cattle Company, LLC	OPERATOR REPRESENTATIVE: Chris and Carla Van Valkenburg	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$10,800.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Hunter Ridley	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: August 7, 2023	

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 describe how the operator is currently conducting the operation.

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 existing and proposed activities by the corrective action date.

CORRECTIVE ACTION DUE DATE: 10/06/23

OBSERVATIONS

The Van Valkenburg Gravel Pit was inspected by Hunter Ridley with the Division of Reclamation, Mining and Safety (Division) as part of the Division's normal monitoring inspection program. Chris and Carla Van Valkenburg were present during the inspection. The site is an 112c operation permitted for 36 acres. The site was inactive during the inspection and is considered to be in partial reclamation. The Operator stated that while gravel reserves still exist on site, no further mining would occur at the site under the current permit. If further mining is to occur, the Operator stated that a new 112c permit application would be submitted to the Division and the current permit would be released.

The mine sign and boundary markers were observed pursuant to Rule 3.1.12. The mine sign is posted just outside the access road off Hwy 14. Boundary markers consist of yellow posts scattered around the permit edges. Weed spraying was occurring at the time of inspection. This site was previously mined for the Operator

through contract mining. The site is roughly divided into two areas of reclamation: north and south of an oil & gas facility. The Operators are waiting on the contract mining companies to finish reclaiming the landscape as was specified in their contracts. No excavation equipment was currently present onsite. The site is partially reclaimed, with work still to be done to utilize leftover topsoil (Photo 5) and demolish the oil & gas facility built in the middle of the permit near the western boundary (Photos 3 and 4). The approved post-mining land use for the site is pastureland. The oil & gas facility is not listed on the permit's current mine map. **The Division is citing this as a problem.** A TR will need to be submitted to update the mine plan and mine plan map to include the new location of this oil & gas facility and its intended reclamation. Please also outline which areas have been partially or fully reclaimed and note where stockpiled material and topsoil still exists. A site map created by previous inspector Peter Hayes has been attached to this report for use as referenced in creating the new mine plan map.

Two-hundred feet of undisturbed land remains along the north boundary adjacent to the driveway for the property (Photo 1 and 11). The reclaimed area to the west of these acres was partially flooded at the time of inspection. This water is usually used to irrigate adjacent hayfields owned by the Operator. However, in preparation for harvest, water was diverted to this area of the reclaimed pit. The Operator owns the water rights for this irrigation and stated the area should be completely dry by the fall. Stockpiles of material from the previous mining operations on site remain in two sections of the site, one along the western boundary (Photos 8 and 9) and one in the southern area of the pit (Photo 6). Material is hauled off throughout the year on an as needed basis. The remaining stockpiles will need to be completely removed to complete reclamation at the site. As a reminder, Rule 3.1.3 states that "All reclamation shall be carried to completion by the Operator with all reasonable diligence, and each phase of reclamation shall be completed within five (5) years from the date the Operator informs the Board or Office that such phase has commenced".

The older southern portion of the pit contains well-established pastureland grasses and vegetation. The north area has also been reclaimed with well-established vegetation. Grasses from the adjacent hayfield are growing within the permit boundary. This is encouraging and supports the plan to eventually reclaim the entire area into pastureland. Topsoil piles still exist at the site. The Operator is encouraged to make use of this in final reclamation to promote stable and long-lasting vegetation growth, especially in areas already partially reclaimed which contain some bare spots (Photos 4, 6 and 7). Once the entire permit area has been reclaimed and revegetated, and stockpiles have been removed, the site will be eligible for final release.

The Division currently holds a financial warranty in the amount of \$10,800. This financial warranty amount has not been updated since the original permitting of the site in 2003. 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 \$13,978.00. This is an **increase of \$3,178.00.** 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

PHOTOGRAPHS

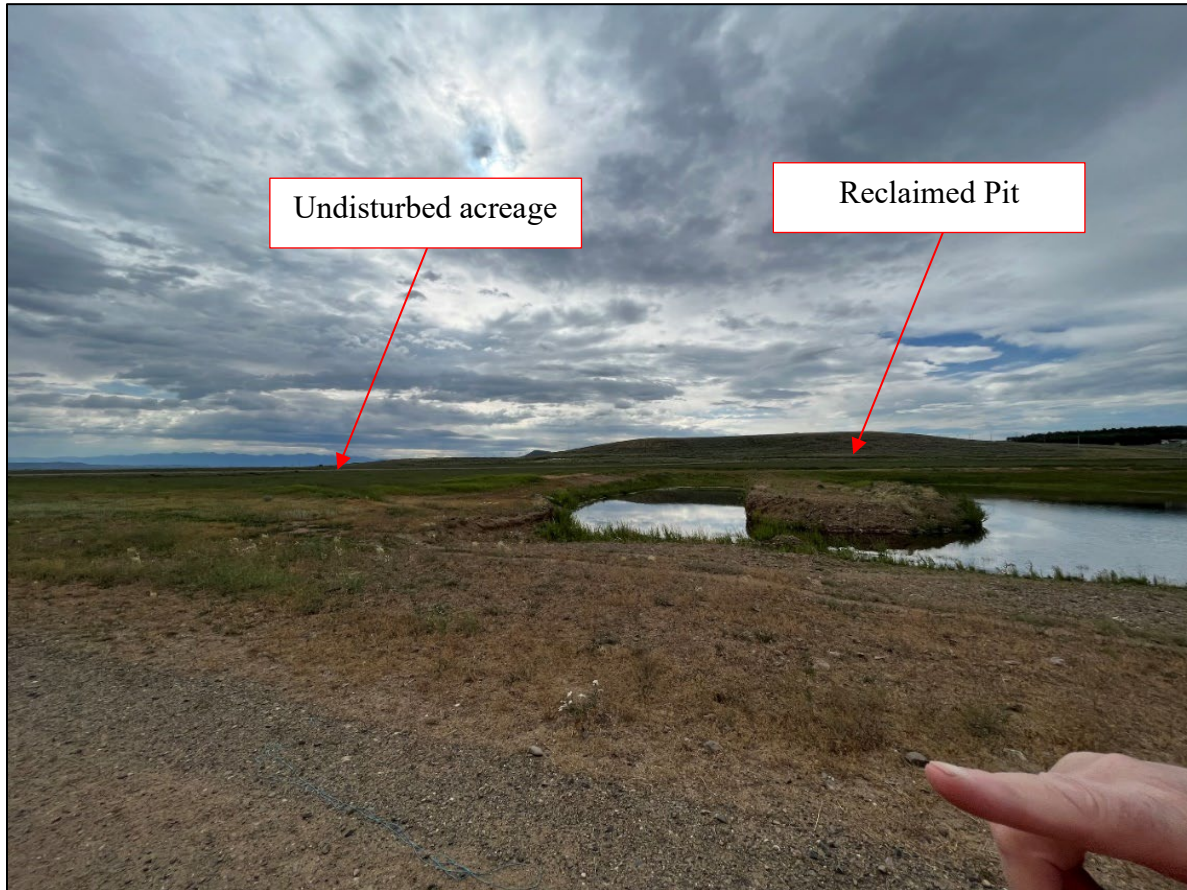


Photo 1: View at the entrance to the pit, area to the east is unmined and undisturbed, the reclaimed section to the west of this is currently flooded as the Operator dries out the adjacent hayfield to harvest.



Photo 2: View northwest of an artesian well along the western permit boundary, water rights for this spring are owned by the Operator.



Photo 3: View x of existing oil and gas facility, area is planned to be reclaimed.



Photo 4: Taken from the southernmost end of the pit, area has been reclaimed but some large, bare spots are noted.



Photo 5: A pile of leftover topsoil is still located at the site, the Operator is encouraged to use this in final reclamation.

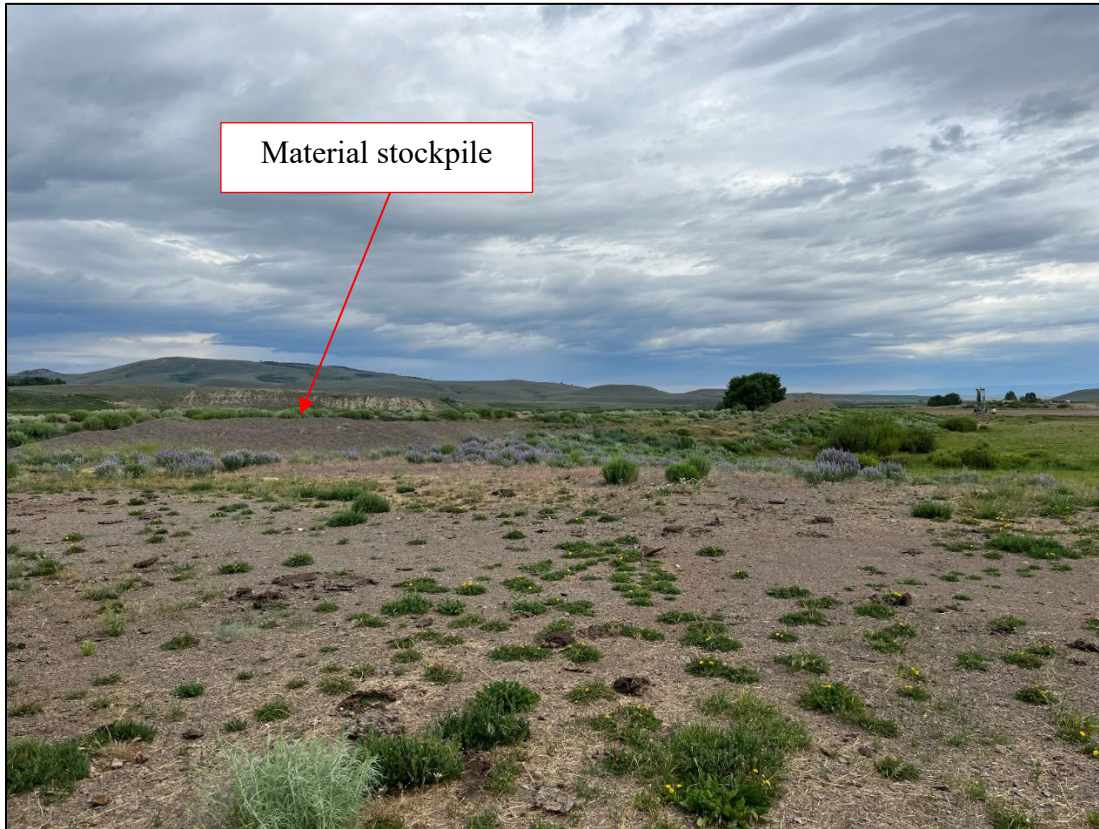


Photo 6: View east of the previously reclaimed southern area, a small stockpile of material is located here. This section will need to be reseeded in final reclamation to revegetate bare spots.



Photo 7: Southern portion of the pit, this previously reclaimed area has lost some of its original vegetation.



Photo 8: Remaining stockpiled material, a large patch of trees has grown around this area.



Photo 9: Front view of stockpiled material still to be removed before final release.



Photo 10: View northeast of the recently constructed oil & gas facility, not in use and planned to be reclaimed.



Photo 11: View northwest of reclaimed northern area of the permit.

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No 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>PB</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>Y</u>	(RS) RECL PLAN/COMP-- <u>Y</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

Inspection Contact Address

Chris and Carla Van Valkenburg
Van Valkenburg Cattle Company, LLC
12353 Hwy 14
Walden, CO 80480

COST SUMMARY WORK

Task description: Post Inspection 7/23

Site: Van Valkenburg Gravel Pit

Permit Action: Inspection 7/23

Permit/Job#: M2005003

PROJECT IDENTIFICATION

Task #: HCR

State: Colorado

Abbreviation: None

Date: 7/28/2023

County: Jackson

Filename: M003-HCR

User: HR1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
02	Grade 5 acres	GRADER	1	4.03	\$640
03	Spread topsoil (5 acres) at 6"	DOZER	1	10.94	\$1,688
04	Revegetate 5 acres	REVEGE	1	7.00	\$4,724
05	mob/demob equipment	MOBILIZE	1	9.33	\$3,756
<u>SUBTOTALS:</u>				31.3	\$10,808

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 16.78
Profit: 10.00

Total = \$218
Total = \$113
Total = \$1,092
Total = \$1,081

TOTAL O & P = \$2,505

CONTRACT AMOUNT (direct + O & P) = \$13,313

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0
Total = \$0
Total = \$666

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$3,170

TOTAL BOND AMOUNT (direct + indirect) = \$13,978

MOTOR GRADER WORK

Task description: Grade 5 acres

Site: Van Valkenburg Gravel Pit

Permit Action: Inspection 7/23

Permit/Job#: M2005003

PROJECT IDENTIFICATION

Task #: 02 State: Colorado Abbreviation: None
Date: 7/28/2023 County: Jackson Filename: 02
User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 12M Horsepower: 158
Ripper Attachment: Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$74.98</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$55.26</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$0.00</u>	
Operator Cost/Hour:	<u>\$28.56</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$158.80</u>	
Total Fleet Cost/Hour:	<u>\$158.80</u>	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 5.00 acres

Source of estimated acreage: 5 acres currently remain disturbed

HOURLY PRODUCTION

Average Grader Speed: 1.50 mph
Selected Application: Finish grading (0-2.5 mph) - 1.5
Selected Blade Angle: -1 degrees
Effective Blade Length: 0.00 feet
Width of blade overlap per pass: 2.00 feet
Net grading or ripping width per pass: 7.58 feet
Unadjusted Hourly Unit Production: 1.3782 acres/hour

Job Condition Correction Factors

Site Altitude: 8300 feet

		Source
Altitude Adj:	<u>1.00</u>	<u>(CAT HB)</u>
Job Efficiency:	<u>0.90</u>	<u>(1sh/d, fav.)</u>
Net Correction:	<u>0.9000</u>	<u>multiplier</u>

Adjusted Hourly Unit Production: 1.2404 acres/Hour
Adjusted Hourly Fleet Production: 1.2404 acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 4.03 Hours

Unit cost: \$128.03 per acre Total job cost: \$640

BULLDOZER WORKTask description: Spread topsoil (5 acres) at 6"Site: Van Valkenburg Gravel PitPermit Action: Inspection 7/23Permit/Job#: M2005003**PROJECT IDENTIFICATION**Task #: 03State: ColoradoAbbreviation: NoneDate: 7/28/2023County: JacksonFilename: 03User: HR1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D5N LGP - 5PHorsepower: 96Blade Type: Power Angle TiltAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$68.32	NA
Operating Cost/Hour:	\$44.72	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: \$154.34Total Fleet Cost/Hour: **\$154.34****MATERIAL QUANTITIES**Initial Volume: 4,000Swell factor: 1.000Loose volume: **4,000** LCYSource of estimated volume: Rec PlanSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 400 feetUnadjusted hourly production: NA LCY/hrMaterials consistency description: Partly consolidated stockpile 1.1Average push gradient: 0 %Average site altitude: 8,300 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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7877

Adjusted unit production: LCY/hr

Adjusted fleet production: LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: /LCY

Total job time: Hours

Total job cost: 0

REVEGETATION WORKTask description: Revegetate 5 acresSite: Van Valkenburg Gravel PitPermit Action: Inspection 7/23Permit/Job#: M2005003**PROJECT IDENTIFICATION**Task #: 04
Date: 7/28/2023
User: HR1State: Colorado
County: JacksonAbbreviation: None
Filename: 04Agency 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
Indian Ricegrass - Native	20.00	64.74	\$130.00
Crested Wheatgrass - Standard	10.00	45.91	\$41.50
Russian Wildrye - Vinal	10.00	40.17	\$61.80
Sheep Fescue - Bighorn	20.00	312.21	\$88.00
Milk Vetch, Cicer - Lutana	10.00	33.29	\$82.00
Western Wheatgrass - Native	10.00	25.25	\$60.00
Bluebunch Wheatgrass - Goldar	20.00	64.28	\$92.00
Totals Seed Mix	100.00	585.86	\$555.30

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
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

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: 5 Cost /Acre: \$787.30
 Estimated Failure Rate: 20% Cost /Acre*: \$787.30
 *Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$3,936.50**
 Reseeding Job Cost: **\$787.30**
 Total Job Cost: **\$4,724**
 Job Hours: **7.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/demob equipment**Site: **Van Valkenburg Gravel Pit**Permit Action: Inspection 7/23Permit/Job#: M2005003**PROJECT IDENTIFICATION**Task #: 05
Date: 7/28/2023
User: HR1State: Colorado
County: JacksonAbbreviation: None
Filename: M003-05Agency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per day
Cost 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:	\$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 D5N LGP - 5P	11.47	\$68.32	\$82.29	1	\$150.61	\$82.29	\$250.00
CAT 12M	16.01	\$74.98	\$82.29	1	\$157.27	\$82.29	\$250.00
Subtotals:					\$307.88	\$164.58	\$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, 1 T. Crew	\$27.44	1	\$27.44	\$27.44
Drill/Broadcast Seeder with Tractor	\$14.81	1	\$14.81	\$14.81
Power Mulcher (Bowie LD-90)	\$57.02	1	\$57.02	\$57.02
Subtotals:			\$99.27	\$99.27

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:

STEAMBOAT
SPRINGSTotal one-way travel distance: 60.00 milesAverage Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost *

\$3,491.41

** two round trips with haul rig:

Total Roadable Mob/Demob Cost **

\$264.72

** one round trip, no haul rig:

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.33	1.33
Return Time (Hours):	1.33	1.33
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	4.67	2.67

JOB TIME AND COSTTotal job time: 9.33 HoursTotal job cost: \$3,756

Van Valkenburg Gravel Pit

August 14, 2019 Inspection Map
M-2005-003

Legend

- Active Mining Area
- Existing Oil & Gas Facility
- Future Oil & Gas Facility Location
- Material Stockpiles
- Topsoil Stockpile
- Van Valkenburg Gravel
- Van Valkenburg Permit Boundary

Van Valkenburg Gravel

Google Earth

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1000 ft