



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: Nicholson Gravel Pit	MINE/PROSPECTING ID#: M-1986-048	MINERAL: Sand and gravel	COUNTY: Morgan
INSPECTION TYPE: Monitoring	INSPECTOR(S): Brock Bowles	INSP. DATE: November 19, 2021	INSP. TIME: 09:00
OPERATOR: R & J Yetter Sand & Gravel LLC	OPERATOR REPRESENTATIVE: None	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$43,357.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: December 3, 2021	

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>N</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>N</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>N</u>
(SM) SIGNS AND MARKERS----- <u>N</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>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

OBSERVATIONS

This inspection was conducted by Brock Bowles of the Division of Reclamation, Mining and Safety (Division). The operator was not present for this inspection. The other folks who attended the inspection were: Mickey Ashvey (landowner) Grant Segelki (landowner), Jeremiah and Rebecca Curtis (perspective buyers). The pit is located about 16 miles northeast of Brush. The site is an active 112c operation with 49.9 acres permitted and the post-mining land use is general agriculture. At the time of the inspection it was partly cloudy, cool, and the ground dry.

This inspection was conducted at the requested of the perspective buyers. Mr. Curtis wanted to meet with DRMS to review the permit requirements, understand the SO process and get an idea of the bond amount.

The site conditions were not significantly different than the last inspection conducted in July 2019. I conducted both inspections. The annual reports states that 15 acres are disturbed. This is consistent with the site conditions.

The reclamation cost estimate was updated based on 15 disturbed acres as reported. The updated cost estimate for the site is \$39,228. The Division holds a bond for \$43,357. The detailed cost estimate is attached to this report.

An additional inspection will be conducted as part of the SO application process.

Inspection Contact Address

None
R & J Yetter Sand & Gravel LLC
16757 CR 16
Atwood, CO 80722

Enclosure

CC:

COST SUMMARY WORK

Task description: Site reclamation

Site: Nicholson Gravel Pit

Permit Action: 2021 Update

Permit/Job#: M1986048

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 12/2/2021

County: Morgan

Filename: M048-000

User: BFB

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Regrade Highwall to 3:1	DOZER	1	20.97	\$4,228
002	Replace Topsoil	DOZER	1	54.84	\$11,059
003	Revegetation	REVEGE	1	12.00	\$7,509
003A	Seed Sorghum cover crop	REVEGE	1	12.00	\$4,024
004	Mobilization	MOBILIZE	1	2.50	\$2,294
<u>SUBTOTALS:</u>				102.31	\$29,114

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$588

Performance bond: 1.05

Total = \$306

Job superintendent: 55.04

Total = \$3,965

Profit: 10.00

Total = \$2,911

TOTAL O & P = \$7,770

CONTRACT AMOUNT (direct + O & P) = \$36,884

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

\$1,844

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$10,114

TOTAL BOND AMOUNT (direct + indirect) = \$39,228

BULLDOZER WORKTask description: Regrade Highwall to 3:1Site: Nicholson Gravel PitPermit Action: 2021 UpdatePermit/Job#: M1986048**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 12/2/2021County: MorganFilename: M048-001User: BFBAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D7R DS XR Series IIHorsepower: 240Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$81.02</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$79.33</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: \$201.65Total Fleet Cost/Hour: \$201.65**MATERIAL QUANTITIES**Initial Volume: 10,200Swell factor: 1.250Loose volume: 12,750 LCYSource of estimated volume: DRMS: 3:1 slopes at 500' longSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 75 feetUnadjusted hourly production: 854.1 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -30 %Average site altitude: 4,200 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packed**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>0.900</u>	<u>(CAT HB))</u>
Dozing method:	<u>1.100</u>	<u>(50% SL)</u>
Visibility:	<u>1.000</u>	<u>(AVG.)</u>

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7120

Adjusted unit production: 608.12 LCY/hr

Adjusted fleet production: **608.12 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.332/LCY

Total job time: **20.97 Hours**

Total job cost: **\$4,228**

BULLDOZER WORKTask description: Replace TopsoilSite: Nicholson Gravel Pit Permit Action: 2021 Update Permit/Job#: M1986048**PROJECT IDENTIFICATION**

Task #: 002 State: Colorado Abbreviation: None
 Date: 12/2/2021 County: Morgan Filename: M048-002
 User: BFB

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

Basic Machine: Cat D7R DS XR Series II
 Horsepower: 240
 Blade Type: Semi-Universal
 Attachment: NA
 Shift Basis: 1 per day
 Data Source: (CRG)

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$81.02</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$79.33</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: \$201.65
 Total Fleet Cost/Hour: \$201.65

MATERIAL QUANTITIES

Initial Volume: 12,100
 Swell factor: 1.000
 Loose volume: 12,100 LCY

Source of estimated volume: Application & AR- 6" over 15 acres
 Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 200 feet
 Unadjusted hourly production: 410.8 LCY/hr

Materials consistency description: Consolidated stockpile 1.0

Average push gradient: 0 %
 Average site altitude: 4,200 feet

Material weight: 1,600 lbs/LCYWeight description: Top Soil

<u>Job Condition Correction Factor</u>		<u>Source</u>
Operator Skill:	<u>0.750</u>	<u>(AVG.)</u>
Material consistency:	<u>1.000</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:	0.600	(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: 0.5371

Adjusted unit production: 220.64 LCY/hr

Adjusted fleet production: **220.64 LCY/hr**

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.914/LCY

Total job time: **54.84 Hours**

Total job cost: **\$11,059**

REVEGETATION WORKTask description: RevegetationSite: Nicholson Gravel PitPermit Action: 2021 UpdatePermit/Job#: M1986048PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
 Date: 12/2/2021 County: Morgan Filename: M048-003
 User: BFB

Agency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$114.56
Total Tilling Cost/Acre	
	\$114.56

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	1.00	16.32	\$15.98
Sideoats Grama - Vaughn	3.00	9.85	\$25.13
Western Wheatgrass - Arriba	5.50	13.89	\$35.75
Totals Seed Mix		9.50	\$76.85

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00

Total Seed Application Cost/Acre	\$232.00
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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: <u>15</u>	Cost /Acre: <u>\$423.41</u>
	Estimated Failure Rate: <u>25%</u>	Cost /Acre*: <u>\$308.85</u>
	*Selected Replanting Work Items: <u>SEEDING</u>	
Initial Job Cost:	<u>\$6,351.15</u>	
Reseeding Job Cost:	<u>\$1,158.19</u>	
Total Job Cost:	<u>\$7,509</u>	
Job Hours:	<u>12.00</u>	

REVEGETATION WORKTask description: Seed Sorghum cover cropSite: Nicholson Gravel PitPermit Action: 2021 UpdatePermit/Job#: M1986048PROJECT IDENTIFICATIONTask #: 003AState: ColoradoAbbreviation: NoneDate: 12/2/2021County: MorganFilename: M048-003AUser: BFBAgency 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
Sorghum, Sudan - Arikaree	50.00	28.70	\$36.25
Totals Seed Mix	50.00	28.70	\$36.25

Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00

Total Seed Application Cost/Acre	\$232.00
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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: <u>15</u>	Cost /Acre: <u>\$268.25</u>
Estimated Failure Rate: <u>0%</u>	Cost /Acre*: <u>\$0.00</u>
*Selected Replanting Work Items: <u>NONE</u>	

Initial Job Cost: <u>\$4,023.75</u>
Reseeding Job Cost: <u>\$0.00</u>
Total Job Cost: <u>\$4,024</u>
Job Hours: <u>12.00</u>

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: MobilizationSite: Nicholson Gravel PitPermit Action: 2021 UpdatePermit/Job#: M1986048PROJECT IDENTIFICATIONTask #: 004State: ColoradoAbbreviation: NoneDate: 12/2/2021County: MorganFilename: M048-004User: BFBAgency or organization name: DRMSEQUIPMENT TRANSPORT RIG COSTShift 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:

<u>Available Rig Capacities</u>	<u>0-25 Tons</u>	<u>26-50 Tons</u>	<u>51+ Tons</u>
Ownership Cost/Hour:	\$21.28	\$37.94	\$47.67
Operating Cost/Hour:	\$26.55	\$50.48	\$56.21
Operator Cost/Hour:	\$20.54	\$20.54	\$20.54
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$68.37	\$132.49	\$147.95

NON ROADABLE EQUIPMENT:

<u>Machine Description</u>	<u>Weight/ Unit (TONS)</u>	<u>Owner ship Cost/hr/ unit</u>	<u>Haul Rig Cost/hr/unit</u>	<u>Fleet Size</u>	<u>Haul Trip Cost/hr/ fleet</u>	<u>Return Trip Cost/hr/ fleet</u>	<u>DOT Permit Cost/ fleet</u>
Cat D7R DS XR Series II	32.01	\$81.02	\$132.49	1	\$213.51	\$132.49	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$7.98	\$68.37	1	\$76.35	\$68.37	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$7.98	\$68.37	1	\$76.35	\$68.37	\$250.00

Subtotals: **\$366.21** **\$269.23** **\$750.00**ROADABLE EQUIPMENT:

<u>Machine Description</u>	<u>Total Cost/hr/ unit</u>	<u>Fleet Size</u>	<u>Haul Trip Cost/hr/ fleet</u>	<u>Return Trip Cost/hr/ fleet</u>

Subtotals: **\$0.00** **\$0.00**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: STERLING
 Total one-way travel distance: 25.00 miles
 Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost * \$2,294.30
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$0.00
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.63	0.63
Return Time (Hours):	0.63	0.63
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	1.25	1.25

JOB TIME AND COST

Total job time: 2.50 Hours

Total job cost: \$2,294