




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: Bond Pit	MINE/PROSPECTING ID#: M-2007-035	MINERAL: Sand	COUNTY: Jackson
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: September 11, 2023	INSP. TIME: 13:30
OPERATOR: Glenn E Sessions & Sons, Inc.	OPERATOR REPRESENTATIVE: Jamie Sessions	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$35,527.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Hunter Ridley	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: September 28, 2023	

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>N</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>N</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

OBSERVATIONS

The Bond Pit was inspected by Hunter Ridley with the Division of Reclamation, Mining and Safety (Division) as a part of the Division's normal monitoring inspection program. Jamie Sessions with Glenn E. Session & Sons, Inc was present during the inspection. The site is located about 3 miles north of Walden, CO and is accessed by a two track road off of CR 125.

An entrance sign was posted and permit boundary markers in the form of a fence were observed as required by Rule 3.1.12 (Photo 1).

The Bond Pit is a 112c operation permitted for 20.31 acres. The site has not changed drastically since the last inspection in 2019. About half of the site is still left to mine with approximately 10 acres currently disturbed. Mining has historically progressed from north to south. The southernmost area which had been stripped of topsoil in 2019 has now been mined. A large product stockpile is located in the northwest corner of the site (Photos 3 and 4) and is hauled off on an as needed basis. This stockpile was stable with no signs of erosion. No processing equipment is stored onsite. A small office is located at the end of the site access road, nearest the pit (Photo 10).

Highwalls onsite range from 6-8' in height and are all at an approximate 1H:1V slope (Photos 6, 7, and 8). Mining has progressed south since the last inspection. The pit floor was dry with no signs of erosion. A culvert located along the western permit boundary helps to drain stormwater (Photo 8). Topsoil and overburden are both stored to the east, with topsoil being stored along the easternmost boundary. Both stockpiles were well vegetated with volunteer vegetation (Photo 2, 5, 7, and 9). The proposed post-mining land use is rangeland and highwalls will be reclaimed to 3H:1V slopes.

The Division currently holds a financial warranty amount of, \$35,527.00 for this site. The bond was last updated post inspection in 2019. 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 \$59,560.00. This is an **increase of \$24,033.00**. 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: Appropriate mine signage is located at the site entrance.



Photo 2: View east of permit boundary extent which lies just beyond stockpiled overburden.



Photo 3: View southwest of pit and product stockpile.



Photo 4: View west of current stockpiled of product.



Photo 5: View southeast of stockpiled topsoil.



Photo 6: View southwest looking towards the southern extent of mining.



Photo 7: View east of the mined highwall, a topsoil stockpile can be seen in the background.



Photo 8: View west of a culvert which drains storm water along the pit boundary.



Photo 9: View east of overburden pile, topsoil is stockpiled behind.



Photo 10: View west of pit entrance road and office.

Inspection Contact Address

Jamie Sessions
Glenn E Sessions & Sons, Inc.
33492 Hwy 125
Walden, CO 80480

COST SUMMARY WORK

Task description: Updated post inspection 2023

Site: Bond Pit

Permit Action: Insp 2023

Permit/Job#: M2007035

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 9/6/2023

County: Jackson

Filename: M035-000

User: HR1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Grade 1,125 LF of 6' Avg Height Highwall	DOZER	1	5.53	\$2,359
002	Replace 12" of Overburden - 4 Acres	DOZER	1	40.11	\$17,112
003	Replace 6" Topsoil - 7 Acres	DOZER	1	20.80	\$8,872
004	Revegetate - 7 Acres	REVEGE	1	7.00	\$12,733
005	Mob / Demob	MOBILIZE	1	13.14	\$4,648
<u>SUBTOTALS:</u>				86.58	\$45,724

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$924

Performance bond: 1.05

Total = \$480

Job superintendent: 43.29

Total = \$2,817

Profit: 10.00

Total = \$4,572

TOTAL O & P = \$8,793

CONTRACT AMOUNT (direct + O & P) = \$54,517

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$0

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$2,317

Reclamation management and/or administration: 5.00

\$2,726

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$13,836

TOTAL BOND AMOUNT (direct + indirect) = \$59,560

BULLDOZER WORKTask description: **Grade 1,125 LF of 6' Avg Height Highwall**Site: **Bond Pit** Permit Action: **Insp 2023** Permit/Job#: **M2007035****PROJECT IDENTIFICATION**

Task #: **001** State: **Colorado** Abbreviation: **None**
 Date: **9/25/2023** County: **Jackson** Filename: **001**
 3:15:23 PM
 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: **\$426.60**

MATERIAL QUANTITIES

Initial Volume: **3,000**
 Swell factor: **1.124**
 Loose volume: **3,371 LCY**

Source of estimated volume: **Division of Reclamation, Mining & Safety**
 Source of estimated swell factor: **Cat Handbook**

HOURLY PRODUCTION

Average push distance: **50 feet**
 Unadjusted hourly production: **1,400.0 LCY/hr**

Materials consistency description: **Compacted fill or embankment 0.9**

Average push gradient: **-10 %**
 Average site altitude: **8,100 feet**

Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry****Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4354

Adjusted unit production: 609.56 LCY/hr

Adjusted fleet production: **609.56** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.700/LCY

Total job time: **5.53** Hours

Total job cost: **\$2,359**

BULLDOZER WORKTask description: **Replace 12" of Overburden - 4 Acres**Site: **Bond Pit** Permit Action: **Insp 2023** Permit/Job#: **M2007035****PROJECT IDENTIFICATION**

Task #: **002** State: **Colorado** Abbreviation: **None**
 Date: **9/25/2023** County: **Jackson** Filename: **002**
 3:15:36 PM
 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: **\$426.60**

MATERIAL QUANTITIES

Initial Volume: **6,453**
 Swell factor: **1.000**
 Loose volume: **6,453 LCY**

Source of estimated volume: **Division of Reclamation, Mining & Safety**
 Source of estimated swell factor: **Cat Handbook**

HOURLY PRODUCTION

Average push distance: **250 feet**
 Unadjusted hourly production: **377.8 LCY/hr**

Materials consistency description: **Compacted fill or embankment 0.9**

Average push gradient: **-5 %**
 Average site altitude: **8,100 feet**

Material weight: **2,700 lbs/LCY**Weight description: **Sand and clay - Loose****Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.852	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4258

Adjusted unit production: 160.87 LCY/hr

Adjusted fleet production: **160.87** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$2.652/LCY

Total job time: **40.11** Hours

Total job cost: **\$17,112**

BULLDOZER WORKTask description: **Replace 6" Topsoil - 7 Acres**Site: **Bond Pit** Permit Action: **Insp 2023** Permit/Job#: **M2007035****PROJECT IDENTIFICATION**

Task #:	003	State:	Colorado	Abbreviation:	None
Date:	9/25/2023	County:	Jackson	Filename:	003
	3:17:38 PM				
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:	\$426.60

MATERIAL QUANTITIES

Initial Volume:	5,646
Swell factor:	1.000
Loose volume:	5,646 LCY

Source of estimated volume:	Division of Reclamation, Mining & Safety
Source of estimated swell factor:	Cat Handbook

HOURLY PRODUCTION

Average push distance:	250 feet
Unadjusted hourly production:	377.8 LCY/hr

Materials consistency description: **Compacted fill or embankment 0.9**

Average push gradient:	-5 %
Average site altitude:	8,100 feet

Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(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:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7186

Adjusted unit production: 271.49 LCY/hr

Adjusted fleet production: **271.49** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
 Unit cost: \$1.571/LCY

Total job time: **20.80** Hours
 Total job cost: **\$8,872**

REVEGETATION WORKTask description: **Revegetate - 7 Acres**Site: **Bond Pit**Permit Action: **Insp 2023**Permit/Job#: **M2007035****PROJECT IDENTIFICATION**Task #: **004**State: **Colorado**Abbreviation: **None**Date: **9/25/2023**County: **Jackson**Filename: **004****3:18:58 PM**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)	\$112.82
Total Tilling Cost/Acre	\$112.82

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alsike Clover	1.00	15.61	\$3.83
Orchardgrass - Elsie	1.00	12.40	\$3.10
White Dutch Clover - Alice	1.00	19.51	\$6.70
Tall Fescue - Fawn E.F.	1.50	7.82	\$2.89
Western Wheatgrass - Arriba	2.50	6.31	\$16.25
Needlegrass, Green - Lodorm	2.00	8.31	\$23.55
Timothy - Climax	0.50	14.35	\$0.80
		84.31	\$57.11

Totals Seed Mix	9.50		
------------------------	------	--	--

Application

Description	Cost /Acre
Drill seeding (MEANS 32 92 19.13 0020)	\$468.00
Total Seed Application Cost/Acre	\$468.00

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.01	\$4.01
Total Mulch Materials Cost/Acre				\$863.58

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Weed spray, truck, non-aquatic areas, ann. [DMG]	\$22.81
Total Mulch Application Cost/Acre	\$159.99

NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Nursery Stock Cost / Acre					\$0.00

JOB TIME AND COST

No. of Acres:	7	Cost /Acre:	\$1,661.50
Estimated Failure Rate:	30%	Cost /Acre*:	\$525.11
*Selected Replanting Work Items:	SEEDING		
Initial Job Cost:	\$11,630.50		
Reseeding Job Cost:	\$1,102.73		
Total Job Cost:	\$12,733		
Job Hours:	7.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob / Demob**Site: **Bond Pit**Permit Action: **Insp 2023**Permit/Job#: **M2007035****PROJECT IDENTIFICATION**

Task #: **005** State: **Colorado** Abbreviation: **None**
 Date: **9/25/2023** County: **Jackson** Filename: **005**
 3:20:13 PM
 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	1	\$399.55	\$158.17	\$250.00
Subtotals:					\$399.55	\$158.17	\$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Subtotals:			\$0.00	\$0.00

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>FORT COLLINS, CO</u>	
Total one-way travel distance:	<u>80.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$4,647.78</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$0.00</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>2.29</u>	<u>2.29</u>
Return Time (Hours):	<u>2.29</u>	<u>2.29</u>
Loading Time (Hours):	<u>1.00</u>	<u>NA</u>
Unloading Time (Hours):	<u>1.00</u>	<u>NA</u>
Subtotals:	<u>6.57</u>	<u>4.57</u>

JOB TIME AND COST

Total job time:	<u>13.14</u>	Hours
-----------------	--------------	-------

Total job cost:	<u>\$4,648</u>
-----------------	----------------