COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY
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: Russell Ranch Pit	**MINE/PROSPECTING ID#:** M-2006-008	**MINERAL:** Sand and gravel	**COUNTY:** Rio Blanco
INSPECTION TYPE: Monitoring	**INSPECTOR(S):** Travis H. Marshall	**INSP. DATE:** March 2, 2016	**INSP. TIME:** 13:00
OPERATOR: Russell Ranch General Partnership dba W Aggregates	**OPERATOR REPRESENTATIVE:** Steve Baker	**TYPE OF OPERATION:** 110c - Construction Limited Impact	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $23,303.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Windy	**INSPECTOR'S SIGNATURE:**	**SIGNATURE DATE:** March 24, 2016

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: Signs & Markers
PROBLEM/POSSIBLE VIOLATION: Problem: The mine identification sign was not posted at the entrance of the mine site. This is a problem for failure to post a mine identification sign as required by Section 3.1.12(1) of the rule.
CORRECTIVE ACTIONS: The operator shall, at the entrance of the mine site, post a sign which shall be clearly visible from the access road 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. The operator shall submit photo documentation that a proper sign has been posted by the corrective action date.
CORRECTIVE ACTION DUE DATE: 4/22/16

OBSERVATIONS

This inspection was conducted as part of the Colorado Division of Reclamation Mining and Safety's (Division) normal monitoring program. The Russell Ranch Pit is a 110c operation that consists of 9.9 acres. The site is located west of Rio Blanco County Road 79. Steve Baker was present for the inspection.

It was noted that a mine identification sign was not posted at the entrance of the mine site. The operator is required to post a sign that complies with the requirements of Rule 3.1.12(1). Please post a sign that complies with the requirements of Rule 3.1.12(1) and provide this office photo-documentation that the sign has been posted within 30 days of the signature date of this inspection report.

Boundary markers were observed around the entire perimeter of the mine and deemed compliant with the requirements of Rule 3.1.12(2).

A separate material borrow area that is used by the property owner to maintain ranch roads was observed adjacent to the southwest corner of the permit area. The borrow area has no affiliation with the permitted site.

The site is an active operation but no mining equipment was working the site during the inspection. The site is usually more active in the warmer months. Various stockpiles were observed within the permit area. A portable scale and scale house was observed along the southern permit boundary. Topsoil was observed stockpiled along the northern border of the permit area.

Thistle was observed on the topsoil stockpiles located along the northern permit boundary. The infestation was observed by the operator and the operator verbally acknowledged the infestation and stated that weed control would be implemented to manage the infestation. This is not noted as a problem at this time but will be used as a mechanism to document the effectiveness of the operators weed management program during the next inspection.

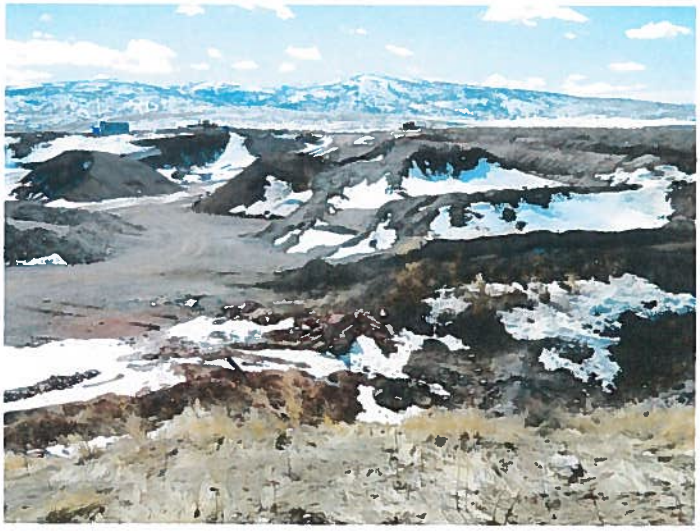
Stockpiles of imported asphalt was observed within the permit area. Per the requirements of Rule 3.1.5(9) the operator must provide the Division notice of any proposed, in this case after the fact, backfill activity not identified in the approved reclamation plan. **Therfore, notice from the operator allowing for importation of off-site material to the mine site shall be provided to the Division within 30 days from the signature date of this inspection report.** The notification must inclued a narrative that describes the approximate location of the proposed activity; the approximate volume of inert material to be backfilled; a signed affidavit certifying that the material is clean and inert, as defined in Rule 1.1(20); the approximate dates the proposed activity will commence and end, however, such dates shall not be an enforceable condition; an explanation of how the backfilled site will result in a post-mining configuration that is compatible with the approved post-mining land use; and a general engineering plan stating how the material will be placed and stabilized in a manner to avoid unacceptable settling and voids.

No erosional features were observed during the inspection.

Due to the last bond calculation being completed as part of the application process in April of 2006 the site is considered under bonded at the time of this inspection. As part of the routine reclamation bonding program an updated bond calculation will be conducted and sent along with this inspection report. The revised required reclamation bond amount is $47,392.21. Placement of the revised required reclamation bond is to be submitted and approved no later than May 23, 2016.

Responses to this inspection report should be directed to Travis Marshall at the Division of Reclamation, Mining and Safety, Grand Junction Field Office, 101 South 3rd Street, Room 301, Grand Junction, Colorado 81501, phone no. (970) 241-2042.

PHOTOGRAPHS



GENERAL INSPECTION TOPICS

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

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

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

Inspection Contact Address
Steve Baker
Russell Ranch General Partnership dba WR Aggregates
1240 Rio Blanco County Road 8
Meeker, CO 81641

COST SUMMARY WORK

Task description:

Site: **Russell Ranch Pit** Permit Action: SI-01 Permit/Job#: M2006008

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 3/24/2016 County: Rio Blanco Filename: M008-001
User: THM

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Reduce 2H:1V Slopes to 3H:1V	DOZER	1	41.57	$7,146.00
02a	Rip 7.16 acres of compacted pit floor	RIPPER	1	15.76	$2,858.00
03a	Distribute 6 inches topsoil over 9.1 acres	DOZER	1	35.62	$6,123.00
04a	Revegetate 9.78 acres	REVEGE	1	16.00	$16,675.00
05a	Mobilization	MOBILIZE	1	2.66	$2,547.00
		SUBTOTALS:		**111.61**	**$35,349**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$714.05
Performance bond:	1.05	Total =	$371.16
Job superintendent:	55.81	Total =	$4,156.36
Profit:	10.00	Total =	$3,534.90
		TOTAL O & P =	$8,776.47
		CONTRACT AMOUNT (direct + O & P) =	$44,125.47

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	0.00	Total =	0.00
Engineering work and/or contract/bid preparation:	0.00	Total =	$0.00
Reclamation management and/or administration:	5.00		$2,206.27
CONTINGENCY:	3.00	Total =	$1,060.47
		TOTAL INDIRECT COST =	$12,043.21
		TOTAL BOND AMOUNT (direct + indirect) =	**$47,392.21**

BULLDOZER WORK

Task description: **Reduce 2H:1V Slopes to 3H:1V**

Site: **Russell Ranch Pit** Permit Action: SI-01 Permit/Job#: M2006008

PROJECT IDENTIFICATION

Task #: 01A State: Colorado Abbreviation: None
Date: 3/24/2016 County: Rio Blanco Filename: M008-01a
User: THM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$54.56	NA
Operating Cost/Hour:	$78.45	100
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.89	NA

Total unit Cost/Hour: $171.90
Total Fleet Cost/Hour: **$171.90**

MATERIAL QUANTITIES

Initial Volume: 10,575
Swell factor: 1.330
Loose volume: **14,065** LCY

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

HOURLY PRODUCTION

Average push distance: 75 feet
Unadjusted hourly production: 594.6 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -30 %
Average site altitude: 6,600 feet

Material weight: 2,900 lbs/LCY

Weight description: Decomposed rock - 50% Rock, 50% Earth

Job Condition Correction Factor		Source
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:	1.601	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5690

Adjusted unit production: 338.33 LCY/hr
Adjusted fleet production: **338.33** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.508/LCY

Total job time: **41.57** Hours
Total job cost: **$7,146**

BULLDOZER RIPPING WORK

Task description: **Rip 7.16 acres of compacted pit floor**

Site: **Russell Ranch Pit** Permit Action: SI-01 Permit/Job#: M2006008

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 3/24/2016 County: Rio Blanco Filename: M008-02a
User: THM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS Series II LGP Horsepower: 240
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$59.25	NA
Operating Cost/Hour:	$78.45	100
Ripper Operating Cost/Hour:	$4.68	100
Operator Cost/Hour:	$38.89	NA
Total Unit Cost/Hour:	$181.27	
Total Fleet Cost/Hour:	**$181.27**	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 7.16 acres Rip Depth (ft): 2.00 Volume: 23,103 BCY or CCY

Source of estimated quantity: Reclamation Requirement

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	2.45	mph
Average Ripping Width:	6.50	degrees
Average Ripping Length:	50.00	feet
Average Dozer Speed:	88.00	feet
Average Maneuver Time:	0.25	feet
Production per unit area:	0.547	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production:	0.547	Acres/hr
Site Altitude:	6,600	feet
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier
Adjusted Hourly Unit Production:	0.45	Acres/hr
Adjusted Hourly Fleet Production:	**0.45**	Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **15.77** Hours

Unit cost: $399.164 Per acre Total job cost: **$2,858**

BULLDOZER WORK

Task description: **Distribute 6 inches topsoil over 9.1 acres**

Site: **Russell Ranch Pit** Permit Action: SI-01 Permit/Job#: M2006008

PROJECT IDENTIFICATION

Task #: 03A State: Colorado Abbreviation: None
Date: 3/24/2016 County: Rio Blanco Filename: M008-03a
User: THM

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$54.56	NA
Operating Cost/Hour:	$78.45	100
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.89	NA

Total unit Cost/Hour: $171.90
Total Fleet Cost/Hour: **$171.90**

MATERIAL QUANTITIES

Initial Volume: 7,405
Swell factor: 1.000
Loose volume: **7,405** LCY

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

HOURLY PRODUCTION

Average push distance: 200 feet
Unadjusted hourly production: 289.3 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -5 %
Average site altitude: 6,600 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

Job Condition Correction Factor		Source
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: 207.89 LCY/hr
Adjusted fleet production: **207.89** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.827/LCY

Total job time: **35.62** Hours
Total job cost: **$6,123**

REVEGETATION WORK

Task description: **Revegetate 9.78 acres**

Site: **Russell Ranch Pit** Permit Action: SI-01 Permit/Job#: M2006008

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 3/24/2016 County: Rio Blanco Filename: M008-04a
User: THM

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)	$107.59
Total Tilling Cost/Acre	**$107.59**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Russian Wildrye - Vinal	2.50	10.04	$9.30
Smooth Brome - Lincoln	4.30	14.31	$5.72
Intermediate Wheatgrass - Oahe	3.80	8.11	$8.32
Western Wheatgrass - Arriba	4.00	10.10	$14.76
Totals Seed Mix	14.60	42.57	**$38.10**

Application

Description	Cost /Acre

Drill seeding (MEANS 32 92 19.13 0020)	$434.00
Total Seed Application Cost/Acre	**$434.00**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	1.00	ACRE	$16.56	$16.56
Straw, delivered {MEANS 31 25 14.16 1200}	1.50	TON	$246.00	$369.00
Total Mulch Materials Cost/Acre				**$385.56**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$66.02
Power mulcher (MEANS 32 91 13.16 0350)	$97.14
Weed spray, hand, non-aquatic area, nox. [DMG]	$183.16
Total Mulch Application Cost/Acre	**$346.32**

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: 9.78 Cost /Acre: $1,311.57
Estimated Failure Rate: 30% Cost /Acre*: $1,311.57
*Selected Replanting Work Items: TILLING,SEEDING,MULCHING

Initial Job Cost: **$12,827.15**
Reseeding Job Cost: **$3,848.15**
Total Job Cost: **$16,675**
Job Hours: **16.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mobilization**

Site: **Russell Ranch Pit** Permit Action: SI-01 Permit/Job#: M2006008

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 3/24/2016 County: Rio Blanco Filename: M008-05a
User: THM

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:	$16.63	$18.37	$22.33
Operating Cost/Hour:	$44.38	$46.13	$50.07
Operator Cost/Hour:	$27.66	$27.66	$27.66
Helper Cost/Hour:	$0.00	$25.39	$25.39
Total Unit Cost/Hour:	$88.67	$117.55	$125.45

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D7R DS Series II LGP	38.49	$59.25	$117.55	1	$176.80	$117.55	$250.00
Drill/Broadcast Seeder with Tractor	25.00	$39.59	$88.67	1	$128.26	$88.67	$250.00
Power Mulcher (Reinco M90)	6.00	$7.03	$88.67	1	$95.70	$88.67	$250.00
Subtotals:					**$400.76**	**$294.89**	**$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, 3/4 T.	$13.42	1	$13.42	$13.42
2500 gal water truck	$27.11	1	$27.11	$27.11
Subtotals:			**$40.53**	**$40.53**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	MEEKER	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	30.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$2,533.40	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$13.51	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.17	0.17
Return Time (Hours):	0.17	0.17
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.33	0.33

JOB TIME AND COST

Total job time:	**2.67**	Hours
Total job cost:	**$2,547**	