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: Red Rock Pit	**MINE/PROSPECTING ID#:** M-1978-315	**MINERAL:** Sand and gravel	**COUNTY:** Routt
INSPECTION TYPE: Preoperation Inspection	**INSPECTOR(S):** Dustin M. Czapla	**INSP. DATE:** April 17, 2012	**INSP. TIME:** 11:30
OPERATOR: Peabody Sage Creek Mining LLC	**OPERATOR REPRESENTATIVE:** Jay James	**TYPE OF OPERATION:** 110c - Construction Limited Impact	

REASON FOR INSPECTION: Pre-operation Inspection	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $31,550.00
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
WEATHER: Clear	**INSPECTOR'S SIGNATURE:**	**SIGNATURE DATE:** April 20, 2012

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

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

OBSERVATIONS

This pre-operation inspection was conducted by the Division of Reclamation, Mining and Safety (Division) as part of the review process for the 112c Conversion application (CN-1), which was submitted on May 9, 2011. Jay James, Jim Rolando, Dennis Bugay and Jen Hunt, representing the Operator, were present during this inspection. Photographs are included with this report in order to illustrate some of the conditions observed during this inspection.

The Red Rock Pit is located approximately 10 miles south of Hayden and accessed from CR53. The proposed 112c operation will increase the permitted acreage from 5 acres to 41.8 acres. The Division currently holds a financial warranty amount of $31,550.00 for this site. The Division has reevaluated the reclamation costs for this site, in order to reflect the operational changes proposed through CN1, and determined that the current financial warranty amount held is sufficient at this time.

The topography at the site consists of fairly steep slopes, ranging from approximately 1H:1V to 2H:1V. The amount of vegetation on the undisturbed slopes at the site varies from bare to well vegetated (see photos). The dominant species appeared to be Gambel oak, Rabbitbrush, Indian ricegrass, and wheat grasses. Noxious weeds were not noted at the site.

No problems or violations were noted during this inspection.

Responses to this inspection report should be directed to Dustin Czapla at the Division of Reclamation, Mining and Safety, Grand Junction Field Office, 101 South 3rd Street, Room 301, Grand Junction, Colorado 81501, phone number (970) 243-6299.

PHOTOGRAPHS

(All photographs were taken from CR53, beginning at the west end of the CN1 permit area and ending at the east end.)


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Inspection Contact Address

Jay James
Peabody Sage Creek Mining LLC
PO Box 250
36600 RCR 27
Hayden, CO 81639-0250

Enclosure: CIRCES Reclamation Cost Summary worksheets (4/20/2012)

CC:

COST SUMMARY WORK

Task description: **CN1 Application FW Estimate**

Site: **Red Rock Pit** Permit Action: CN1 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 4/20/2012 County: Routt Filename: M315-000
User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Finish grade mined 1H:1V slopes, spread fines	DOZER	1	23.16	$4,629.03
02a	Rip base area in Phase 1	RIPPER	1	6.06	$1,292.00
03a	Spread topsoil over base area	DOZER	1	1.15	$230.62
04a	Revegetate base area in Phase 1	REVEGE	1	3.00	$3,270.00
04b	Revegetate slopes in Phase 1	REVEGE	1	5.00	$7,792.06
05a	Mobilize reclamation crew and equipment	MOBILIZE	1	4.22	$2,258.43
		SUBTOTALS:		**42.59**	**$19,472.14**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$393.34
Performance bond:	1.05	Total =	$204.46
Job superintendent:	21.30	Total =	$1,262.79
Profit:	10.00	Total =	$1,947.21
		TOTAL O & P =	$3,807.80
		CONTRACT AMOUNT (direct + O & P) =	$23,279.94

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.00	Total =	500.00
Engineering work and/or contract/bid preparation:	0.00	Total =	$0.00
Reclamation management and/or administration:	5.00		$1,164.00
CONTINGENCY:	0.00	Total =	$0.00
		TOTAL INDIRECT COST =	$5,471.80

TOTAL BOND AMOUNT (direct + indirect) = $24,943.94

BULLDOZER WORK

Task description: **Finish grade mined 1H:1V slopes, spread fines**

Site: **Red Rock Pit** Permit Action: CN1 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 01A State: Colorado Abbreviation: None
Date: 4/20/2012 County: Routt Filename: M315-01a
User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8U
Horsepower: 310
Blade Type: Universal
Attachment: NA
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$58.56	NA
Operating Cost/Hour:	$102.84	100
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.49	NA

Total unit Cost/Hour: $199.89
Total Fleet Cost/Hour: **$199.89**

MATERIAL QUANTITIES

Initial Volume: 13,391
Swell factor: 1.000
Loose volume: **13,391** LCY

Source of estimated volume: Grade upper 1 foot of material in Phase 1 (8.3 ac.)
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet
Unadjusted hourly production: 1,627.0 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: 0 %
Average site altitude: 6,300 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:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3554

Adjusted unit production: 578.24 LCY/hr
Adjusted fleet production: **578.24** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.346/LCY

Total job time: **23.16** Hours
Total job cost: **$4,629.03**

BULLDOZER RIPPING WORK

Task description: **Rip base area in Phase 1**

Site: **Red Rock Pit** Permit Action: CN1 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 02A State: Colorado Abbreviation: None
Date: 4/20/2012 County: Routt Filename: M315-02a
User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8U Horsepower: 310
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$65.28	NA
Operating Cost/Hour:	$102.84	100
Ripper Operating Cost/Hour:	$6.49	100
Operator Cost/Hour:	$38.49	NA
Total Unit Cost/Hour:	$213.10	
Total Fleet Cost/Hour:	**$213.10**	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 3.00 acres Rip Depth (ft): 2.00 Volume: 9,680 BCY or CCY

Source of estimated quantity: Mine/Rec. Plan Maps

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	2.56	mph
Average Ripping Width:	7.08	degrees
Average Ripping Length:	50.00	feet
Average Dozer Speed:	88.00	feet
Average Maneuver Time:	0.25	feet
Production per unit area:	0.596	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production:	0.596	Acres/hr
Site Altitude:	6,300	feet
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier
Adjusted Hourly Unit Production:	0.49	Acres/hr
Adjusted Hourly Fleet Production:	**0.49**	Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **6.06** Hours

Unit cost: $430.813 Per acre Total job cost: **$1,292.00**

BULLDOZER WORK

Task description: **Spread topsoil over base area**

Site: **Red Rock Pit** Permit Action: CN1 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #:	03A	State:	Colorado	Abbreviation:	None
Date:	4/20/2012	County:	Routt	Filename:	M315-03a
User:	DMC				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine:	Cat D8T - 8U
Horsepower:	310
Blade Type:	Universal
Attachment:	NA
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$58.56	NA
Operating Cost/Hour:	$102.84	100
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.49	NA

Total unit Cost/Hour: $199.89
Total Fleet Cost/Hour: **$199.89**

MATERIAL QUANTITIES

Initial Volume:	1,613
Swell factor:	1.000
Loose volume:	**1,613** LCY

Source of estimated volume: Approx. 3 ac. @ 4" depth
Source of estimated swell factor: Cat Handbook

HOURLY PRODUCTION

Average push distance: 50 feet
Unadjusted hourly production: 1,627.0 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
Average site altitude: 6,300 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

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:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8593

Adjusted unit production: 1,398.08 LCY/hr
Adjusted fleet production: **1398.08** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.143/LCY

Total job time: **1.15** Hours
Total job cost: **$230.62**

REVEGETATION WORK

Task description: **Revegetate base area in Phase 1**

Site: **Red Rock Pit** Permit Action: CN1 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 04A State: Colorado Abbreviation: None
Date: 4/20/2012 County: Routt Filename: M315-04a
User: DMC

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
Chisel plowing {DMG}	$86.71
Weed control spraying (MEANS 31 31 16.13 3100)	$145.20
Total Tilling Cost/Acre	**$231.91**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Bitterbrush, Antelope	1.00	0.31	$19.83
Indian Ricegrass - Native	2.50	8.09	$16.50
Intermediate Wheatgrass - Oahe	3.00	6.40	$6.42
Slender Wheatgrass - Native	3.00	10.95	$6.60
Western Wheatgrass - Arriba	2.50	6.31	$9.00
Sagebrush, Mountain or Big	0.25	13.20	$8.25
Bluebunch Wheatgrass - Goldar	5.00	16.07	$26.90
Totals Seed Mix	17.25	61.34	**$93.50**

Application

Description	Cost /Acre
Drill seeding {DMG}	$90.11
Total Seed Application Cost/Acre	**$90.11**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 2.0 pt/ac	1.00	ACRE	$2.40	$2.40
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$164.00	$328.00
Total Mulch Materials Cost/Acre				**$330.40**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$65.89
Weed spray, truck, non-aquatic area, nox. [DMG]	$60.19
Total Mulch Application Cost/Acre	**$126.08**

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: 3 Cost /Acre: $872.00
Estimated Failure Rate: 25% Cost /Acre*: $872.00
*Selected Replanting Work Items: TILLING, SEEDING, MULCHING

Initial Job Cost: **$2,616.00**
Reseeding Job Cost: **$654.00**
Total Job Cost: **$3,270.00**
Job Hours: **3.00**

REVEGETATION WORK

Task description: **Revegetate slopes in Phase 1**

Site: **Red Rock Pit** Permit Action: CN1 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 04B State: Colorado Abbreviation: None
Date: 4/20/2012 County: Routt Filename: M315-04b
User: DMC

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
Chisel plowing {DMG}	$86.71
Weed control spraying (MEANS 31 31 16.13 3100)	$145.20
Total Tilling Cost/Acre	**$231.91**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Bitterbrush, Antelope	2.00	0.62	$39.66
Indian Ricegrass - Native	5.00	16.18	$33.00
Intermediate Wheatgrass - Oahe	6.00	12.81	$12.84
Slender Wheatgrass - Native	6.00	21.90	$13.20
Western Wheatgrass - Arriba	5.00	12.63	$18.00
Sagebrush, Mountain or Big	0.50	26.40	$16.50
Bluebunch Wheatgrass - Goldar	10.00	32.14	$53.80
Totals Seed Mix	34.50	122.68	**$187.00**

Application

Description	Cost /Acre
Broadcast seeding [DMG]	$255.76
Total Seed Application Cost/Acre	**$255.76**

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 2.0 pt/ac	1.00	ACRE	$2.40	$2.40
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	$164.00	$328.00
Total Mulch Materials Cost/Acre				**$330.40**

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	$65.89
Weed spray, hand, non-aquatic area, nox. [DMG]	$175.77
Total Mulch Application Cost/Acre	**$241.66**

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: $1,246.73
Estimated Failure Rate: 25% Cost /Acre*: $1,246.73
*Selected Replanting Work Items: TILLING, SEEDING, MULCHING

Initial Job Cost: **$6,233.65**
Reseeding Job Cost: **$1,558.41**
Total Job Cost: **$7,792.06**
Job Hours: **5.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mobilize reclamation crew and equipment**

Site: **Red Rock Pit** Permit Action: CN1 Permit/Job#: M1978315

PROJECT IDENTIFICATION

Task #: 05A State: Colorado Abbreviation: None
Date: 4/20/2012 County: Routt Filename: M315-05a
User: DMC

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/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8U	53.70	$65.28	$125.45	1	$190.73	$125.45	$250.00
Drill/Broadcast Seeder with Tractor	25.00	$39.59	$88.67	1	$128.26	$88.67	$250.00
Subtotals:					**$318.99**	**$214.12**	**$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	$25.30	1	$25.30	$25.30
Subtotals:			**$25.30**	**$25.30**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	CRAIG	
Total one-way travel distance:	25.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$2,230.32	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$28.11	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.56	0.56
Return Time (Hours):	0.56	0.56
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	2.11	1.11

JOB TIME AND COST

Total job time:	**4.22**	Hours
Total job cost:	**$2,258.43**	