COLORADO
Division of Reclamation, Mining and Safety
Department of Natural Resources

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: King Pit	**MINE/PROSPECTING ID#:** M-1987-012	**MINERAL:** Sand and gravel	**COUNTY:** Alamosa
INSPECTION TYPE: Monitoring	**WEATHER:** Clear	**INSP. DATE:** September 5, 2024	**INSP. TIME:** 11:20am
OPERATOR: Southwest Ready-Mix, Inc.	**OPERATOR REPRESENTATIVE:** Paul Bottini	**TYPE OF OPERATION:** 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** **Complete**	**BOND AMOUNT:** $216,866
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
INSPECTOR(S): Chris Girardi Jared Ebert	**INSPECTOR'S SIGNATURE:** Chris Girardi	**SIGNATURE DATE:** November 5, 2024

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: Acid And Toxic Materials
PROBLEM: A fuel spill has occurred at the site which may have impacted soils, surface water or groundwater.
CORRECTIVE ACTIONS: The operator shall immediately remediate the spill and submit a final report to the Division containing at least the following information:
1.) A description of how the spill was cleaned up containing at a minimum - the appropriate maps, volumes removed, and photo documentation.
2.) Evidence in the form of a receipt that the contaminated soil was disposed of by an approved method (such as sent to an approved landfill, land farming, recycling center, etc.).
CORRECTIVE ACTION DUE DATE: 12/1/24

INSPECTION TOPIC: Gen. Compliance With Mine Plan
PROBLEM: The highwalls in the North Pit Area exceed the maximum highwall length of 300 feet in the approved mining plan. The current mine plan 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 or identify how the operator intends to conduct 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 to reflect existing and proposed activities by the corrective action date.

CORRECTIVE ACTION DUE DATE: 12/1/24

INSPECTION TOPIC: Sediment Control
PROBLEM: Erosion gullies and ruts were observed in the South Pit Area. This is a problem at this time for failure to protect the affected land from erosion pursuant to C.R.S. 34-32.5-116(4)(j).
CORRECTIVE ACTIONS: The operator shall provide photo documentation to the Division verifying erosion gullies and ruts have been repaired, and that the site has have been reconstructed and stabilized to prevent erosion damage by the corrective action date.
CORRECTIVE ACTION DUE DATE: 2/3/2025

INSPECTION TOPIC: Signs & Markers
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. The Operator shall, at the entrance of the mine site post a sign, which shall be clearly visible from the access road, with a minimum size equaling one hundred and eighty-seven (187) square inches, such as eleven (11) inches in height and seventeen (17) inches in width, with appropriate font size, 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.
CORRECTIVE ACTIONS: The Operator shall submit photo documentation that a proper sign has been posted as discussed above by the corrective action date.
CORRECTIVE ACTION DUE DATE: 12/1/24

OBSERVATIONS

The King Pit was inspected on September 5, 2024, by Chris Girardi and Jared Ebert with the Division of Reclamation, Mining, and Safety (DRMS) as part of the DRMS's routine monitoring inspection program. The site was last inspected on March 28, 2019. Paul Bottini represented Southwest Ready-Mix, Inc. (Operator) during the inspection. The weather was sunny and warm.

The King Pit is a 112c sand and gravel operation with a permitted area of 344.30 acres and an affected area of approximately 50 acres. The site is located approximately 22 miles northeast of Alamosa, CO. The current land use surrounding the site is rangeland and the approved post-mining land use is rangeland.

There was no mine sign present. This has been cited as a problem. In accordance with Rule 3.1.12, at the entrance of the mine site a clearly visible sign must be posted that displays the Operator and operation name, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board, and the permit number.

Permit boundary markers were observed s (see Photo 1) and appear to be in compliance.

General Compliance With Mine Plan:

The site is located adjacent to the west side of the Sangre De Cristo Mountains, causing the permit area to slope upward to the east. Surrounding the disturbed area is undulating topography and vegetation, including Indian ricegrass, Fourwing salt brush, and Russian thistle (see Photo 3). The only noxious weed observed was Russian thistle, which is an annual weed and not considered a problem at this time. The current disturbed area is approximately 60 acres, consisting of a North Pit Area and a South Pit Area. Large, vegetated topsoil berms (see Photo 1) were located to the west of the North and South Pit Areas and appeared to be stable with adequate vegetation cover. The DRMS observed several portable conveyers, a grizzly screener, a scale house, and a wheel dozer (see Photos 8-10). Stockpiles of processed material and reclamation material were observed at various locations in the pit floor (see Photo 10).

The North Pit Area was active at the time of the inspection. The pit contains a highwall with a length of over 2000 feet that is oriented from south to north and curls at the northern end to the west. The pit floor is approximately 40 feet deep, and the portion where the pit curls in the north (see Photo 15) is approximately twenty-five (25) feet deep. The Operator intends to continue to mine the highwall to the east. The approved mining plan stated the maximum vertical highwall will not exceed forty (40) feet in depth, and a maximum highwall length of three hundred (300) feet. In accordance with C.R.S. 34-32.5-112 (1)(c)(VI), the Operator needs to submit a Technical Revision (TR) to update the mining plan based on the current site activities.

The North Pit Area also contained an area for equipment, discarded materials, drums, and fuel tanks (see Photos 11-14). Within this area, the DRMS observed three empty drums that displayed evidence of leaked fuel oil (see Photos 11-13). This has been cited as a problem. The DRMS has requested that the Operator document how the spill(s) were cleaned up, including maps, volumes, photo documentation, as well as evidence in the form of a receipt that the contaminated soil was disposed of by an approved method.

According to the Operator, the South Pit Area has been inactive for several years due to disputes with the Bureau of Land Management (BLM). As a result of this inactivity, erosion of the pit slope is evident. Three large

gullies have formed perpendicular to the pit slope (see Photos 6-7) due to upland drainage from the east. The DRMS noted that these gullies will need repair and stabilization in accordance with Rule 3.1.6(3). The highwall slopes ranged from 3:1 to 4:1 (horizontal to vertical ratio). However, along the north side of the South Pit highwall, the toe of the highwall was closer to a 1:1 slope (see Photo 5). The Operator claims that the BLM will not allow them to do any earthwork at the site without charging them royalties and therefore they have not been able to repair the erosion. The Operator must work with the BLM to come to a resolution and repair and stabilize the erosion observed at the site.

Financial Warranty:

The Division currently holds a reclamation bond in the amount of $216,866. for this operation. The Division has estimated the reclamation liability at the site, and found it to be $300,109. This is an increase of $83,243 from the bond currently held. The Operator will have 14 days (November 19, 2024), from the issuance of this report to submit any questions regarding the updated cost estimate. If no questions are received, the Division may issue a Surety Increase notice for the difference. The Operator will have 60 days from the date of the notice to submit and obtain acceptance of the increase in financial warranty from the Division in accordance with Rule 4.2.1(2).

PHOTOGRAPHS

Photo 1: Topsoil berms along western portion of disturbed area.

Photo 2: Surrounding undisturbed area vegetation.

Photo 3: South Area Pit Highwall with 3:1 slopes, facing northeast

Photo 4: South Area Pit Highwall with 3:1 slopes, facing west.

Photo 5: South Pit Area Highwall with toe of highwall closer to 1:1 slope.

Photo 6: South Pit Area Highwall with erosion gully in the center, facing east.

Photo 7: South Pit Area Highwall with erosion gully, facing west.

Photo 8: On-site equipment.

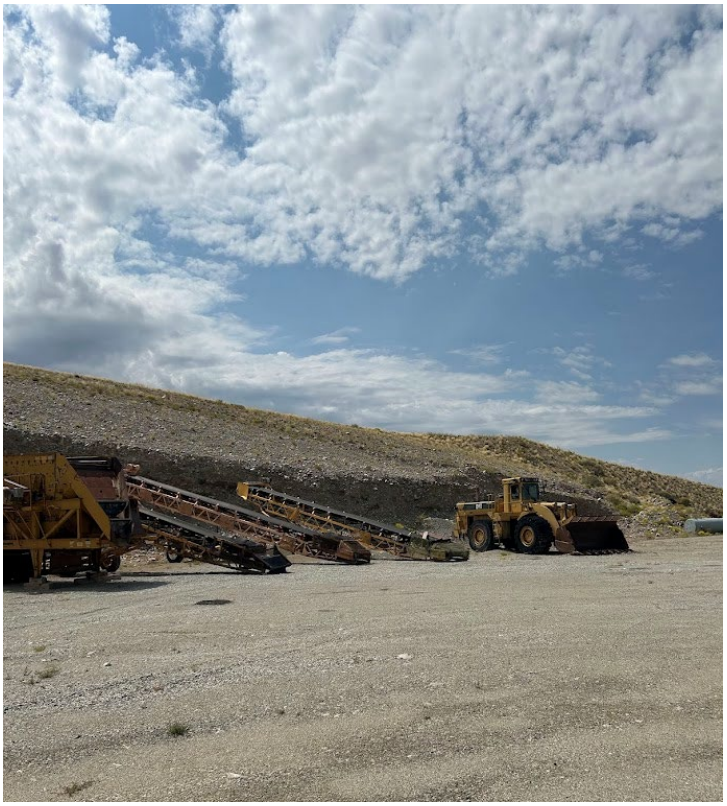

Photo 9: On-site equipment.

Photo 10: Reclamation material stockpiles, including topsoil and mulch.

Photo 11: Oil drum (#1) with evidence of leaking within the North Area Pit.

Photo 12: Oil drum (#2) with evidence of leaking within the North Area Pit.

Photo 13: Oil drum (#3) with evidence of leaking within the North Area Pit.

Photo 14: Empty fuel tank within the North Area Pit.

Photo 15: The northern portion of the North Area Pit Highwall

Photo 16: North Area Pit Highwall, facing east.

GENERAL INSPECTION TOPICS

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

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

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

Inspection Contact Address
Southwest Ready-Mix, Inc.
Southway Construction Company, Inc.
117 White Pine Dr
Alamosa, CO 81101

Enclosure

CC:

COST SUMMARY WORK

Task description: **Reclaim site**

Site: **King Pit** Permit Action: 2024 Inspection Permit/Job#: M1987012

PROJECT IDENTIFICATION

Task #:	000	State:	Colorado	Abbreviation:	None
Date:	10/17/2024	County:	Alamosa	Filename:	M012-000
User:	CMG				

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Reduce highwalls in North Pit Area	DOZER	1	17.45	$5,901
002	South Pit Area - Reduce toe of HW at 1:1 and erosion gullies	SITEMAINTENANCE	1	8.00	$2,573
003	Rip pit floor prior to topsoil replacement	GRADER	1	48.37	$7,616
004	Replace 6 inches of topsoil over affected area	SCRAPER1	2	23.19	$81,225
005	Revegetate permit area	REVEGE	1	60.00	$112,532
006	Mobilize reclamation equipment	MOBILIZE	1	6.96	$20,528
	SUBTOTALS:			**163.97**	**$230,375**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$4,654
Performance bond:	1.05	Total =	$2,419
Job superintendent:	81.99	Total =	$6,499
Profit:	10.00	Total =	$23,038
		TOTAL O & P =	$36,609
	CONTRACT AMOUNT (direct + O & P) =		$266,984

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$500	Total =	$500
Engineering work and/or contract/bid preparation:	7.22	Total =	$19,276
Reclamation management and/or administration:	5.00		$13,349
CONTINGENCY:	0.00	Total =	$0
TOTAL INDIRECT COST =			$69,734
TOTAL BOND AMOUNT (direct + indirect) =			**$300,109**

BULLDOZER WORK

Task description: **Reduce highwalls in North Pit Area**

Site: **King Pit** Permit Action: 2024 Inspection Permit/Job#: M1987012

PROJECT IDENTIFICATION

Task #:	001	State:	Colorado	Abbreviation:	None
Date:	10/17/2024	County:	Alamosa	Filename:	M012-001
User:	CMG				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine:	Cat D8T - 8SU
Horsepower:	310
Blade Type:	Semi-Universal
Attachment:	3-shank ripper
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$173.32	NA
Operating Cost/Hour:	$109.71	100
Ripper own. Cost/Hour:	$14.53	NA
Ripper op. Cost/Hour:	$1.99	25
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $338.13
Total Fleet Cost/Hour: **$338.13**

MATERIAL QUANTITIES

Initial Volume:	7,243
Swell factor:	1.000
Loose volume:	**7,243** LCY

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

HOURLY PRODUCTION

Average push distance: 80 feet
Unadjusted hourly production: 984.2 LCY/hr

Materials consistency description: Compacted fill or embankment 0.9

Average push gradient: -15 %
Average site altitude: 7,800 feet

Material weight: 3,250 lbs/LCY

Weight description: Gravel - Pitrun

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:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.708	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4217

Adjusted unit production: 415.04 LCY/hr

Adjusted fleet production: **415.04** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: $0.815/LCY

Total job time: **17.45** Hours

Total job cost: **$5,901**

SITE MAINTENANCE

Task description: **South Pit Area - Reduce toe of HW at 1:1 and erosion gullies**

Site: **King Pit** Permit Action: 2024 Inspection Permit/Job#: M1987012

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 10/31/2024 County: Alamosa Filename: M012-002
User: CMG

Agency or organization name: DRMS

UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Reduce 1:1 HW toe and fix erosion gullies	8.00	Cat D8T - 8SU	8.00	EA	$321.62	$2,572.96

Job Hours: **8.00** **Total Cost**: **$2,572.96**

MOTOR GRADER WORK

Task description: **Rip pit floor prior to topsoil replacement**

Site: **King Pit** Permit Action: 2024 Inspection Permit/Job#: M1987012

PROJECT IDENTIFICATION

Task #:	003	State:	Colorado	Abbreviation:	None
Date:	10/17/2024	County:	Alamosa	Filename:	M012-003
User:	CMG				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

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

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$69.16	NA
Operating Cost/Hour:	$54.74	100
Ripper Ownership Cost/Hour:	$3.06	NA
Ripper Operating Cost/Hour:	$2.73	100
Operator Cost/Hour:	$27.76	NA
Total Unit Cost/Hour:	$157.45	

Total Fleet Cost/Hour: **$157.45**

MATERIAL QUANTITIES

Total Area to be graded or ripped: 60.00 acres

Source of estimated acreage: Total permit acreage minus area loosened by highwall reduction

HOURLY PRODUCTION

Average Grader Speed:	1.50	mph
Selected Application:	Ripping (0-3 mph) - 1.50	
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: 7800 feet

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

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:	**48.37**	Hours
Unit cost:	$126.94	per acre	Total job cost:	**$7,616**	

SCRAPER TEAMWORK

Task description: **Replace 6 inches of topsoil over affected area**

Site: **King Pit** Permit Action: 2024 Inspection Permit/Job#: M1987012

PROJECT IDENTIFICATION

Task #:	004	State:	Colorado	Abbreviation:	None
Date:	10/31/2024	County:	Alamosa	Filename:	M012-004
User:	CMG				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST Shift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G
-Dozer:	Cat D8T – 8SU
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance –Motor Grader:	CAT 12M
-Water Truck:	Water Tanker, 3,500 Gal.

Cost Breakdown: Scraper Work Team Support Equipment Maintenance Equipment

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	50	NA	NA	25	25
Ownership cost/hour:	$329.66	$173.32	NA	NA	$69.16	$17.11
Operating cost/hour:	$347.48	$54.86	NA	NA	$13.69	$9.20
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. Cost/hour:	NA	$0.00	NA	NA	$0.00	$0.00
Ripper op. cost/hour:	NA	$0.00	NA	NA	$0.00	$0.00
Operator cost/hour:	$30.90	$38.59	NA	NA	$27.76	$0.00
Unit Subtotals:	$708.04	$266.76	NA	NA	$110.61	$26.31
Number of Units:	4	2	0	0	1	1
Group Subtotals:	Work:	$3,365.68	Support:	$0.00	Maint:	$136.92

Total work team cost/hour: **$3,502.60**

MATERIAL QUANTITIES

Initial volume: 50,000 CCY Swell factor: 1.215
Loose volume: **60,750** LCY

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

HOURLY PRODUCTION

Scraper Bowl (volume) Basis:

Material weight:	1,600 lbs/LCY	Struck Volume:	24.00	LCY
Material description:	Topsoil	Heaped Volume:	34.00	LCY
Rated Payload:	81,600 pounds	Average Volume:	29.00	LCY

Payload Capacity: 51.00 LCY Adjusted Capacity: **29.00** LCY

Cycle Time:

Scraper Loading Time: 0.80 Minutes
Maneuver and Spread Time: 0.60 Minutes

Job Condition Correction: Site Altitude: 7800 feet

	Scraper	Push Dozer	Source
Altitude Adj:	0.980	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.813	0.830	

Travel Time:
Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	3.00	3.00	6.00	1477	0.46

Haul Time: **0.46** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	600.00	-3.00	3.00	0.00	2965	0.30

Return Time: **0.30** minutes

Total Scraper team cycle time: **2.16** minutes
Adjusted for job conditions: 654.92 LCY/Hour
Selected Number of Scrapers: 2 Scraper(s)
Adjusted single scraper team (unit) hourly production: 1,309.83 LCY/Hour
Adjusted multiple scraper team (fleet) hourly production: **2,619.67** LCY/Hour

Unadjusted unit production/hour: 805.56 LCY/Hour
Optimal Number of Scrapers per push dozer:

JOB TIME AND COST

Fleet size: 2 Team(s) Total job time: **23.19** Hours

Unit cost: $1.337 /LCY Total job cost: **$81,225**

REVEGETATION WORK

Task description: **Revegetate permit area**

Site: **King Pit** Permit Action: 2024 Inspection Permit/Job#: M1987012

PROJECT IDENTIFICATION

Task #:	005	State:	Colorado	Abbreviation:	None
Date:	10/31/2024	County:	Alamosa	Filename:	M012-005
User:	CMG				

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	120.00	pound	$0.64	$77.04
Triple superphosphate, 0-46-0	90.00	pound	$0.92	$82.50
			Total Fertilizer Materials Cost/Acre	**$159.54**

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	$43.12
Total Fertilizer Application Cost/Acre	**$43.12**

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	$117.61
Total Tilling Cost/Acre	**$117.61**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	3.00	9.71	$51.88
Bottlebrush Squirreltail	0.50	2.20	$12.70
Burnett, Small (or Little) - Delar	2.00	2.53	$8.91
Galleta	3.00	10.95	$166.31
Daisy or Sunflower, Maximillians	1.00	5.67	$56.83
Saltbush, Four Wing	0.50	0.69	$9.94
Globemallow, Scarlet (or copper)	0.50	5.66	$92.78
Saltbush, Shadscale	0.50	0.75	$9.04
Winter Fat	0.50	1.27	$23.36
Sulphur Flower (or Buckwheat)	2.00	4.13	$362.58
Rabbitbrush, Douglas	0.50	7.46	$20.49

Totals Seed Mix	14.00	51.02	**$814.83**

Application

Description	**Cost /Acre**
Drill Seeding (DRMS Survey Cost)	$236.64
Total Seed Application Cost/Acre	**$236.64**

MULCHING and MISCELLANEOUS

Materials

Description	**Units / Acre**	**Unit**	**Cost / Unit**	**Cost /Acre**
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	BALE	$19.71	$19.71
Total Mulch Materials Cost/Acre				**$19.71**

Application

Description	**Cost /Acre**
Crimping, with tractor {DMG survey data}	$85.37
Weed spray, truck, non-aquatic area, nox. [DMG]	$83.26
Total Mulch Application Cost/Acre	**$168.64**

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:	60	Cost /Acre:	$1,560.09
Estimated Failure Rate:	30%	Cost /Acre*:	$1,051.47
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	**$93,605.40**
Reseeding Job Cost:	**$18,926.46**
Total Job Cost:	**$112,532**
Job Hours:	**60.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Mobilize reclamation equipment**

Site: **King Pit** Permit Action: 2024 Inspection Permit/Job#: M1987012

PROJECT IDENTIFICATION

Task #:	006	State:	Colorado	Abbreviation:	None
Date:	10/31/2024	County:	Alamosa	Filename:	M012-006
User:	CMG				

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:	$10.44	$22.18	$23.94
Operating Cost/Hour:	$26.48	$54.55	$55.65
Operator Cost/Hour:	$22.52	$22.52	$22.52
Helper Cost/Hour:	$0.00	$23.53	$23.53
Total Unit Cost/Hour:	$59.44	$122.78	$125.64

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	53.08	$187.85	$125.64	2	$626.98	$251.28	$250.00
Cat 637G	57.28	$329.66	$125.64	4	$1,821.20	$502.56	$250.00
Drill/Broadcast Seeder with Tractor	25.00	$41.02	$59.44	2	$200.92	$118.88	$250.00
CAT 12M	16.01	$69.16	$59.44	1	$128.60	$59.44	$250.00
Subtotals:					**$2,777.70**	**$932.16**	**$1,000.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 3,500 Gal.	$53.90	1	$53.90	$53.90
Generic 7-8 cy, 4x2	$74.39	1	$74.39	$74.39
Lube Truck, 4x2, 190 HP	$41.41	1	$41.41	$41.41
Subtotals:			**$169.70**	**$169.70**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	ALAMOSA	
Total one-way travel distance:	12.00	miles
Average Travel Speed:	50.00	mph
Total Non-Roadable Mob/Demob Cost *	$20,446.93	
'* two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	$81.46	
** one round trip, no haul rig:		

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.24	0.24
Return Time (Hours):	0.24	0.24
Loading Time (Hours):	1.50	NA
Unloading Time (Hours):	1.50	NA
Subtotals:	3.48	0.48

JOB TIME AND COST

Total job time:	**6.96**	Hours
Total job cost:	**$20,528**	