

**STATE OF  
COLORADO**

Simmons - DNR, Leigh &lt;leigh.simmons@state.co.us&gt;

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## M2001097, Fort Lyon - State Pit No. 1, April 2024 Inspection Report

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**Simmons - DNR, Leigh** <leigh.simmons@state.co.us>

Wed, Jul 31, 2024 at 5:56 PM

To: info@flcc.net

Amy

Please find attached the report of the Division's inspection of the Fort Lyon - State Pit No. 1, conducted earlier this year. Note that two problems have been cited, which will require your attention - both of these were discussed with Mr Sniff during the inspection.

I apologise for the delay in sending the report to you.

Please let me know if you have any questions,  
Leigh

Leigh Simmons  
Environmental Protection Specialist



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

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**M2001097\_2024 Inspection Report and RCE.pdf**  
3021K



## 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.

<b>MINE NAME:</b> Fort Lyon - State Pit No. 1	<b>MINE/PROSPECTING ID#:</b> M-2001-097	<b>MINERAL:</b> Limestone (general)	<b>COUNTY:</b> Bent
<b>INSPECTION TYPE:</b> Monitoring	<b>WEATHER:</b> Clear	<b>INSP. DATE:</b> April 16, 2024	<b>INSP. TIME:</b> 12:00
<b>OPERATOR:</b> The Fort Lyon Canal Company	<b>OPERATOR REPRESENTATIVE:</b> Curtis Sniff	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Normal I&E Program	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$65,554.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>INSPECTOR(S):</b> Leigh Simmons	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> July 31, 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:** Financial Warranty

**PROBLEM/POSSIBLE VIOLATION:** Problem: The financial warranty is not adequate to reclaim the site in accordance with the approved reclamation plan. This is a failure to maintain the proper financial warranty amount to complete reclamation of the affected lands pursuant to C.R.S. 34-32.5-117(4)(b) of the Act.

**CORRECTIVE ACTIONS:** Please review the attached Reclamation Cost Estimate and respond with comments within 30 days. After 30 days the Division will initiate a separate Surety Increase notice to increase the financial warranty. The operator will have 60 days from the date on the Surety Increase notice to post the additional financial warranty.

**CORRECTIVE ACTION DUE DATE:** 8/30/24

**INSPECTION TOPIC:** Signs & Markers

**PROBLEM/POSSIBLE VIOLATION:** Problem: The affected area boundary markers were not observed per the requirements of Rule 3.1.12.

**CORRECTIVE ACTIONS:** The boundaries of the affected area must be marked by monuments or other markers that are clearly visible and adequate to delineate such boundaries.

**CORRECTIVE ACTION DUE DATE:** 8/30/24

## **OBSERVATIONS**

This inspection was conducted as part of the normal monitoring program established by the Colorado Division of Reclamation, Mining and Safety (Division). The inspection was conducted by Leigh Simmons of the Division and accompanied by Curtis Sniff of Fort Lyon Canal Company.

The Fort Lyon - State Pit No. 1 is a 112(c) operation with a total permit area of 44.5 acres, located on state-owned land approximately four miles north-east of the city of McClave. The pit is accessed from County Rd 34, north of the intersection with County Road NN.

The permit was last revised with TR-1, in 2013, which allowed for intermittent operation. A surety increase, SI-1, followed the 2019 inspection

The locations of photos taken during the inspection are shown on the screenshot of the field map.

### **Financial Warranty:**

The Division currently holds a reclamation bond of \$65,554 for the site. As is customary, the Reclamation Cost Estimate (RCE) for the site was re-evaluated with current unit costs as of 7/31/2024. The new RCE is attached to this inspection report - note that the tasks were not changed except to update obsolete equipment as necessary. The total required bond amount, including indirect costs, has increased to \$130,734 meaning that the current financial warranty is insufficient; a problem has been cited above.

### **Gen. Compliance With Mine Plan:**

There was no activity at the pit at the time of the inspection. Several stockpiles of material were on site, ready for use.

### **Revegetation:**

The site was very dry, with very little vegetation on the disturbed area. Vegetation on the undisturbed area was predominantly short grasses and was indistinguishable from the surrounding area. Noxious weeds were not observed.

### **Signs and Markers:**

The Mine ID sign was in place. The permit boundary was not marked, a problem has been cited above.

### **Topsoil:**

Topsoil had been stockpiled and was sparsely vegetated.

**MAPS & PHOTOGRAPHS**

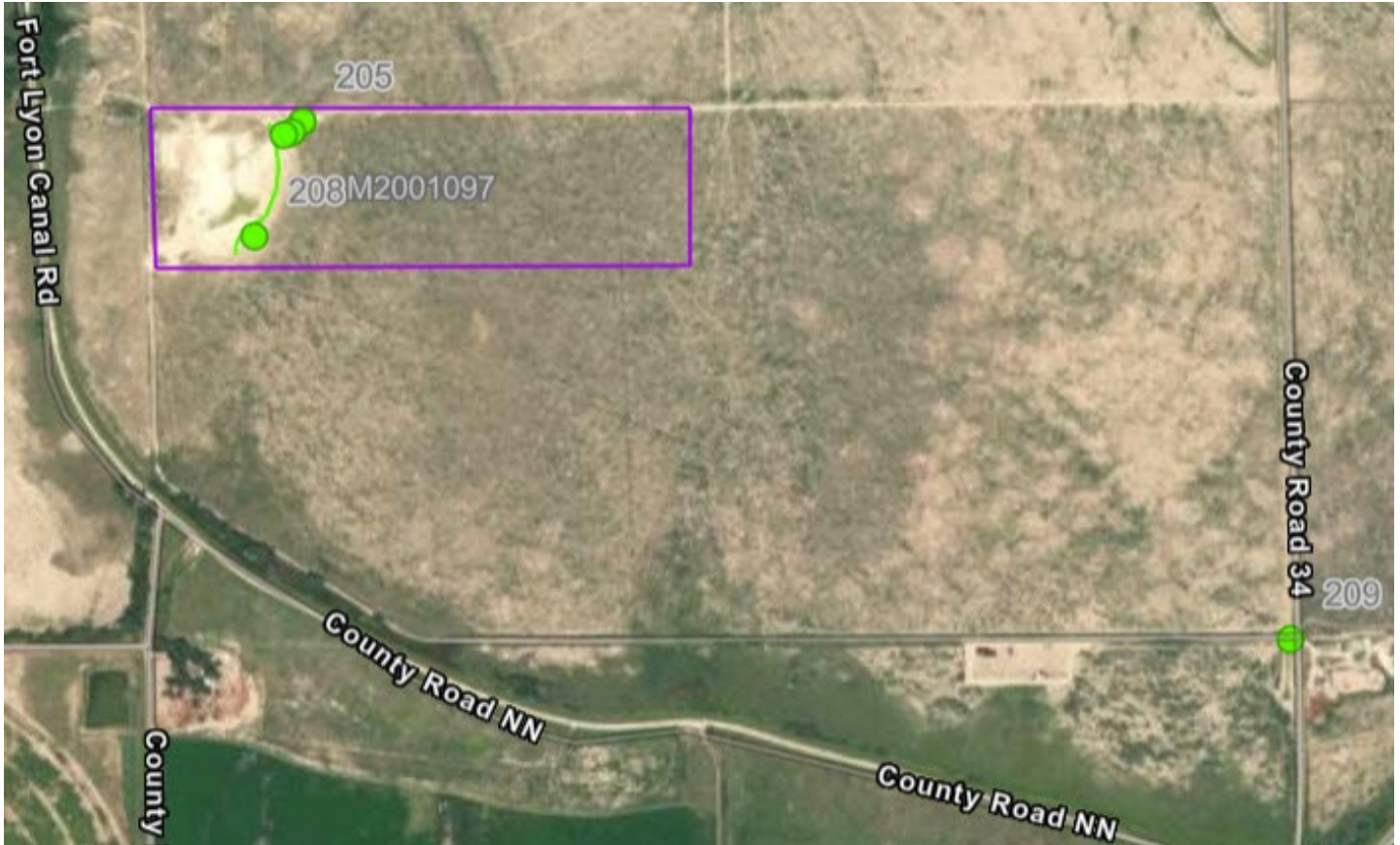


Figure 1: Screenshot of inspection map, with approximate permit boundary (purple) and inspection features (green)



Figure 2: Screenshot of inspection map, showing disturbed area





Figure 3: Mine ID sign (209)





Figure 4: Stockpiled overburden material (205)



Figure 5: Topsoil stripped from right side of image, undisturbed land on left (206)





Figure 6: Highwall, from north (207)



Figure 7: Pit area from highwall (208)





Figure 8: Stockpiled material (208)



Figure 9: Stockpiled topsoil (208)



## **GENERAL INSPECTION TOPICS**

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

(AR) RECORDS----- <u>N</u>	(FN) FINANCIAL WARRANTY----- <u>PB</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>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>N</u>	(RV) REVEGETATION---- <u>Y</u>
(SM) SIGNS AND MARKERS----- <u>PB</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

### **Inspection Contact Address**

Curtis Sniff  
The Fort Lyon Canal Company  
750 Bent Ave.  
Las Animas, CO 81054

Enclosure: 2024 Inspection Reclamation Cost Estimate



## COST SUMMARY WORK

Task description: \_\_\_\_\_

Site: Fort Lyon - State Pit No. 1

Permit Action: 2024 Inspection

Permit/Job#: M2001097

### PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 7/31/2024

County: Bent

Filename: M097-000

User: LDS

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Grade highwall to 3H:1V	DOZER	2	2.62	\$1,686
002	Replace 1 foot overburden on 10 acres	SCRAPER1	1	18.43	\$31,938
003	Replace 1 foot of topsoil on 10 acres	SCRAPER1	1	17.37	\$30,103
004	Revegetate 10 acres	REVEGE	1	10.00	\$19,938
005	Mobilization/Demobilization	MOBILIZE	1	7.20	\$16,706
<b><u>SUBTOTALS:</u></b>				<b>55.62</b>	<b>\$100,371</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$2,027

Performance bond: 1.05

Total = \$1,054

Job superintendent: 27.81

Total = \$2,204

Profit: 10.00

Total = \$10,037

TOTAL O & P = \$15,323

CONTRACT AMOUNT (direct + O & P) = \$115,694

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0

Engineering work and/or contract/bid preparation: 8.00

Total = \$9,256

Reclamation management and/or administration: 5.00

\$5,785

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$30,363

**TOTAL BOND AMOUNT (direct + indirect) = \$130,734**



**BULLDOZER WORK**Task description: Grade highwall to 3H:1VSite: Fort Lyon - State Pit No. 1Permit Action: 2024 InspectionPermit/Job#: M2001097**PROJECT IDENTIFICATION**Task #: 001State: ColoradoAbbreviation: NoneDate: 7/31/2024County: BentFilename: 097-001User: LDSAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 4,375Swell factor: 1.330Loose volume: 5,819 LCYSource of estimated volume: DRMSSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -5 %Average site altitude: 3,950 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	1.000	(EXCL.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7926

Adjusted unit production: 1,109.64 LCY/hr

Adjusted fleet production: **2219.28** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.290/LCY

Total job time: **2.62** Hours

Total job cost: **\$1,686**



**SCRAPER TEAM WORK**Task description: **Replace 1 foot overburden on 10 acres**Site: **Fort Lyon - State Pit No. 1**Permit Action: 2024 InspectionPermit/Job#: M2001097**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 7/31/2024County: BentFilename: 097-002User: LDSAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	CAT 14M
-Water Truck:	Water Tanker, 2,500 Gal.

**Cost Breakdown:****Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	NA	100	100
Ownership cost/hour:	\$442.19	NA	NA	NA	\$129.81	\$11.65
Operating cost/hour:	\$252.89	NA	NA	NA	\$89.13	\$22.45
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	NA	NA	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	NA	NA	\$27.76	\$0.00
Unit Subtotals:	\$725.98	NA	NA	NA	\$246.70	\$34.10
Number of Units:	2	0	0	0	1	1
Group Subtotals:	Work:	\$1,451.96	Support:	\$0.00	Maint:	\$280.80

Total work team cost/hour: **\$1,732.76****MATERIAL QUANTITIES**Initial volume: 16,133

CCY

Swell factor: 1.250Loose volume: **20,166**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>2,650 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Decomposed rock - 25% Rock, 75% Earth</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>30.79 LCY</u>	Adjusted Capacity:	<b><u>29.00</u></b>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 3950 feet

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

Travel Time:Road Condition: Very hard, smooth, asphalt or concrete, no tire penetration 1.2Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	1.00	1.20	2.20	2806	0.72

Haul Time: 0.72 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	-1.00	1.20	0.20	2937	0.42

Return Time: 0.42 minutesTotal Scraper team cycle time: 2.64 minutesAdjusted for job conditions: 547.05 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,094.09 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 1,094.09 LCY/HourUnadjusted unit production/hour: 659.09 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: 18.43 HoursUnit cost: \$1.584 /LCYTotal job cost: \$31,938



**SCRAPER TEAM WORK**Task description: **Replace 1 foot of topsoil on 10 acres**Site: **Fort Lyon - State Pit No. 1**Permit Action: 2024 InspectionPermit/Job#: M2001097**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 7/31/2024County: BentFilename: 097-003User: LDSAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	CAT 14M
-Water Truck:	Water Tanker, 2,500 Gal.

**Cost Breakdown:****Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	NA	NA	100	100
Ownership cost/hour:	\$442.19	NA	NA	NA	\$129.81	\$11.65
Operating cost/hour:	\$252.89	NA	NA	NA	\$89.13	\$22.45
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	NA	NA	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	NA	NA	\$27.76	\$0.00
Unit Subtotals:	\$725.98	NA	NA	NA	\$246.70	\$34.10
Number of Units:	2	0	0	0	1	1
Group Subtotals:	Work:	\$1,451.96	Support:	\$0.00	Maint:	\$280.80

Total work team cost/hour: **\$1,732.76****MATERIAL QUANTITIES**Initial volume: 16,133

CCY

Swell factor: 1.215Loose volume: **19,602**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>51.00 LCY</u>	Adjusted Capacity:	<b><u>29.00</u></b>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 3950 feet

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

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

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	1.00	3.00	4.00	1667	0.59

Haul Time: 0.59 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	800.00	-1.00	3.00	2.00	2914	0.47

Return Time: 0.47 minutesTotal Scraper team cycle time: 2.56 minutesAdjusted for job conditions: 564.14 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,128.28 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 1,128.28 LCY/HourUnadjusted unit production/hour: 679.69 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 1 Team(s)Total job time: 17.37 HoursUnit cost: \$1.536 /LCYTotal job cost: \$30,103



**REVEGETATION WORK**Task description: Revegetate 10 acresSite: Fort Lyon - State Pit No. 1Permit Action: 2024 InspectionPermit/Job#: M2001097**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 7/31/2024County: BentFilename: 097-004User: LDSAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	121.00	pound	\$0.64	\$77.68
Triple superphosphate, 0-46-0	115.00	pound	\$0.92	\$105.42
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$183.10</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$43.12
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$43.12</b>

**TILLING**

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

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Lovington	0.90	14.69	\$24.98
Buffalograss - Native/Plains	0.60	0.58	\$17.10
Sand Dropseed	0.10	11.94	\$1.30
Sideoats Grama - El Reno	1.80	5.91	\$43.96
Western Wheatgrass - Barton	3.20	8.08	\$30.07
<b>Totals Seed Mix</b>	<b>6.60</b>	<b>41.20</b>	<b>\$117.41</b>

**Application**

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Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
<b>Total Seed Application Cost/Acre</b>	<b>\$236.64</b>

**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
<b>Total Mulch Materials Cost/Acre</b>				<b>\$985.56</b>

**Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Weed spray, hand, non-aquatic areas, ann. [DMG]	\$136.48
<b>Total Mulch Application Cost/Acre</b>	<b>\$221.85</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres:	10	Cost /Acre:	\$1,905.29
Estimated Failure Rate:	25%	Cost /Acre*:	\$354.05
*Selected Replanting Work Items:	SEEDING		
Initial Job Cost:	<b>\$19,052.90</b>		
Reseeding Job Cost:	<b>\$885.13</b>		
Total Job Cost:	<b>\$19,938</b>		
Job Hours:	<b>10.00</b>		



**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: Mobilization/DemobilizationSite: Fort Lyon - State Pit No. 1Permit Action: 2024 InspectionPermit/Job#: M2001097**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 7/31/2024County: BentFilename: 097-005User: LDSAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift 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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
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	47.71	\$173.32	\$122.78	2	\$592.20	\$245.56	\$500.00
Cat 631G	52.50	\$442.19	\$125.64	2	\$1,135.66	\$251.28	\$500.00
CAT 14M	23.57	\$129.81	\$59.44	1	\$189.25	\$59.44	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00

Subtotals: **\$2,017.57** **\$615.72** **\$1,500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 2,500 Gal.	\$34.10	1	\$34.10	\$34.10

Subtotals: **\$34.10** **\$34.10**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: LAMAR  
 Total one-way travel distance: 15.00 miles  
 Average Travel Speed: 50.00 mph

Total Non-Roadable Mob/Demob Cost \* \$16,685.39  
 \*\* two round trips with haul rig:  
 Total Roadable Mob/Demob Cost \*\* \$20.46  
 \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.30	0.30
Return Time (Hours):	0.30	0.30
Loading Time (Hours):	1.50	NA
Unloading Time (Hours):	1.50	NA
Subtotals:	3.60	0.60

**JOB TIME AND COST**

Total job time: 7.20 Hours

Total job cost: \$16,706