



STATE OF  
COLORADO

Girardi - DNR, Chris <chris.girardi@state.co.us>

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## North River Pit- August 2025 Inspection Report

1 message

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**Girardi - DNR, Chris** <chris.girardi@state.co.us>

Mon, Sep 8, 2025 at 9:12 AM

To: "Weimer, Sara (APC Construction)" <shaggstrom@apc.us.com>, PFM Consulting <pfmconsultingcompany@gmail.com>

Cc: Jared Ebert - DNR <jared.ebert@state.co.us>

Good morning,

Attached to this email is a pdf of the Division's Inspection Report for the inspection conducted on August 26th, 2025 in response to a Succession of Operator request submitted by Oldcastle SW Group, Inc..

Also attached to this email is a pdf of the Division's Reclamation Cost Estimate. If you have any questions or comments regarding the cost estimate, please let me know.

Hard copies will not be sent unless requested.

Sincerely,

Chris Girardi

Environmental Protection Specialist



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

P: (720) 793-3041

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216

[chris.girardi@state.co.us](mailto:chris.girardi@state.co.us) | <https://drms.colorado.gov/>

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### 2 attachments



**NorthRiverPit\_InspectionReport\_August2025\_SO1\_M1999005.pdf**  
5004K



**NorthRiverPit\_DRMSReclamationCostEstimate2025\_M1999005.pdf**  
288K



## 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> North River Pit	<b>MINE/PROSPECTING ID#:</b> M-1999-005	<b>MINERAL:</b> Sand and gravel	<b>COUNTY:</b> Otero
<b>INSPECTION TYPE:</b> Monitoring	<b>WEATHER:</b> Cloudy	<b>INSP. DATE:</b> August 26, 2025	<b>INSP. TIME:</b> 11:30am
<b>OPERATOR:</b> All-Rite Paving & Redi-Mix, Inc.	<b>OPERATOR REPRESENTATIVE:</b> Jodi Schreiber	<b>TYPE OF OPERATION:</b> 112c - Construction Regular Operation	

<b>REASON FOR INSPECTION:</b> Succession of Operator Request	<b>BOND CALCULATION TYPE:</b> Complete Bond	<b>BOND AMOUNT:</b> \$639,008.00
<b>DATE OF COMPLAINT:</b> NA	<b>POST INSP. CONTACTS:</b> None	<b>JOINT INSP. AGENCY:</b> None
<b>INSPECTOR(S):</b> Chris Girardi	<b>INSPECTOR'S SIGNATURE:</b> 	<b>SIGNATURE DATE:</b> September 8, 2025

**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 has 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, sample locations, analytical data, 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:** 10/8/25

**INSPECTION TOPIC:** Hydrologic Balance

**PROBLEM:** The Operator's substitute water supply plan for the exposed groundwater was valid through March 31, 2025. The Division has not received evidence that the plan was renewed. This is a problem related to 34-32.5-116(4)(h) of the Colorado Revised Statutes and 3.1.6(1)(a) of the Construction Materials Rules and Regulations governing injury to existing water rights.

**CORRECTIVE ACTIONS:** The operator shall demonstrate compliance with the Office of the State Engineer (SEO) by submitting documentation indicating that the substitute water supply plan has been renewed.

**CORRECTIVE ACTION DUE DATE:** 10/8/25

**INSPECTION TOPIC:** Revegetation

**PROBLEM:** Tamarisk (salt cedar) trees are present within or have volunteered into the permit area and are becoming established. This is a problem for failure to employ weed control methods for a state listed noxious weed species within the permitted area, and to reduce the spread of weeds to nearby areas as required by Section 3.1.10 (6) of the rule.

**CORRECTIVE ACTIONS:** The Operator shall implement the approved Weed Control Plan and provide proof to the Division this has been completed. The Division approved a Technical Revision (TR-3) on 2/6/2020, which was a Weed Control Plan. According to the approved plan, if weeds have been identified, the Operator is required to mechanically remove Tamarisk and burn onsite, followed by application of herbicide approved by the Otero County Extension Agent. Please provide a written response to the Division that identifies a timeline for implementation of the approved Weed Control Plan submitted via TR-3.

**CORRECTIVE ACTION DUE DATE:** 10/8/25

## **OBSERVATIONS**

The North River Pit permit was inspected on August 26, 2025, by Chris Girardi and with the Division of Reclamation, Mining, and Safety ("DRMS" or "Division") in response to a Succession of Operator (SO) application submitted by Oldcastle SW Group, Inc. (Applicant) to transfer the permit from All-Rite Paving & Redi-Mix, Inc. (Operator). The site was last inspected on January 28, 2020. Sara Weimer represented the Applicant during the inspection. Jodi Schreiber represented the Operator during the inspection. The weather was cloudy and cool.

The North River Pit is a 112c sand and gravel wet mining operation with a permitted acreage of 275.50 acres and an affected area of approximately 48 acres. The site is located approximately 2 miles northeast of La Junta, CO. The current land surrounding the site is industrial and the approved post-mining land use is rangeland on the south side and wildlife habitat on the north side.

A mine identification sign was located at the entrance to the site in compliance with Rule 3.1.12 (see Photo 1). Access to the primary mining area is via a dirt road, which contains a scale house (see Photo 2). T-post permit boundary markers were observed and appear to be in compliance.

### **General Compliance With Mine Plan:**

The site is located along the Arkansas River, with the river bisecting the permit area into a North Area and a South Area. Dominant vegetation observed includes Blue grama, Little barley, Cottonwood trees, sunflowers, Kochia, and Salt cedar (see Photos 14-15). The current affected area is approximately 48 acres, with the North Area having disturbed 29 acres, while the South Area has 18 acres of disturbance. The mining plan is a phased approach with a total of 5 distinct phase acres within the North Area. Mining has only been conducted in the Phase 1 and 2 area, as well as the disturbance in the South Side Area.

The Operator is approved to conduct wet mining into the water table in the North Area, as excavations have created two groundwater ponds (see Photos 3-4, Figure 1). The approved reclamation includes leaving unlined, open groundwater ponds in the North Area, to which the Operator has been bonded by the DRMS for backfilling of the current open groundwater ponds. Advancement into the subsequent mining phases will create additional exposed groundwater ponds. The groundwater pond shorelines have been mined to gentle slopes of less than 3H:1V configuration (see Photo 3). The larger pond also contains a floating pump station for dewatering (see Photo 3). Along the southeast shoreline of the groundwater pond, a significant amount of imported material has been placed, predominantly recycled concrete, asphalt, rock slabs, and bricks (see Photo 4). All material observed appears to be inert material, as the Operator was approved to import clean, inert material from outside the permit via a Technical Revision (TR-2).

The North Area also contained several stockpiles of material (see Photos 5, 8-9). The operation was inactive at the time of the inspection. According to the Operator, the groundwater pond hasn't been mined for several years, as they only conduct processing of aggregate using the wash plant. The equipment observed includes a dragline, a wash plant, conveyers, a grizzly screener, and a wheel loader (see Photos 5-10). Within this area, the DRMS observed an empty fuel tank that displayed evidence of leaked fuel oil within and near the horse trough (see Photos 9-10). The soil observed exhibited hydrocarbon staining and odor. This has been cited as a problem. The DRMS requests that the Operator remediate the spill and document how the spill was 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. The North Area also contained a laydown area with old equipment and materials, including conveyers, an old cane, a few tires, and several empty barrels that showed no evidence of spills (see Photos 11-13).

The South Area has not been disturbed in several years and was not observed during this inspection due to difficulty gaining access. Wet mining is not conducted in this area. Historical Google Earth Imagery indicates this area has not been mined for at least 10 years, as the Operator previously mined several highwall areas.

In order to conduct wet mining into the groundwater table and remain in compliance with the Office of the State Engineer (SEO), the Operator has maintained a Substitute Water Supply Plan to account for evaporative loss of groundwater. The 2024 Substitute Water Supply Plan accounted for 7.24 acres of exposed groundwater. As previously stated in this report, the Operator maintains a reclamation bond that accounts for the backfilling of the exposed groundwater ponds. However, the Operator's substitute water supply plan was valid through March 31, 2025. The Division has not received documentation indicating that the plan was renewed. This is cited as a problem related to 34-32.5-116(4)(h) of the Colorado Revised Statutes and 3.1.6(1)(a) of the Construction Materials Rules and Regulations governing injury to existing water rights. The Operator shall demonstrate compliance with the Office of the State Engineer (SEO) by submitting documentation that the substitute water supply plan has been renewed.

The Division observed a significant amount of Salt Cedar trees along the north side of the Arkansas River, as well as sporadic patches within the undisturbed area on the north side (see Photos 14-15). This has been cited as a problem. In accordance with Rule 3.1.10(6) of the Construction Materials Rules and Regulations governing weed control, the DRMS will require the Operator to initiate the weed control plan approved in TR-3 to control the current infestation.

#### Financial Warranty:

The Division currently holds a reclamation bond in the amount of \$431,039. for this operation. The Division has estimated the reclamation liability at the site and found it to be \$639,008. This is an increase of \$207,969 from the bond currently held. The Applicant will be required to post a financial warranty in the amount of \$639,008 in order to complete the permit transfer. If the Applicant elects not to complete the permit transfer, then a Surety Increase will be submitted by the Division and 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).

This concludes the Division's inspection report; a subset of photos was taken during the time of the inspection are included below. If you need additional information or have any questions, please contact me at the Division of Reclamation, Mining, and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at (720) 793-3041 or by email at [chris.girardi@state.co.us](mailto:chris.girardi@state.co.us).

## PHOTOGRAPHS



Photo 1: Mine entrance sign, facing south.



Photo 2: Scale house within the North Area along the access road, facing north.





Photo 3: View of the open groundwater pond within the North Area, including the floating pump station and a pile of imported concrete material, facing northeast.



Photo 4: View along the groundwater pond of the concrete and other inert material imported from outside the permit area, facing east.





Photo 5: View of the dragline and stockpiles with the North Area, facing south.



Photo 6: View of a CAT 950G wheel loader with the North Area.





Photo 7: View of a Grizzly screener and conveyers, facing west.



Photo 8: View of the wash plant and material stockpiles with the North Area adjacent to the west of the groundwater pond, facing west.





Photo 9: View of a porta potty, rusty structure, and a storage tank, facing northeast.



Photo 10: View of a storage tank within a horse trough, with observed hydrocarbon staining and odor, facing west.





Photo 11: View of old mining equipment and conveyers within the North Area near the northwest permit boundary, facing east.



Photo 12: Old mining equipment, conveyers, and tires within the North Area, facing south.





Photo 13: View of old mining equipment and empty plastic barrels, facing east.



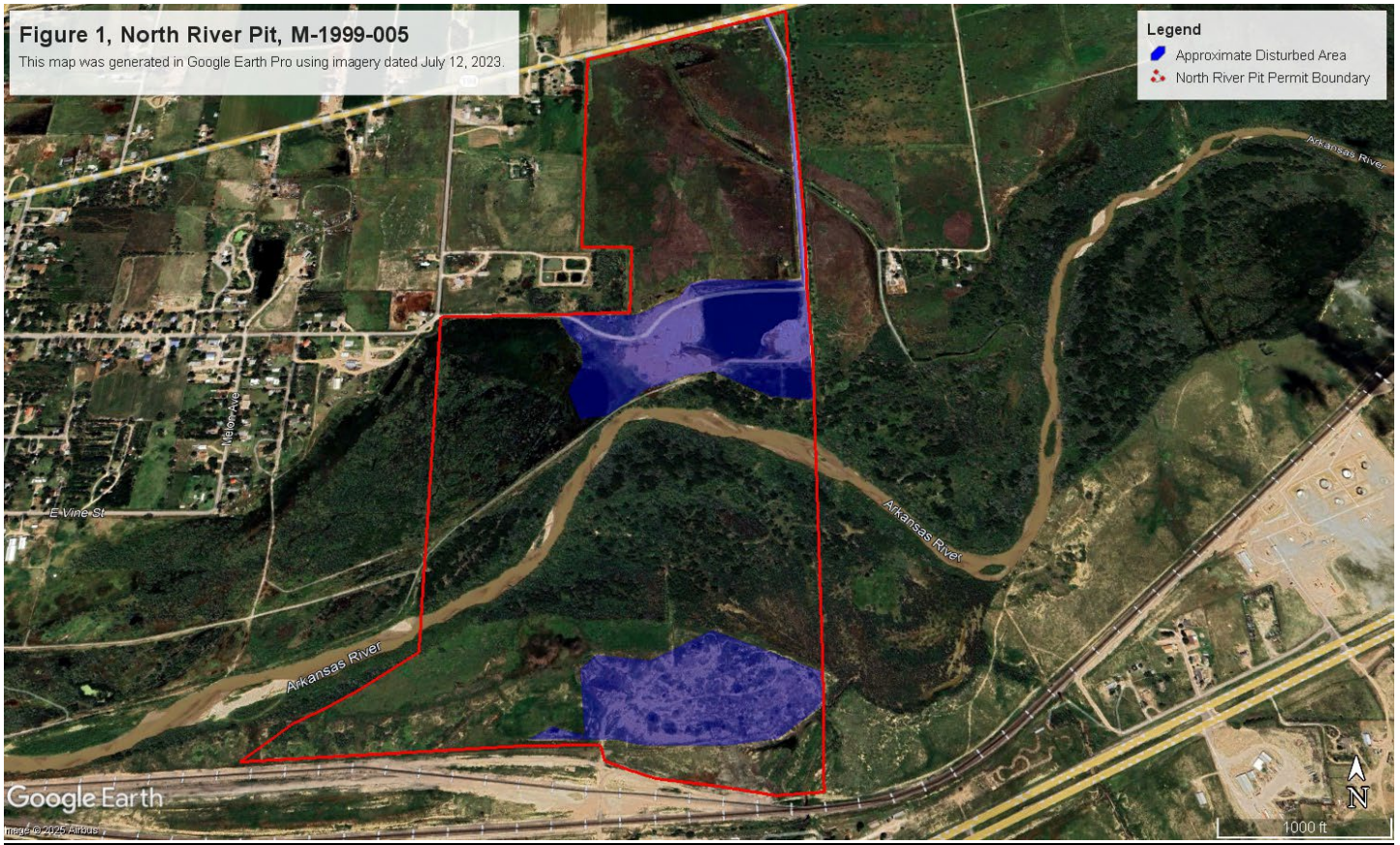
Photo 14: View of Salt cedar adjacent to the south of the groundwater pond within the North Area, facing south.





Photo 15: View of Salt cedar and Kochia adjacent to the south of the groundwater pond within the North Area, facing south.







### 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>Y</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>PB</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>Y</u>	(TS) TOPSOIL----- <u>Y</u>
(MP) GENL MINE PLAN COMPLIANCE- <u>Y</u>	(FW) FISH & WILDLIFE----- <u>Y</u>	(RV) REVEGETATION---- <u>PB</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>PB</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

Jodi Schreiber  
All-Rite Paving & Redi-Mix, Inc.  
P.O. Box 165  
Canon City, CO 81215

Enclosure: DRMS Reclamation Cost Estimate

CC:  
Jared Ebert, DRMS  
Sara Weimer, Oldcastle SW Group, Inc.

COST SUMMARY WORK

Task description: Reclamation

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

**PROJECT IDENTIFICATION**

Task #: 000 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

Agency or organization name: DRMS

**TASK LIST (DIRECT COSTS)**

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Removal of scale	DEMOLISH	1	8.00	\$2,025
002	Grade highwalls to 3H:1V in South Side Area	DOZER	1	9.07	\$2,974
003	Backfill 7.42 acres of exposed groundwater	SCRAPER1	2	93.18	\$340,745
004	Replace topsoil on 29 acres (N Side)	SCRAPER1	1	43.09	\$67,463
005	Replace topsoil on 18 acres (South Side)	SCRAPER1	1	13.86	\$21,706
006	Revegetate 29 acres (North Side)	REVEGE	1	29.00	\$25,452
007	Revegetate 18 acres (South Side)	REVEGE	1	18.00	\$15,798
008	Mobilization/Demobilization	MOBILIZE	1	8.24	\$33,336
<b><u>SUBTOTALS:</u></b>				<b>222.44</b>	<b>\$509,499</b>

**INDIRECT COSTS**

**OVERHEAD AND PROFIT:**

Liability insurance:	2.02	Total =	\$10,292
Performance bond:	1.05	Total =	\$5,350
Job superintendent:	111.22	Total =	\$8,356
Profit:	10.00	Total =	\$50,950
		TOTAL O & P =	\$74,947
CONTRACT AMOUNT (direct + O & P) =			\$584,446

**LEGAL - ENGINEERING - PROJECT MANAGEMENT:**

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$24,839
Reclamation management and/or administration:	5.00		\$29,222

CONTINGENCY:	0.00	Total =	\$0
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TOTAL INDIRECT COST =	\$129,509
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TOTAL BOND AMOUNT (direct + indirect) =	\$639,008
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DEMOLITION WORK

Task description: Removal of scale

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

**PROJECT IDENTIFICATION**

Task #: 001 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

Agency or organization name: DRMS

**UNIT COSTS** **Location adjustment: 88.00 %**

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale	92' x 10' x 3'	Plant (1C) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	2,760.00	CF	\$0.74	\$2,055.92
Scale House	17' x 11 'x 10'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 200 ft. push	1,040.00	CF	\$0.24	\$244.92

Job Hours:	<u>8.00</u>	Subtotal (unadjusted):	<u>\$2,300.84</u>	Total Cost (adjusted for location):	<u>\$2,024.74</u>
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## BULLDOZER WORK

Task description: Grade highwalls to 3H:1V in South Side Area

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

### PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

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:	<u>\$179.60</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$110.45</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$38.02</u>	<u>NA</u>

Total unit Cost/Hour: \$328.07  
Total Fleet Cost/Hour: \$328.07

### MATERIAL QUANTITIES

Initial Volume: 4,625  
Swell factor: 1.250  
Loose volume: 5,781 LCY

Source of estimated volume: 2,220 ft total L x 15 ft H, from 1H:1V= 4,625 CY  
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: -5 %  
Average site altitude: 4,040 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% Earth

<u>Job Condition</u>	<u>Correction Factor</u>	<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	1.115	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4555

Adjusted unit  
production: 637.70 LCY/hr

Adjusted fleet  
production: **637.7** LCY/hr

#### **JOB TIME AND COST**

Fleet size: 1 Dozer(s)  
Unit cost: \$0.514/LCY

Total job time: **9.07** Hours  
Total job cost: **\$2,974**

## SCRAPER TEAM WORK

Task description: Backfill 7.42 acres of exposed groundwater

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

### PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST Shift basis: 1 per day

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	Cat D8T - 8SU
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	100	NA	NA	25	25
Ownership cost/hour:	\$462.75	\$179.60	NA	NA	\$101.88	\$12.20
Operating cost/hour:	\$260.25	\$110.45	NA	NA	\$18.29	\$5.37
%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:	\$59.78	\$38.02	NA	NA	\$60.00	\$0.00
Unit Subtotals:	\$782.78	\$328.07	NA	NA	\$180.17	\$17.57
Number of Units:	4	1	0	0	1	1
Group Subtotals:	Work:	\$3,459.19	Support:	\$0.00	Maint:	\$197.74

Total work team cost/hour: \$3,656.93

### MATERIAL QUANTITIES

Initial volume: 214,557 CCY Swell factor: 1.125  
Loose volume: 241,377 LCY

Source of estimated volume: 7.42 ac x avg 25' deep (un-augmented)  
Source 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: 30.79 LCY      Adjusted Capacity: 29.00 LCY

Cycle Time:

Scraper Loading Time: 0.80 Minutes  
 Maneuver and Spread Time: 0.70 Minutes

Job Condition Correction: Site Altitude: 4040 feet

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

Travel Time:

Road Condition: Hard, smooth, stabilized, surfaced, watered, maintained 2.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	350.00	1.00	2.00	3.00	2227	0.45

Haul Time: 0.45 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	350.00	-1.00	2.00	1.00	2937	0.28

Return Time: 0.28 minutes

Total Scraper team cycle time: 2.23 minutes  
 Adjusted for job conditions: 647.62 LCY/Hour  
 Selected Number of Scrapers: 2 Scraper(s)  
 Adjusted single scraper team (unit) hourly production: 1,295.25 LCY/Hour  
 Adjusted multiple scraper team (fleet) hourly production: 2,590.49 LCY/Hour

Unadjusted unit production/hour: 780.27 LCY/Hour

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

**JOB TIME AND COST**

Fleet size: 2 Team(s)      Total job time: 93.18 Hours

Unit cost: \$1.412 /LCY      Total job cost: \$340,745



## SCRAPER TEAM WORK

Task description: Replace topsoil on 29 acres (North Side)

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

### PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

Agency 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:	NA
-Water Truck:	NA

### 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	NA	NA
Ownership cost/hour:	\$462.75	NA	NA	NA	NA	NA
Operating cost/hour:	\$260.25	NA	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	\$59.78	NA	NA	NA	NA	NA
Unit Subtotals:	\$782.78	NA	NA	NA	NA	NA
Number of Units:	2	0	0	0	0	0
Group Subtotals:	Work:	\$1,565.56	Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: \$1,565.56

### MATERIAL QUANTITIES

Initial volume: 46,777 CCY Swell factor: 1.215  
Loose volume: 56,834 LCY

Source of estimated volume: 29 acres x 1 foot depth  
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: Top Soil Heaped Volume: 34.00 LCY

Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>51.00 LCY</u>	Adjusted Capacity:	<u>29.00</u>	LCY

Cycle Time:

Scraper Loading Time:	<u>0.80</u> Minutes
Maneuver and Spread Time:	<u>0.70</u> Minutes

Job Condition Correction: Site Altitude: 4040 feet

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

Travel Time:

Road Condition: Hard, smooth, stabilized, surfaced, watered, maintained 2.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	1.00	2.00	3.00	2227	0.39

Haul Time: 0.39 minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	400.00	-1.00	2.00	1.00	2937	0.30

Return Time: 0.30 minutes

Total Scraper team cycle time:	<u>2.19</u>	minutes
Adjusted for job conditions:	<u>659.45</u>	LCY/Hour
Selected Number of Scrapers:	<u>2</u>	Scraper(s)
Adjusted single scraper team (unit) hourly production:	<u>1,318.90</u>	LCY/Hour
Adjusted multiple scraper team (fleet) hourly production:	<u>1,318.90</u>	LCY/Hour

Unadjusted unit production/hour: 794.52 LCY/Hour

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

**JOB TIME AND COST**

Fleet size:	<u>1</u>	Team(s)	Total job time:	<u>43.09</u>	Hours
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Unit cost:	<u>\$1.187</u>	/LCY	Total job cost:	<u>\$67,463</u>
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## SCRAPER TEAM WORK

Task description: Replace topsoil on 18 acres (South Side)

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

### PROJECT IDENTIFICATION

Task #: 005 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST Shift basis: 1 per day

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance –Motor Grader:	NA
-Water Truck:	NA

### 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	NA	NA
Ownership cost/hour:	\$462.75	NA	NA	NA	NA	NA
Operating cost/hour:	\$260.25	NA	NA	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	NA	NA	NA	NA
Ripper op. cost/hour:	NA	NA	NA	NA	NA	NA
Operator cost/hour:	\$59.78	NA	NA	NA	NA	NA
Unit Subtotals:	\$782.78	NA	NA	NA	NA	NA
Number of Units:	2	0	0	0	0	0
Group Subtotals:	Work:	\$1,565.56	Support:	\$0.00	Maint:	\$0.00

Total work team cost/hour: \$1,565.56

### MATERIAL QUANTITIES

Initial volume: 14,520 CCY Swell factor: 1.215  
Loose volume: 17,642 LCY

Source of estimated volume: 18 acres x 6 inches depth  
Source 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:	<u>29.00</u>	LCY

**Cycle Time:**

Scraper Loading Time: 0.80 Minutes  
 Maneuver and Spread Time: 0.70 Minutes

**Job Condition Correction:** Site Altitude: 4040 feet

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

**Travel Time:**

Road Condition: Hard, smooth, stabilized, surfaced, watered, maintained 2.0

**Haul Route:**

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	1.00	2.00	3.00	2227	0.43

Haul Time: 0.43 minutes

**Return Route:**

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	-1.00	2.00	1.00	2937	0.34

Return Time: 0.34 minutes

Total Scraper team cycle time: 2.27 minutes  
 Adjusted for job conditions: 636.21 LCY/Hour  
 Selected Number of Scrapers: 2 Scraper(s)  
 Adjusted single scraper team (unit) hourly production: 1,272.42 LCY/Hour  
 Adjusted multiple scraper team (fleet) hourly production: 1,272.42 LCY/Hour

Unadjusted unit production/hour: 766.52 LCY/Hour

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

**JOB TIME AND COST**

Fleet size: 1 Team(s) Total job time: 13.86 Hours

Unit cost: \$1.230 /LCY Total job cost: \$21,706



REVEGETATION WORK

Task description: Revegetate 29 acres (North Side)

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

**PROJECT IDENTIFICATION**

Task #: 006 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

Agency or organization name: DRMS

**FERTILIZING**

**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	40.00	pound	\$0.66	\$26.29
Triple superphosphate, 0-46-0	40.00	pound	\$0.94	\$37.54
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$63.84</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$46.17
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$46.17</b>

**TILLING**

Description	Cost /Acre
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Switchgrass - Blackwell	1.00	8.93	\$13.54
Blue Grama - Lovington	0.30	4.90	\$8.53
Little Bluestem - Pastura	1.40	8.36	\$22.74
Sideoats Grama - El Reno	1.80	5.91	\$45.01
Galleta	0.40	1.46	\$22.71
Western Wheatgrass - Arriba	3.20	8.08	\$29.60
<b>Totals Seed Mix</b>	<b>8.10</b>	<b>37.63</b>	<b>\$142.12</b>

**Application**

<b>Description</b>	<b>Cost /Acre</b>
Drill seeding (MEANS 32 92 19.13 0020)	\$472.00
<b>Total Seed Application Cost/Acre</b>	<b>\$472.00</b>

### **MULCHING and MISCELLANEOUS**

#### **Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

#### **Application**

<b>Description</b>	<b>Cost /Acre</b>
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</b>

### **NURSERY STOCK PLANTING**

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

### **JOB TIME AND COST**

No. of Acres:	29	Cost /Acre:	\$724.13
Estimated Failure Rate:	25%	Cost /Acre*:	\$614.12
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	<b>\$20,999.77</b>
Reseeding Job Cost:	<b>\$4,452.37</b>
Total Job Cost:	<b>\$25,452</b>
Job Hours:	<b>29.00</b>

REVEGETATION WORK

Task description: Revegetate 18 acres (South Side)

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

**PROJECT IDENTIFICATION**

Task #: 007 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
User: CMG

Agency or organization name: DRMS

**FERTILIZING**

**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	40.00	pound	\$0.66	\$26.29
Triple superphosphate, 0-46-0	40.00	pound	\$0.94	\$37.54
			<b>Total Fertilizer Materials Cost/Acre</b>	<b>\$63.84</b>

**Application**

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$46.17
<b>Total Fertilizer Application Cost/Acre</b>	<b>\$46.17</b>

**TILLING**

Description	Cost /Acre
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Switchgrass - Blackwell	1.00	8.93	\$13.54
Blue Grama - Lovington	0.30	4.90	\$8.53
Little Bluestem - Pastura	1.40	8.36	\$22.74
Sideoats Grama - El Reno	1.80	5.91	\$45.01
Galleta	0.40	1.46	\$22.71
Western Wheatgrass - Arriba	3.20	8.08	\$29.60
<b>Totals Seed Mix</b>	<b>8.10</b>	<b>37.63</b>	<b>\$142.12</b>

**Application**



<b>Description</b>	<b>Cost /Acre</b>
Drill seeding (MEANS 32 92 19.13 0020)	\$472.00
<b>Total Seed Application Cost/Acre</b>	<b>\$472.00</b>

### **MULCHING and MISCELLANEOUS**

#### **Materials**

<b>Description</b>	<b>Units / Acre</b>	<b>Unit</b>	<b>Cost / Unit</b>	<b>Cost /Acre</b>
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

#### **Application**

<b>Description</b>	<b>Cost /Acre</b>
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</b>

### **NURSERY STOCK PLANTING**

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

### **JOB TIME AND COST**

No. of Acres:	18	Cost /Acre:	\$724.13
Estimated Failure Rate:	25%	Cost /Acre*:	\$614.12
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	<b>\$13,034.34</b>
Reseeding Job Cost:	<b>\$2,763.54</b>
Total Job Cost:	<b>\$15,798</b>
Job Hours:	<b>18.00</b>

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: Mobilization/Demobilization

Site: North River Pit Permit Action: 2025 Bond Update Permit/Job#: M1999005

**PROJECT IDENTIFICATION**

Task #: 008 State: Colorado Abbreviation: None  
Date: 9/8/2025 County: Otero Filename: M1999005  
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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
Ownership Cost/Hour:	\$21.47	\$38.32	\$48.96
Operating Cost/Hour:	\$31.47	\$60.11	\$65.86
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$22.25	\$22.25
Total Unit Cost/Hour:	\$75.46	\$143.20	\$159.59

**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	\$194.88	\$159.59	2	\$708.94	\$319.18	\$500.00
CAT 14M	23.57	\$101.88	\$75.46	2	\$354.68	\$150.92	\$250.00
Cat 631G	52.50	\$462.75	\$159.59	4	\$2,489.36	\$638.36	\$500.00
Drill/Broadcast Seeder with Tractor	25.00	\$5.99	\$75.46	2	\$162.90	\$150.92	\$250.00

Subtotals: 

<b>\$3,715.88</b>	<b>\$1,259.38</b>	<b>\$1,500.00</b>
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**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.	\$33.68	1	\$33.68	\$33.68
Light Duty Pickup, 4x4, 3/4 T.	\$22.72	1	\$22.72	\$22.72
Lube Truck, 4x2, 190 HP	\$40.52	1	\$40.52	\$40.52

Subtotals: 

<b>\$96.92</b>	<b>\$96.92</b>
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**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>LA JUNTA</u>	
Total one-way travel distance:	<u>3.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph
 Total Non-Roadable Mob/Demob Cost *	 <u>\$33,324.07</u>	
* * two round trips with haul rig:		
Total Roadable Mob/Demob Cost **	<u>\$11.63</u>	
** one round trip, no haul rig:		

**Transportation Cycle Time:**

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.06	0.06
Return Time (Hours):	0.06	0.06
Loading Time (Hours):	2.00	NA
Unloading Time (Hours):	2.00	NA
Subtotals:	4.12	0.12

**JOB TIME AND COST**

Total job time:	<u>8.24</u>	Hours
Total job cost:	<u>\$33,336</u>	