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: The Broyles Pit	**MINE/PROSPECTING ID#:** M-2004-028	**MINERAL:** Gravel	**COUNTY:** Las Animas
INSPECTION TYPE: Monitoring	**WEATHER:** Clear	**INSP. DATE:** March 26, 2025	**INSP. TIME:** 08:31
OPERATOR: Michele M and Frederick V Eichler IV	**OPERATOR REPRESENTATIVE:** Seth Crummer	**TYPE OF OPERATION:** 112c - Construction Regular Operation	

REASON FOR INSPECTION: Normal I&E Program	**BOND CALCULATION TYPE:** Complete Bond	**BOND AMOUNT:** $12,023.61
DATE OF COMPLAINT: NA	**POST INSP. CONTACTS:** None	**JOINT INSP. AGENCY:** None
INSPECTOR(S): Amber M. Gibson	**INSPECTOR'S SIGNATURE:** 	**SIGNATURE DATE:** April 17, 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: 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 either implement the existing weed control plan, or develop a weed control and management plan in accordance with Section 3.1.10 (6) of the Rule. This plan should be developed in consultation with the county extension agency, or weed control district office and should include specific control measures to be applied, a schedule for when control measures will be applied and a post-treatment monitoring plan. The Operator shall provide the Division with evidence that the weeds have been eradicated by the corrective action date.
CORRECTIVE ACTION DUE DATE: 6/17/25

INSPECTION TOPIC: Sediment Control
PROBLEM: Erosion gullies and ruts were observed on-site. 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: 6/17/25

INSPECTION TOPIC: Signs & Markers
PROBLEM: The mine identification sign contains incorrect information regarding the Permittee.
CORRECTIVE ACTIONS: The Operator shall, at the entrance of the mine site, post a sign which shall be clearly visible from the access road with the following: the name of the operator, a statement that a reclamation permit for the operation has been issued by the Colorado Mined Land Reclamation Board; and the permit number. The Operator shall submit photo documentation that a proper sign has been posted by the corrective action date.
CORRECTIVE ACTION DUE DATE: 6/17/25

OBSERVATIONS

The Broyles Pit was inspected by Amber Gibson with the Division of Reclamation, Mining and Safety (Division/DRMS). The inspection was completed as part of the Division's routine monitoring inspection program. The site was previously inspected by the Division on November 3, 2020 as a routine monitoring inspection. Seth Crummer (representing the Operator/Permittee), accompanied me during the inspection. The sky was clear, and the weather was warm.

The Broyles Pit is located in Las Animas County approximately 14 miles northeast of Trinidad, Colorado. The gated entrance to the pit is located on the south side of County Road 40. The road leading to the Pit is the 0.5-mile-long County Road 40.2, and there is an access road extending from east to west within the permit boundary. The pit is a 12.96-acre 112c Construction Materials Reclamation Permit. The primary commodity mined at the site was gravel. The approved post-mining land use is rangeland.

Availability Of Records:
The annual report, map, and fee are paid through September 21, 2025. There are no outstanding infractions. This permit was revised via a conversion application (CN1) in 2011. A Succession of Operators (SO1) revision was approved in 2017.

The Division found that the recent **annual report maps were inadequate**.

1. For the 2025 submittal of the annual report map please refer to the Annual Report Form. The Annual Report Form states that as required by the Colorado Land Reclamation Act for the Extraction of Construction Materials (C.R.S. 34-32.5-116), the Permittee shall attach a map to the report that accurately depicts:

   i. the permit boundary,
   ii. the current affected area boundary and;
   iii. the location of the acreages specified in Items no. 8-12 and 15.

   Items 8-12 and 15 on the Annual Report Form are listed below.
   #8. Number of acres currently affected (mining + incomplete and or unreleased reclamation).
   #9. Number of acres that were newly affected during the current report year.
   #10. Number of acres that were reclaimed during the current report year.
   #11. Estimated new acreage to be affected in the next report year.
   #12. Estimated acres to be reclaimed in the next report year.
   #15. Is adequate topsoil reserved for reclamation, based on your approved permit?

2. Please also include the following features:
   - A google earth background image
   - A north arrow and scale
   - A legend indicating the polygons and/or lines for the features identified in items 8-12 and 15 on the form OR include clear labels for each feature.

Backfilling and Grading:
The Broyles Pit is divided into four permit areas: West Pit, East Pit, Stockpile Area, and haul road. During the Division's previous inspection, the slope in the East Pit had been backfilled, graded, and seeded – however, no vegetation had established. Since the last inspection, the slope in the East Pit has experienced excessive erosion.

The northeast side of the pit has a large erosion gully beginning above the permit boundary along the side of County Road 40.2 and extending to the toe of the pit (Photo 1 and Maps 1-2). The top of the East Pit slope has also sloughed down, and smaller ruts and gullies are observed along the extent of the slope (Photos 2-3). There is another deeper erosion gully on the northwest corner of the East Pit as well (Photo 4). The erosion in the East Pit **has been cited as a problem above.** The Operator shall stabilize the erosion and send a photo to the Division by the corrective action date. The Operator will also need to re-seed the slopes to ensure a vegetative cover establishes in the area.

Backfilling and grading had also occurred in the West Pit (Photo 5) however, there is still a portion of highwall remaining along the south side of the access road (Photos 6-7: Map 3). There is an approximately 113' x 8' section of highwall in the West Pit, just south of the access road. The Operator was advised to push the excess material still stockpiled in the west pit up against the highwall to backfill, because it is extremely close to the edge of the permit boundary and the cut-fill method would create off-site damage. As a reminder, the Reclamation Plan states that the Operator will grade the slopes to a 4H:1V slope. Additionally, there are some areas south of the access road, on the West Pit slope where erosion rills have begun to form (Map 3).

The Stockpile Area is located northwest of the East Pit. There are a couple of small piles remaining in this area (Photo 8). The piles are required to be removed and the area is to be plowed and seeded upon reclamation.

The haul road is approved to stay post reclamation.

Revegetation and Reclamation Success:
During the inspection, the Operator stated that the site had been re-seeded about two years ago. The East Pit slope has some vegetation growing, but it will require reseeding once the erosion is stabilized. Little to no vegetation appears to have established in the low lying areas within the West Pit (Photo 9). These areas will need to be re-seeded and probably chiseled to establish vegetation.

The state listed noxious weed Tamarisk (salt cedar) was observed within the Stockpile Area (Photo 10). **This has been cited as a problem above.** The Operator shall remove the Tamarisk and send evidence to the Division by the corrective action date. An informational sheet for treating Tamarisk is attached to this report.

Hydrologic Balance and Sediment Control:
As mentioned in the Backfilling and Grading section above, large erosion ruts and gullies were observed in the East Pit, and small erosion rills have formed on the slope in the West Pit. Also, the horizontal length of the east slope has begun to slough off. The road outside of the permit area to the northeast of the East Pit slopes down towards the pit and the runoff from the road appears to have caused or exacerbated the erosion experienced in the East Pit (Photo 11). No excess sediment was observed outside of the permit area.

General Compliance with Mine Plan:
The conversion CN1 mining plan exhibit states that mining is no longer planned to occur on the site, besides moving crushed material from the stockpile. There are a few small stockpiles of material remaining in the West Pit (Photo 12) and in the Stockpile Area. The Operator/Permittee stated that it has been about two years since the previous permittee hauled gravel off the site with permission. As there are areas remaining that need to be backfilled, the Division advises the Operator to use the remaining material for reclamation.

Signs and Markers:
A mine sign was posted at the entrance to the site but has the previous Permittee's information on it (Photo 13). **This has been cited as a problem above.** The Permittee shall revise or replace the sign and send a photo to the Division by the corrective action date. Field markers were collected using the Esri Field Maps application

during the inspection. However, the Division experienced a data loss and the information collected during the inspection was lost. The Division did observe both t-posts and PVC covered rebar serving as affected boundary markers around the site (Photos 14-15).

Topsoil:
There appears to be some topsoil piled in the West Pit (Photo 16). The Operator shall use this material to topsoil the highwall in the West Pit once it has been backfilled and graded.

Financial Warranty:
The Division currently holds a reclamation bond in the amount of $12,023.61 for this site. The Division has estimated the reclamation liability at the site based on what is currently disturbed and found it to be $16,061.00 - a difference of $4,037.39 from the bond currently held. The Division's cost estimate is enclosed with this report. The Operator will have 14 days (May 1, 2025), from the issuance of this report to submit any questions on the 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).

Conclusion:
This concludes the Division's Inspection Report; a few maps displaying topics discussed in the report, and a subset of corresponding photographs that were taken during the time of the inspection, are included below. If you need additional information or have any questions, please contact me by email at amber.gibson@state.co.us or by telephone at (720) 836-0967.

GENERAL INSPECTION TOPICS

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

(AR) RECORDS---------- Y	**(FN) FINANCIAL WARRANTY-------- Y**	**(RD) ROADS---------- Y**
(HB) HYDROLOGIC BALANCE---------- Y	**(BG) BACKFILL & GRADING---------- Y**	**(EX) EXPLOSIVES--------- N**
(PW) PROCESSING WASTE/TAILING---- N	**(SF) PROCESSING FACILITIES------- N**	**(TS) TOPSOIL---------- Y**
(MP) GENL MINE PLAN COMPLIANCE- Y	**(FW) FISH & WILDLIFE---------- N**	**(RV) REVEGETATION---- PB**
(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------- N	**(OD) OFF-SITE DAMAGE----------N**	

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

Inspection Contact Address
Michele M and Frederick V Eichler IV
PO Box 751
Trinidad, CO 81082

Enclosure: *2025 Reclamation Cost Estimate*
Noxious Weed Sheet

CC: Jared Ebert, DRMS

PHOTOGRAPHS

Photo 1: Erosion gully in northeast corner of the East Pit.

Photo 2: Looking west across the top of the sloughed off slope in the East Pit.

Photo 3: Looking north at the erosion on the East Pit slope.

Photo 4: Looking east at the erosion gully in the northwest side of the East Pit.

Photo 5: Looking west across part of the graded slope in the West Pit. The arrow points to some stockpiled material that remains within the pit area.

Photo 6: Looking north at the highwall remaining in the West Pit.

Photo 7: Looking east across the top of the highwall in the West Pit. The haul road (arrow) is outside of the permit boundary in this section.

Photo 8: Looking northeast at the small stockpiles remaining in the Stockpile Area.

Photo 9: Looking southeast at the low lying area in the West Pit that needs to be revegetated.

Photo 10: Looking east at some small Tamarisk trees establishing in the Stockpile Area.

Photo 11: Looking northeast at the erosion caused by runoff rom the road above the East Pit.

Photo 12: Looking east across the West Pit area from the southwest corner.

Photo 13: Mine sign posted at the gated entrance. The Permittee information needs to be updated.

Photo 14: Looking west across the toe of the East Pit. The arrows point to t-posts marking the permit boundary.

Photo 15: Looking south at some of the stockpiles in the Stockpile Area. The PVC covered rebars serve as the permit boundary marker in this area.

Photo 16: Looking southwest at some topsoil material in the West Pit.

Map 1: 2025 Inspection map of The Broyles Pit created in Google Earth Pro. The numbers correspond to the inspection report photos.

Map 2: Zoomed in map of the East Pit and Stockpile Area.

Map 3: Zoomed in map of the West Pit. The yellow arrow points to the highwall that needs to be backfilled, graded, topsoiled, and revegetated. Circled in yellow is an area where some erosion rills have begun to form on the slope.

COST SUMMARY WORK

Task description: **2025 Reclamation Cost Estimate Summary**

Site: **The Broyles Pit** Permit Action: 2025 Inspection Permit/Job#: M2004028

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 4/16/2025 County: Las Animas Filename: M028-000
User: AMG

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001a	Grading in West Pit (Push-up method)	DOZER	1	1.04	$334
001b	Spread 6 inches of topsoil over graded west highwall	DOZER	1	0.10	$32
002	Re-grade East Pit slopes and repair erosion gullies	DOZER	1	2.29	$779
003	Plow/chisel north stockpile area and low areas in west pit	REVEGE	1	2.00	$410
004	Revegetation of Affected Land	REVEGE	1	12.00	$7,669
005	Equipment Mobilization/Demobilization	MOBILIZE	1	3.40	$2,643
		SUBTOTALS:		**20.83**	**$11,867**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$240
Performance bond:	1.05	Total =	$125
Job superintendent:	10.41	Total =	$825
Profit:	10.00	Total =	$1,187
		TOTAL O & P =	$2,376
		CONTRACT AMOUNT (direct + O & P) =	$14,243

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	$500	Total =	$500
Engineering work and/or contract/bid preparation:	4.25	Total =	$605
Reclamation management and/or administration:	5.00		$712
CONTINGENCY:	0.00	Total =	$0
		TOTAL INDIRECT COST =	$4,194
		TOTAL BOND AMOUNT (direct + indirect) =	**$16,061**

BULLDOZER WORK

Task description: **Grading in West Pit (Push-up method)**

Site: **The Broyles Pit** Permit Action: 2025 Inspection Permit/Job#: M2004028

PROJECT IDENTIFICATION

Task #: 001A State: Colorado Abbreviation: None
Date: 4/16/2025 County: Las Animas Filename: M028-001a
User: AMG

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:

		Utilization %
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: $321.62
Total Fleet Cost/Hour: **$321.62**

MATERIAL QUANTITIES

Initial Volume: 502
Swell factor: 1.125
Loose volume: **565** LCY

Source of estimated volume: 113' x 8' highwall close to boundary to cut-fill to 4H:1V
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: 0 %
Average site altitude: 5,570 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3890

Adjusted unit production: 544.60 LCY/hr
Adjusted fleet production: **544.6** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.591/LCY

Total job time: **1.04** Hours
Total job cost: **$334**

BULLDOZER WORK

Task description: **Spread 6 inches of topsoil over graded west highwall**

Site: **The Broyles Pit** Permit Action: 2025 Inspection Permit/Job#: M2004028

PROJECT IDENTIFICATION

Task #:	001B	State:	Colorado	Abbreviation:	None
Date:	4/17/2025	County:	Las Animas	Filename:	M028-001b
User:	AMG				

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:

		Utilization %
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: $321.62
Total Fleet Cost/Hour: **$321.62**

MATERIAL QUANTITIES

Initial Volume:	81
Swell factor:	1.215
Loose volume:	**98** LCY

Source of estimated volume: 6 inches of topsoil over 0.1 acre area
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: Consolidated stockpile 1.0

Average push gradient: 0 %
Average site altitude: 5,570 feet

Material weight: 1,600 lbs/LCY

Weight description: Top Soil

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(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: 0.7161

Adjusted unit production: 1,002.54 LCY/hr
Adjusted fleet production: **1002.54** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.321/LCY

Total job time: **0.10** Hours
Total job cost: **$32**

BULLDOZER WORK

Task description: **Re-grade East Pit slopes and repair erosion gullies**

Site: **The Broyles Pit** Permit Action: 2025 Inspection Permit/Job#: M2004028

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 4/16/2025 County: Las Animas Filename: M028-002
User: AMG

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:	$3.98	50
Operator Cost/Hour:	$38.59	NA

Total unit Cost/Hour: $340.12
Total Fleet Cost/Hour: **$340.12**

MATERIAL QUANTITIES

Initial Volume: 970
Swell factor: 1.125
Loose volume: **1,091** LCY

Source of estimated volume: 1.2 acre area x avg depth of 6 inches
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: 0 %
Average site altitude: 5,570 feet

Material weight: 2,650 lbs/LCY

Weight description: Decomposed rock - 25% Rock, 75% 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:	0.700	(FND-MF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3404

Adjusted unit production: 476.56 LCY/hr
Adjusted fleet production: **476.56** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: $0.714/LCY

Total job time: **2.29** Hours
Total job cost: **$779**

REVEGETATION WORK

Task description: **Plow/chisel north stockpile area and low areas in west pit**

Site: **The Broyles Pit** Permit Action: 2025 Inspection Permit/Job#: M2004028

PROJECT IDENTIFICATION

Task #: 003 State: Colorado Abbreviation: None
Date: 4/16/2025 County: Las Animas Filename: M028-003
User: AMG

Agency or organization name: DRMS

TILLING

Description	Cost /Acre
Chisel plowing {DMG}	$102.41
Total Tilling Cost/Acre	**$102.41**

JOB TIME AND COST

No. of Acres: 4 Cost /Acre: $102.41
Estimated Failure Rate: 0% Cost /Acre*: $0.00
*Selected Replanting Work Items: NONE

Initial Job Cost: **$409.64**
Reseeding Job Cost: **$0.00**
Total Job Cost: **$410**
Job Hours: **2.00**

REVEGETATION WORK

Task description: **Revegetation of Affected Land**

Site: **The Broyles Pit** Permit Action: 2025 Inspection Permit/Job#: M2004028

PROJECT IDENTIFICATION

Task #: 004 State: Colorado Abbreviation: None
Date: 4/16/2025 County: Las Animas Filename: M028-004
User: AMG

Agency or organization name: DRMS

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	0.45	7.35	$9.60
Little Bluestem - Native	1.75	10.45	$26.94
Sideoats Grama - Butte	2.70	8.86	$65.22
Oats - Ajay	20.00	5.97	$12.91
Western Wheatgrass - Native	4.80	12.12	$43.23
Totals Seed Mix	29.70	44.74	**$157.88**

Application

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

JOB TIME AND COST

No. of Acres: 12.96 Cost /Acre: $394.52
Estimated Failure Rate: 50% Cost /Acre*: $394.52
*Selected Replanting Work Items: SEEDING

Initial Job Cost: **$5,112.98**
Reseeding Job Cost: **$2,556.49**
Total Job Cost: **$7,669**
Job Hours: **12.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: **Equipment Mobilization/Demobilization**

Site: **The Broyles Pit** Permit Action: 2025 Inspection Permit/Job#: M2004028

PROJECT IDENTIFICATION

Task #: 005 State: Colorado Abbreviation: None
Date: 4/16/2025 County: Las Animas Filename: M028-005
User: AMG

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	1	$313.49	$125.64	$250.00
Drill/Broadcast Seeder with Tractor	25.00	$41.02	$59.44	2	$200.92	$118.88	$250.00
Subtotals:					**$514.41**	**$244.52**	**$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, 4x2, 1/2 T.	$118.99	1	$118.99	$118.99
Subtotals:			**$118.99**	**$118.99**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	TRINIDAD	
Total one-way travel distance:	14.00	miles
Average Travel Speed:	40.00	mph

Total Non-Roadable Mob/Demob Cost * '* two round trips with haul rig:	$2,560.07
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	$83.29

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.35	0.35
Return Time (Hours):	0.35	0.35
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.70	0.70

JOB TIME AND COST

Total job time:	**3.40**	Hours
Total job cost:	**$2,643**	

Saltcedar

Tamarix spp.

Colorado Department of Agriculture

305 Interlocken Pkwy
Broomfield, CO 80021

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weeds@state.co.us

Saltcedar Identification and Management

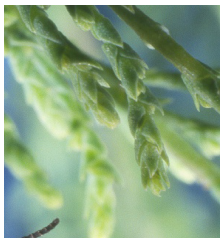
Identification and Impacts

Saltcedar, or tamarisk (*Tamarix spp.*), is a non-native deciduous evergreen shrub or small tree that grows from 5 to 20 feet tall. The bark on saplings and stems is reddish-brown. The leaves are small, scale-like and bluish-green in color. Tiny pink to white flowers have five petals and grow on slender racemes. Saltcedar reproduces by seeds as well as vegetatively. A mature plant can produce up to 600,000 seeds per year. Seeds are viable for up to 45 days under ideal conditions. Saltcedar buds break dormancy in February or March. Flowering occurs anytime between April and August. Ideal conditions for saltcedar seedling survival are saturated soil during the first few weeks of life, a high water table, and open sunny ground with little competition from other plants.

Saltcedar was introduced from central Asia, northern Africa, and southern Europe for ornamental purposes and for stream bank stabilization. It is now widespread in the United States. Saltcedar crowds out native stands of riparian and wetland vegetation. Saltcedar increases salinity of surface soil, rendering the soil inhospitable to native plant species. Saltcedar can be found along floodplains, riverbanks, streambanks, marshes, and irrigation ditches. It's heavy use of water has contributed to the intensity of the drought.

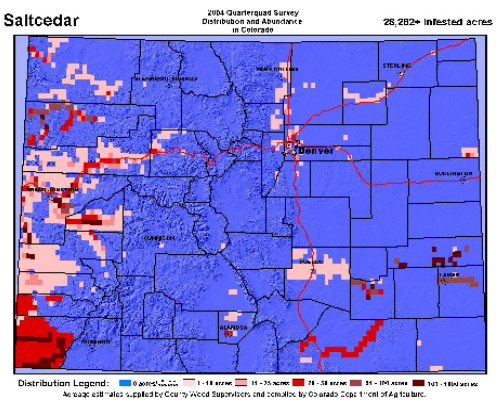
The most effective method of control for saltcedar is to prevent its establishment through proper land management. Monitor susceptible areas for new infestations. An integrated weed management approach has proven to be an effective control when dealing with saltcedar. Details on the back of this sheet can help to create a management plan compatible with your site ecology.

Saltcedar is designated as a "List B" species on the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information, please visit www.colorado.gov/ag/csd and click on the Noxious Weed Program link. Or call the State Weed Coordinator of the Colorado Department of Agriculture, Conservation Services Division, 303-239-4100.



Key ID Points

1. Saltcedar is a tall shrub or small tree that has white to pink flowers in clusters called racimes.
2. Leaves are small and scaly.



Plant and flower photos © Kelly Uhing. Leaf photo © USDA Aphis PPQ. Infestation photo above, © Steve Dewey, Invasive.org. Tamarisk branch © Stevens County, WA Noxious Weed Control Board

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Management Recomendations

CULTURAL
After a saltcedar infestation is managed, revegetation is necessary in order to protect the soil resource and reduce the threat of reinvasion. Seeded grasses, willow stakes, and cottonwood cuttings can reduce the chances of saltcedar reinvading managed sites.

BIOLOGICAL
The saltcedar leaf beetle (*Diorhabda elongata*) larvae and adults feed on foliage. This causes stem dieback and potential death of the plant if defoliation is consistent. The leaf beetle should be available for limited distribution. For more information, contact the Palisade Insectary of the Colorado Department of Agriculture, 970-464-7916.

MECHANICAL
A bulldozer or prescribed fire can be used to open up large stands of saltcedar. These methods must be followed up with a herbicide treatment of the resprouts when they are 1 to 2 meters tall. Chainsaws, or loppers for smaller plants, are effective for cut-stump treatments to smaller infestations or in environmentally-sensitive management areas.

Integrated Weed Management:

Select the appropriate control method based on the size of the area and other environmental or cultural considerations. Re-seed controlled areas with desirable species to protect the soil resource and to prevent or slow saltcedar reinvasion. Follow up control efforts the same growing season and for several years afterwards.

Saltcedar

HERBICIDES: The following are recommendations for herbicides that can be applied to range and pasturelands. Rates are approximate and based on hand-held equipment with an output of 30 gallons per acre. Always read, understand, and follow the label directions. **The herbicide label is the LAW!**

Herbicide	Rate	Application Timing
Triclopyr (Garlon 4, Remedy)	20-30% solution in basal bark oil. The herbicide Pathfinder comes pre-mixed in oil and does not require dilution.	Cut-Stump Treatment: Apply to the cambial layer of the tree immediately after the cut-stump treatment and to roots above soil surface. (Summer to fall) Basal Bark Treatment: Spray till wet but not dripping; the roots above soil surface, root collar, and lower trunk to a height of 12-15 inches above ground (Summer to fall)
Glyphosate* (Rodeo - approved aquatic label)	Undiluted (100% solution) or 50% solution in basil bark oil	Cut-Stump Treatment: Apply to the cambial layer of the tree immediately after the cut-stump treatment and to roots above soil surface. Diluted solutions requires regular agitation. (Summer to fall)
Triclopyr (Garlon 4, Remedy) + Aminopyralid (Milestone)	3 qts. Garlon 4/acre + 7 oz. Milestone/acre + 0.25% v/v non-ionic surfactant	Broadcast foliar treatment: Apply when plants are growing rapidly. (May to September)
Note: *These products are non-selective and will kill any vegetation contacted.		
Additional herbicide recommendations for other species can be found at: **goo.gl/TvWnv9**		