



December 20, 2019

James Thomas
3506 Mesa Grande Dr.
Colorado Springs, CO 80918

**RE: Crystal Falls #1; File No. M-2019-045, 110(1) Application;
Preliminary Adequacy Review**

Dear Mr. Thomas:

The Division of Reclamation, Mining and Safety (DRMS) has completed its preliminary adequacy review of your 110(1) Limited Impact Reclamation Permit Application package for the Crystal Falls #1, File No. M-2019-045. The application was received on December 4, 2019 and called complete for review on December 9, 2019. The decision date for this application is **January 8, 2020**. **Please be advised that if you are unable to satisfactorily address any concerns identified in this review before the decision date, it will be your responsibility to request an extension of the review period. If there are outstanding issues that have not been adequately addressed prior to the end of the review period, and no extension has been requested, the Division will deny this application.**

The review consisted of comparing the application content with specific requirements of Rules 3, 6.1, 6.2, 6.3 and 6.5 of the Minerals Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (Rule). Any inadequacies are identified under the respective exhibit heading along with suggested actions to correct them.

APPLICATION

1. Page 1, Item 8, Type of mining operation – The “Underground” box is checked. Based on the disturbance observed during our September 26, 2019 inspection the DRMS would consider this a “Surface” mine. If the intent is to go underground in a significant way (adits, shafts, etc.) please describe your underground mine plan. Otherwise please resubmit a corrected page 1 of the application, with “Surface” checked.
2. Page 2, Item 9, Inspection Contact – The inspection contact was left blank. Please confirm the inspection contact is James Thomas, or provide the name, address and phone number for the designated inspection contact.



3. Page 6, Item 10, For joint venture partnership operators – Item 10 was initialed. Nothing else in the application suggests this is a joint venture. Please either resubmit page 6 with no initials on Item 10, or provide information on the joint venture for this site.

6.3.3 EXHIBIT C – Mining Plan

4. No. 14, Type of mining operation – The “Underground” box is checked. Based on the disturbance observed during our September 26, 2019 inspection the DRMS would consider this a “Surface” mine. If the intent is to go underground in a significant way (adits, shafts, etc.) please describe your underground mine plane. Otherwise please resubmit a corrected second page of Exhibit C, Item 14 with “Surface” checked.

6.3.5 EXHIBIT E – Map

5. Maps, General – Both the Mine Plan Map and the Reclamation Plan Map are missing a signature date and a scale. Rule 6.2.1(2)(c) requires the date prepared be on the map and Rule 6.2.1(2)(e) requires the map scale be included. **The originally submitted hand drawn maps are enclosed.** Please fill in the date blank on the bottom of both maps and complete the scale in the lower left hand corner and return them to the DRMS.
6. Reclamation plan map – The southeast disturbance area, labeled “1.” on the Mine Plan Map shows 1H:1V reclaimed slopes on the Reclamation Plan Map. The DRMS requires disturbed slopes be stable post-reclamation both from an erosion and geotechnical perspective. Our experience suggests 1H:1V slopes are difficult to revegetate and are likely to move even without the influence of runoff and snowmelt. Please provide some more discussion on how this particular southeast disturbance will be stabilized.

6.3.6 EXHIBIT F – Other Permits and Licenses

7. Blank Exhibit – No boxes were checked for any of the suggested permits and licenses. As this site is on land managed by the US Forest Service (USFS), either a Plan of Operations (PoO) or Notice of Intent (NOI) approved by the USFS would be expected. Other permits that are often required for these types of operations are County land use permits and stormwater permits from the Colorado Department of Public Health and Environment (CDPHE). The DRMS notified both these agencies of your permit application. Please check with El Paso County and CDPHE to see if they require permits and resubmit Exhibit F with the appropriate boxes checked.

6.3.7 EXHIBIT G – Source of Legal Right to Enter

8. Source – The DRMS considers the USFS approved Plan of Operations or Notice of Intent to demonstrate the Legal Right to Enter for reclamation permits on USFS. Please provide a copy of the approved PoO or NOI.

Reclamation Cost Estimate

9. DRMS Cost Estimate – The DRMS estimated the reclamation cost for all hand work assuming coordination with the USFS and the Crystal Park community to allow shorter access from Crystal Park should the State have to complete reclamation for this site. A cost estimate for \$2,978 is enclosed.

Newspaper Publication Error

10. Error in Public Comment Period – The DRMS received your affidavit of publishing the required newspaper notice on December 19, 2019. There was an error in the published notice related to the public comment period. Pursuant to Rule 1.7.1(2)(b) the public comment period ends 10 days after the date of publication in the newspaper. The affidavit indicates the notice was published on December 18, 2019 stating public comments are required by December 26, 2019. This is only 8 days. This error requires the notice be published again. Please ensure the end of the public comment period is 10 days from the new publication date, not 10 days from when you notified the newspaper. After the notice is republished, please provide the DRMS with a new affidavit of publication within 10 days of the publish date.

NOTE: If the 10-day public comment period for the new publish date occurs on or after the January 8, 2020 decision date, you will need to request an extension to the decision date.

Please be advised the Crystal Falls #1 110(1) Application may be deemed inadequate and the application may be denied on **January 8, 2020** unless the abovementioned adequacy review items are addressed to the satisfaction of the DRMS. If you feel more time is needed to complete your reply, the DRMS can grant an extension to the decision date. This will be done upon receipt of a written waiver of your right to a decision by January 8, 2020 and request for additional time. This must be received no later than the deadline date.

If you have any questions, please contact me at (303) 866-3567 x 8169.

Sincerely,



Timothy A. Cazier, P.E.
Environmental Protection Specialist

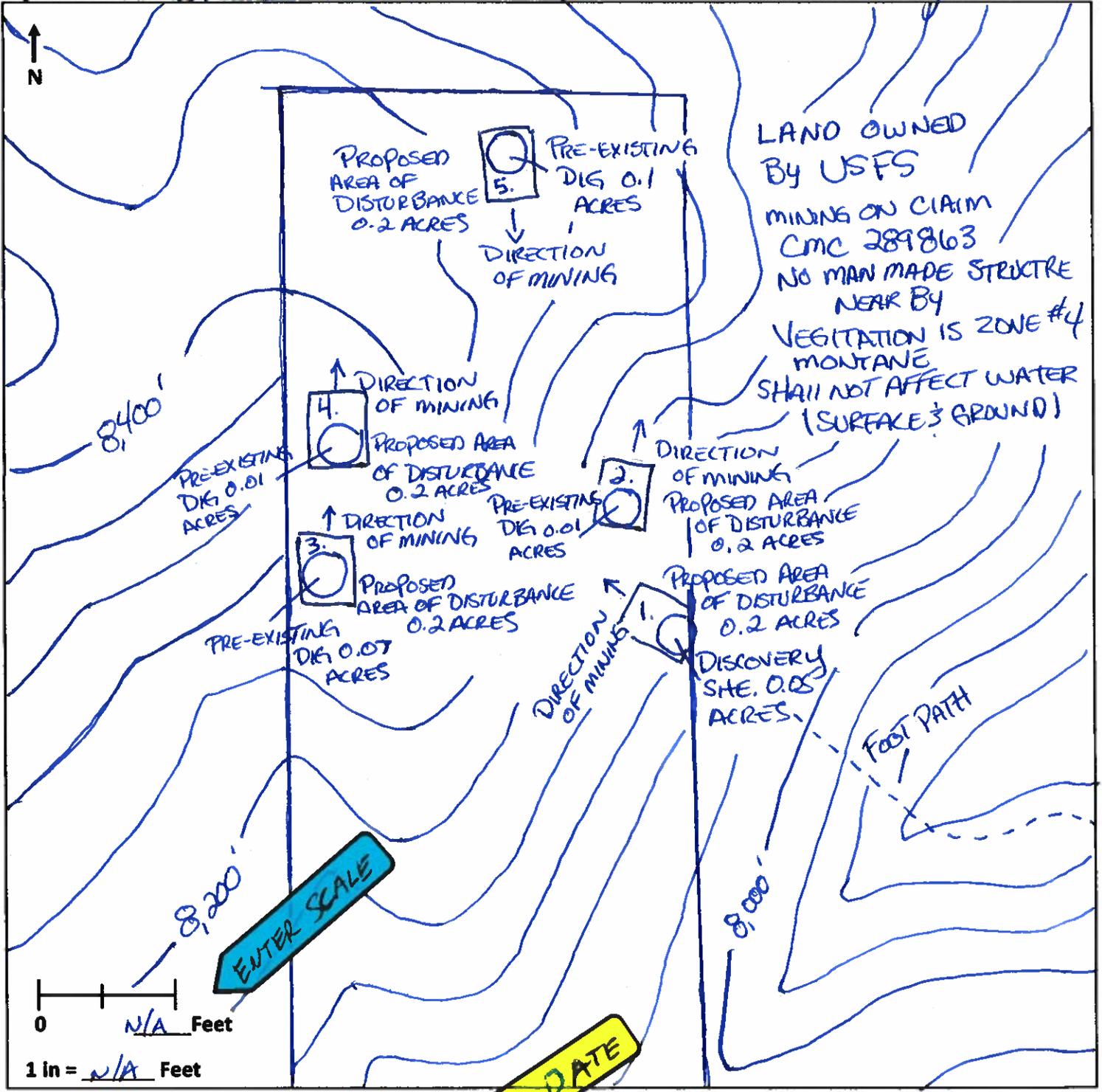
Enclosures

ec: DRMS file
Jeff Hovermale, USFS

MINE PLAN MAP
(Optional template)

Operator Name: JAMES THOMAS

Site Name: CRYSTAL FALLS #1



James Thomas
Signature

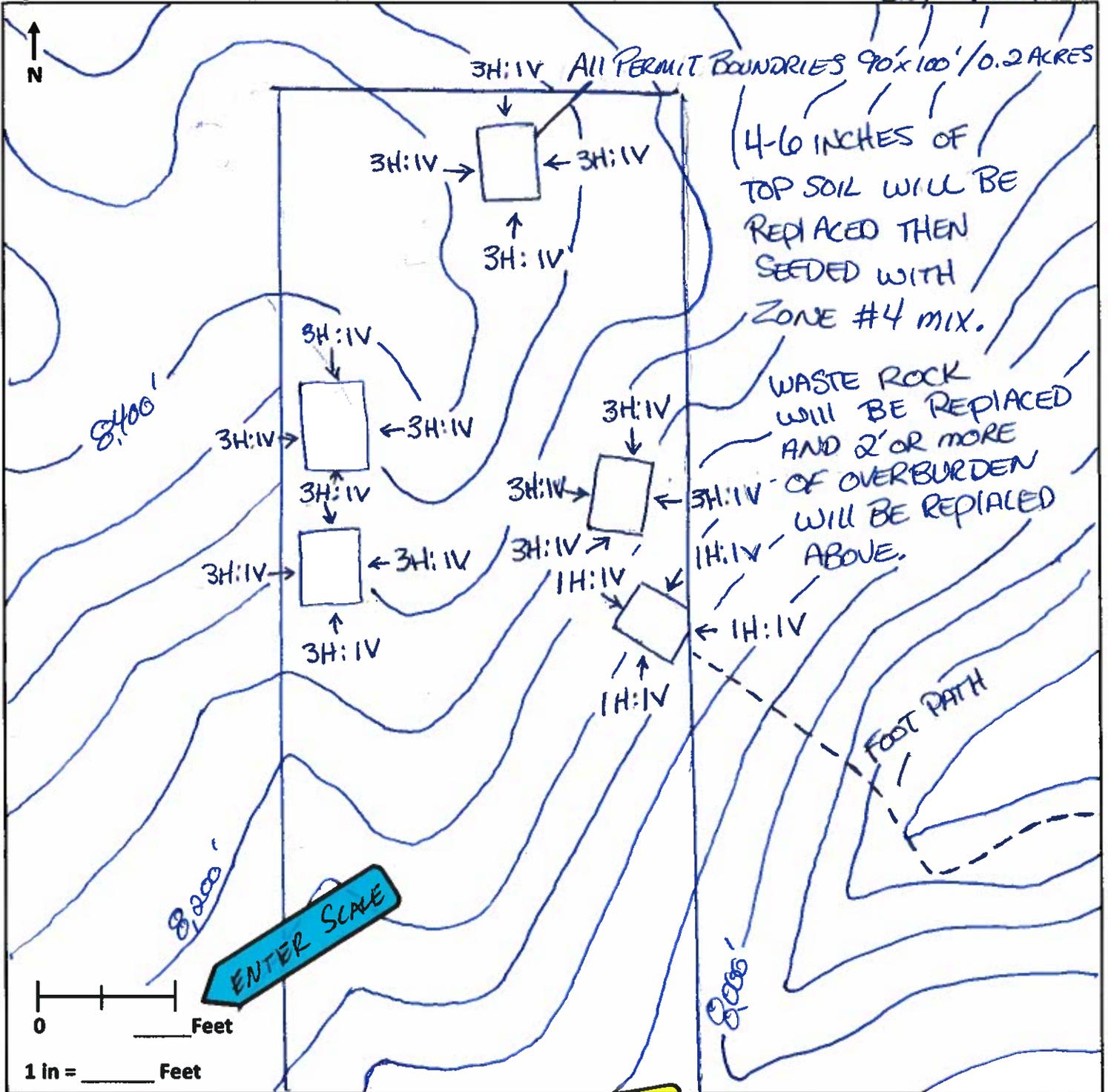
Date

ADD DATE

RECLAMATION PLAN MAP
(Optional template)

Operator Name: JAMES THOMAS

Site Name: CRYSTALFAIS #1



ADD DATE

James Thomas
Signature

_____ Date

COST SUMMARY WORK

Task description: Cost Summary

Site: Crystal Falls #1

Permit Action: New Permit

Permit/Job#: M2019045

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 12/20/2019

County: El Paso

Filename: M045-000

User: TC1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Hand Backfill Disturbances	MISCTRUK	1	25.00	\$1,933
002	Reveg 1.0 acre	REVEGE	1	2.00	\$456
003	Mob Crew to Site	MOBILIZE	1	0.72	\$15
<u>SUBTOTALS:</u>				27.72	\$2,404

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$49

Performance bond: 1.05

Total = \$25

Job superintendent: 2.00

Total = \$139

Profit: 10.00

Total = \$240

TOTAL O & P = \$453

CONTRACT AMOUNT (direct + O & P) = \$2,857

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$121

Reclamation management and/or administration: 0.00

\$0

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$574

TOTAL BOND AMOUNT (direct + indirect) = \$2,978

MISCELLANEOUS TRUCK WORK

Task description: Hand Backfill Disturbances

Site: Crystal Falls #1

Permit Action: New Permit

Permit/Job#: M2019045

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 12/20/2019

County: El Paso

Filename: M045-001

User: TC1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Make and Model: Light Duty Pickup, 4x4, 1 T. Crew

Horsepower: 340

Attachment 1: _____

Shift Basis: 1 per day

Attachment 2: _____

Weight: 2.45

Labor Unit 1: General Laborer

(US Tons)

Labor Unit 2: General Laborer

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$5.77</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$15.16</u>	<u>100</u>
Operator Cost/Hour:	<u>\$56.40</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$77.32</u>	
Total Fleet Cost/Hour:	<u>\$77.32</u>	

JOB TIME AND COST

Fleet size: 1 Truck(s)

Total job time: 25.00 Hours

Unit cost: \$77.32 /Hour

Total job cost: \$1,933

REVEGETATION WORKTask description: Reveg 1.0 acreSite: Crystal Falls #1Permit Action: New PermitPermit/Job#: M2019045PROJECT IDENTIFICATIONTask #: 002State: ColoradoAbbreviation: NoneDate: 12/20/2019County: El PasoFilename: M045-002User: TC1Agency or organization name: DRMSFERTILIZINGMaterials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials Cost/Acre	\$0.00

Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	
	\$0.00

TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	
	\$0.00

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Mountain Brome - Bromar	3.86	6.20	\$14.67
Sandberg Bluegrass - VNS	0.74	15.71	\$6.22
Idaho Fescue	1.58	19.95	\$14.97
Prairie Junegrass	0.30	15.95	\$7.80
Yarrow, White	0.50	31.80	\$20.00
Bluebunch Wheatgrass - Goldar	7.42	23.85	\$34.13
Totals Seed Mix		14.40	\$97.79

Application

Description	Cost /Acre
Broadcast seeding [DMG]	\$267.22
Total Seed Application Cost/Acre	\$267.22

MULCHING and MISCELLANEOUS

Materials

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

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

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: <u>1</u>	Cost /Acre: <u>\$365.01</u>
Estimated Failure Rate: <u>25%</u>	Cost /Acre*: <u>\$365.01</u>
*Selected Replanting Work Items: <u>SEEDING</u>	
Initial Job Cost: <u>\$365.01</u>	
Reseeding Job Cost: <u>\$91.25</u>	
Total Job Cost: <u>\$456</u>	
Job Hours: <u>2.00</u>	

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: **Mob Crew to Site** Site: **Crystal Falls #1** Permit Action: New Permit Permit/Job#: M2019045 **PROJECT IDENTIFICATION**Task #: 003 State: Colorado Abbreviation: None Date: 12/20/2019 County: El Paso Filename: M045-003 User: TC1 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:	\$17.20	\$29.63	\$38.69
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$67.39	\$123.81	\$141.54

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
Subtotals:							
					\$0.00	\$0.00	\$0.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$20.93	1	\$20.93	\$20.93
Subtotals:				
			\$20.93	\$20.93

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: MANITOU SPRINGS
 Total one-way travel distance: 9.00 miles
 Average Travel Speed: 25.00 mph

Total Non-Roadable Mob/Demob Cost * \$0.00
 * * two round trips with haul rig:
 Total Roadable Mob/Demob Cost * * \$15.07
 * * one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.36	0.36
Return Time (Hours):	0.36	0.36
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	0.72	0.72

JOB TIME AND COST

Total job time: 0.72 Hours

Total job cost: \$15