




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: Big R Pit	MINE/PROSPECTING ID#: M-1988-052	MINERAL: Sand and gravel	COUNTY: Elbert
INSPECTION TYPE: Monitoring	INSPECTOR(S): Amy Eschberger	INSP. DATE: February 3, 2021	INSP. TIME: 09:30
OPERATOR: Colorado farms llc	OPERATOR REPRESENTATIVE: Branko Mocevic	TYPE OF OPERATION: 110c - Construction Limited Impact	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Complete Bond	BOND AMOUNT: \$18,642.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
WEATHER: Clear	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: February 5, 2021	

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 #1: 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) and Rule 4.2.1(1).

CORRECTIVE ACTIONS: The Division has re-evaluated the required financial warranty for reclaiming the site in accordance with the approved reclamation plan (see enclosed bond estimate). Any comments regarding the Division's bond estimate and/or evidence demonstrating reclamation work has been completed shall be submitted by the corrective action date. If, by the corrective action date, no comments or additional information has been received, a notice of surety increase will be mailed to the operator for the amount shown in the enclosed bond estimate. The operator will have 60 days from the date on the surety increase notice to post the additional financial warranty.

CORRECTIVE ACTION DUE DATE: April 6, 2021

INSPECTION TOPIC: Reclamation Success

PROBLEM #2: The operator has not completed reclamation of the site within five (5) years from the date that mining activities ceased at the site, as required by Rule 3.1.3 and C.R.S. 34-32.5-116(4)(q)(I).

CORRECTIVE ACTIONS: By the corrective action date, the operator shall submit a timeline for completing reclamation at the site in accordance with the approved reclamation plan. The expectation is that all required earthwork and initial seeding/planting will be completed within the calendar year.

CORRECTIVE ACTION DUE DATE: April 6, 2021

OBSERVATIONS

This inspection of the Big R Pit (Permit No. M-1988-052) was conducted by Amy Eschberger of the Division of Reclamation, Mining and Safety (Division) at the request of the operator to assess remaining reclamation. The site is located approximately 13 miles north of Elizabeth, CO in Elbert County. The site can be accessed from the east via Co Rd 174. It should be noted, the northern permit boundary is directly adjacent to a 112c permit called the Miller Gravel Pit (Permit No. M-1982-112), which is operated by Schmidt Construction Company. The current operator took over the Big R Pit permit in early 2019 (through Succession of Operators No. 2) after the previous operator, Rick L. Hunt passed away. The operator was represented by Branko Mocevic during the inspection. **Photos 1-16** taken during the inspection are included with this report.

This is a 110c operation permitted for 9.9 acres to mine sand and gravel (see enclosed Google Earth image of site and site map submitted with AM-01 in 2011). A shop, office building, and paved parking area originally used by Hunt Construction, and now used by Colorado Farms LLC, is located just east of the permit area. A garage is located between the eastern permit boundary and the shop/office area. The site is divided by an interior road into two pit areas, north and south. No structures are present within the permit area which require demolition or removal. The approved post-mining land use for the site is rangeland. The reclamation plan calls for grading all highwalls to 3H:1V or flatter, ripping any compacted areas (e.g. stockpile/storage areas, pit floor, temporary roads), replacing an average depth of 6 inches of topsoil across disturbed land, and (per Technical Revision No. 1, approved on July 3, 2019) planting industrial hemp at 5 foot spacing on disturbed land. The existing dirt road that bisects the site may remain after reclamation.

The north pit area includes a large topsoil stockpile stored along the northern permit boundary (estimated to cover 1.35 acres) and a shallow, backfilled excavation area graded nearly flat. A small material pile remains at the southern edge of this area (estimated to cover 0.18 acre). According to the permit file, the north pit area was backfilled and graded in 2014. The Division has no evidence the north pit area was ever retopsoiled or seeded. In fact, the large topsoil stockpile left in this area indicates it was not retopsoiled. The vegetative cover of this area consists primarily of annual weeds with some grasses.

The south pit area includes an excavated pit which opens up to the east, with highwall slope gradients at approximately 1H:1V. The southern pit wall is higher (at approximately 15 feet or more) than the rest of the pit walls (at approximately 5-10 feet). A small topsoil stockpile (estimated to cover 0.1 acre) is stored at the southeastern edge of the pit, above the highwall. The operator has imported approximately 20 tons of clean and inert soil to the site per its June 28, 2019 notice to the Division. This material is stockpiled at the eastern edge of the pit and will be used for reclamation. The Division estimates the pit wall to be approximately 1,855 feet in length. The eastern and southern portions of the pit wall are located very close to the permit boundary, most likely requiring backfilling rather than cut/fill methods to achieve the final slope gradient for reclamation. Due to the irregular shape of the southern pit wall, several knobs along this highwall could potentially be excavated and the material used for backfill material. Additional backfill material available on site includes the small stockpile of material stored just north of this pit and the imported soil stored at the eastern edge of the pit. The operator will need to be very careful when reclaiming the south pit area not to create any disturbance outside of the approved permit area, which would result in a possible violation and civil penalties.

To complete reclamation of the site in accordance with the approved reclamation plan, the operator will need to grade the pit walls in the south pit area to 3H:1V or flatter, rip approximately 3.6 acres of compacted areas (1.63 acres stockpiling areas + 2 acres pit floor), replace 6 inches of topsoil on all disturbed lands (estimated to cover the entire 9.9 acre permit area), and plant industrial hemp at 5 foot spacing on all disturbed lands.

After conducting this inspection, the Division reassessed the required financial warranty for reclaiming the site

in accordance with the approved plan (see enclosed bond estimate), and found this amount to be \$51,632.00, which is \$32,990.00 more than the currently held amount of \$18,642.00. The majority of this increase is associated with the revegetation costs for planting industrial hemp at 5 foot spacing (per Technical Revision No. 1). The Division's bond calculating software (CIRCES) does not include an industrial hemp species. Therefore, the Division substituted a plant species in the hemp family which is available in CIRCES, the Hackberry tree. The Division realizes the costs associated with this task may not necessarily be accurate for planting industrial hemp plants. Therefore, the operator is encouraged to provide the Division with demonstration of the actual costs per acre for planting industrial hemp at 5 foot spacing. Another significant contributor to the increase is the task for retopsoiling 9.9 acres. Therefore, if the operator believes the north pit area has been retopsoiled, this demonstration should be provided to the Division. Please keep in mind, all topsoil available on site, including the large topsoil stored along the northern permit boundary and the smaller topsoil stockpile stored at the southern permit boundary must be used for reclamation. If any topsoil remains after reclamation, this material must be graded to 3H:1V or flatter and revegetated in accordance with the approved revegetation plan.

A Problem is cited in this report (Problem #1; see page 1 of this report) for failure to maintain the proper financial warranty amount to complete reclamation of the affected lands in accordance with the approved reclamation plan. The operator is encouraged to review the enclosed bond estimate and submit any comments or evidence of reclamation work completed within 60 days of the date of this inspection report. If, by the 60-day corrective action deadline, the Division has not received any comments from the operator, a notice of Surety Increase will be issued for the amount calculated in the enclosed bond estimate. The operator will have 60 days from the date of such notice to post the additional required financial warranty.

During the inspection, Mr. Mocevic indicated they no longer have plans to grow industrial hemp at the site. In fact, they are currently considering plans to turn the site into a residential area. To do this, they would need to backfill the entire south pit, and potentially bring the grade of the entire site up by five feet or so. The Division informed the operator any changes to the approved reclamation plan must be reviewed and approved by the Division through the appropriate permit revision. To change the post-mining land use for the site (e.g., from rangeland to residential) or to make significant changes to the current approved reclamation plan, the operator must submit an Amendment application with the required fee of \$827. The Amendment application would need to include demonstration the proposed change in post-mining land use is compliant with county land use and zoning requirements. To make minor changes to the approved reclamation plan (e.g., revise the seed mixture), the operator could submit a Technical Revision with the required fee of \$216.

Considering the amount of time that has passed since mining activities occurred at the site, the Division strongly recommends the operator reclaim the site in accordance with the approved reclamation plan and post-mining land use then request a full release of the permit, after which time, the site could be used for other purposes. If the operator wishes to make a minor change to the reclamation plan, for example, to revise the revegetation plan to include planting native grasses rather than industrial hemp, this change would most likely impact the required financial warranty calculated for the site. Therefore, if the operator plans to submit such a proposal, it is strongly recommended the Technical Revision be submitted prior to the corrective action deadline for Problem #1 (described above).

The permit file indicates that mining activities ceased at this site in May of 2015. Pursuant to Rule 3.1.3, all reclamation shall be carried to completion by the operator with all reasonable diligence, and each phase of reclamation shall be completed within 5 years from the date the operator informs the Board or Office that such phase has commenced, or from the date the Office has evidence that mining or exploration has ceased, unless extended by the Board or Office. Because it has been almost six years now since mining activities ceased at the site, and very little if any reclamation has been achieved since that time, the operator is clearly not completing reclamation with all reasonable diligence as required by Rule 3.1.3. The Division understands activities at the

site were stalled by the 2015 death of the previous operator, and the temporary takeover of the permit by his Estate while the fate of the permit was determined. However, the current permittee has held the permit for two years now, and has not completed any reclamation of the site besides importing some soil to the south pit (as mentioned above). **Therefore, the Division is citing a problem in this report (Problem #2; see page 1 of this report) for failure to complete reclamation of the site within 5 years from the date that mining activities ceased, requiring the operator to provide a timeline for completing reclamation at the site in accordance with the approved reclamation plan.** The expectation is that all required earthwork and initial seeding/planting will be completed this calendar year, so that the operator is only waiting for successful revegetation in order to request a full release of the permit.

This concludes the report.

Any questions or comments regarding this inspection report should be forwarded to Amy Eschberger at the Colorado Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, via telephone at 303-866-3567, ext. 8129, or via email at amy.eschberger@state.co.us.

PHOTOGRAPHS



Photo 1. View looking southeast at imported material stored in eastern portion of pit.



Photo 2. View looking east at imported material stored in eastern portion of pit.

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Photo 3. View looking north across eastern pit wall, approximately 5-10 feet in height with 1H:1V slopes.



Photo 4. View looking southeast across eastern pit wall, approximately 5-10 feet in height with 1H:1V slopes.



Photo 5. View looking southwest across northern pit wall, approximately 8-10 feet in height with 1H:1V slopes.



Photo 6. View looking southwest across western portion of pit. Note portion of northern pit wall (with erosion feature) shown in foreground.



Photo 7. View looking south across central portion of pit. Note southern pit wall shown in background.



Photo 8. View looking southeast across eastern portion of pit. Note eastern pit wall shown in background.



Photo 9. View looking south at southern pit wall, approximately 15 feet in height with 1H:1V slopes. Note small topsoil stockpile stored above highwall (indicated).



Photo 10. View looking south at southern pit wall, approximately 15 feet in height with 1H:1V slopes. Note extruding portions of highwall which could be extracted to create additional backfill material if needed for sections of highwall located too close to permit boundary for cut/fill methods.



Photo 11. View looking west across pit from its eastern edge.



Photo 12. View looking south at small material stockpile left at northern edge of pit.

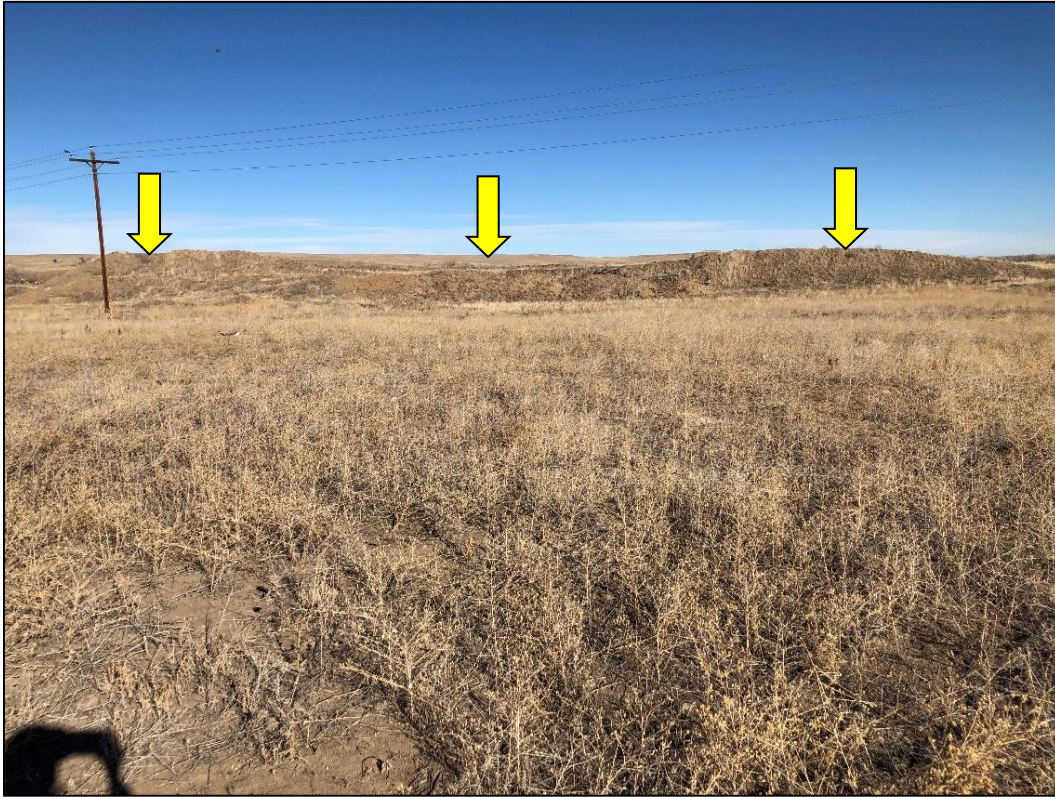


Photo 13. View looking north across backfilled north pit area, showing large topsoil stockpile stored along northern permit boundary (indicated in background). Vegetative cover in this area consists primarily of weeds.



Photo 14. View looking north across backfilled north pit area, showing closer view of large topsoil stockpile stored along northern permit boundary. Vegetative cover in this area consists primarily of weeds.



Photo 15. View looking west across backfilled north pit area. Vegetative cover in this area consists primarily of weeds.



Photo 16. Ground view in north pit area, showing vegetative cover consisting primarily of weeds.

GENERAL INSPECTION TOPICS

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

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- PB	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</u>	(BG) BACKFILL & GRADING----- <u>Y</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>N</u>
(SM) SIGNS AND MARKERS----- <u>N</u>	(SP) STORM WATER MGT PLAN---- <u>N</u>	(RS) RECL PLAN/COMP-- PB
(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

Stefan Mocevic
Colorado farms llc
6460 S Quebec Street
Centennial, CO 80111

Encl(s): Google Earth image of site
Site map submitted with AM-01 in 2011
Division's Bond Estimate
Technical Revision form

CC: Michael Cunningham, DRMS

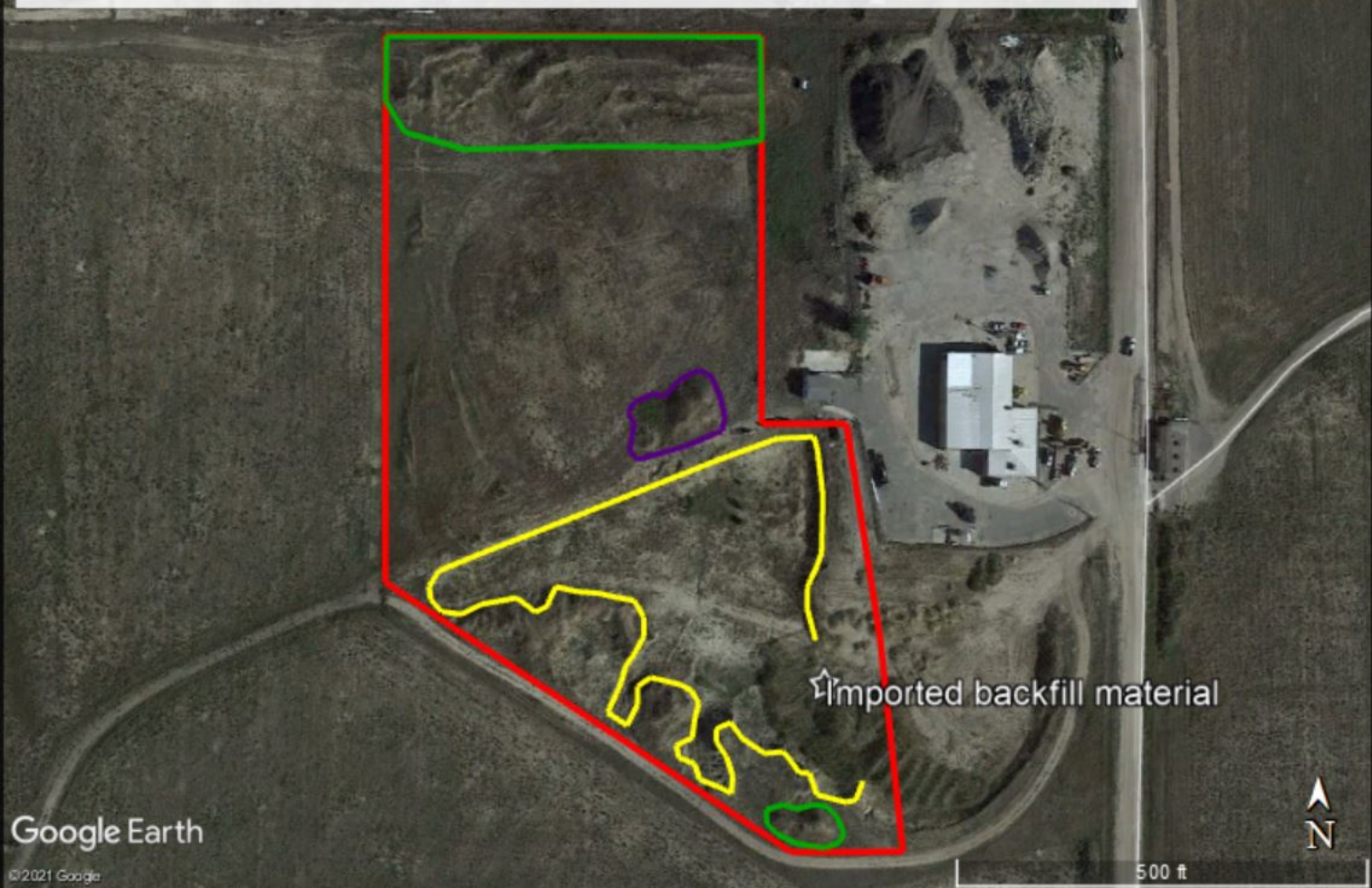
M-1988-052 / Big R Pit / Colorado Farms LLC / (Image data from 9/12/2019)

Red outline = 9.9 acres = Approved Permit Area (location approximated based on permit maps)

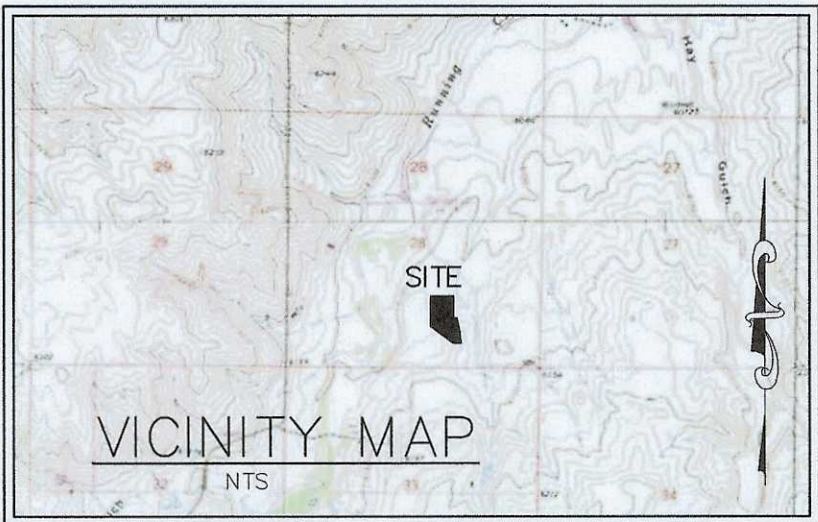
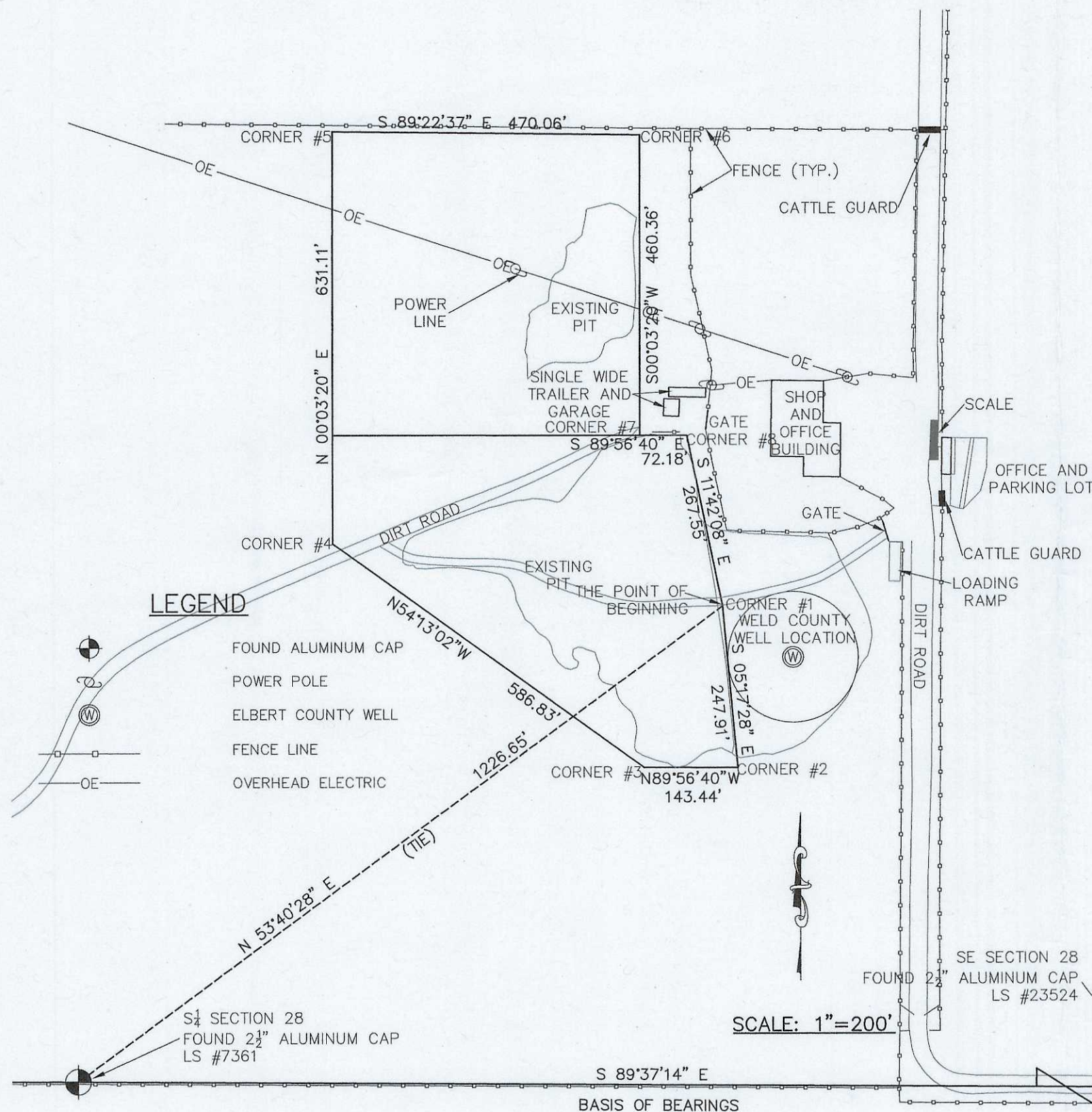
Green outline = 1.45 acres = Topsoil stockpiles (1.35 acres + 0.1 acre)

Purple outline = 0.18 acre = Material stockpile

Yellow line = 1,855 feet = Approximate length of pit highwall



BIG R PIT
A PARCEL OF LAND SITUATED IN THE SW $\frac{1}{4}$ SE $\frac{1}{4}$ SECTION 28
TOWNSHIP 6 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN



PROPERTY DESCRIPTION:

A PARCEL OF LAND SITUATED IN THE SE $\frac{1}{4}$ SW $\frac{1}{4}$ SECTION 28, TOWNSHIP 6 SOUTH, RANGE 64 WEST OF THE 6TH P.M., COUNTY OF ELBERT, STATE OF COLORADO SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS.

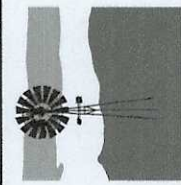
COMMENCING AT THE S $\frac{1}{4}$ CORNER OF SAID SECTION 28, A 2-1/2" ALUMINUM CAP L.S. #7361 FOUND IN PLACE, WHENCE THE SE CORNER OF SAID SECTION 28, A 2-1/2" ALUMINUM CAP L.S. #23524 FOUND IN PLACE, BEARS S89°37'14"E THE BASIS OF BEARINGS FOR THIS DESCRIPTION; THENCE N53°40'28"E A DISTANCE OF 1226.65 FEET TO CORNER #1, THE POINT OF BEGINNING; THENCE S05°17'28"E A DISTANCE OF 247.91 FEET TO CORNER #2; THENCE N89°56'40"W A DISTANCE OF 143.44 FEET TO CORNER #3; THENCE N54°13'02"W A DISTANCE OF 586.83 FEET TO CORNER #4; THENCE N00°03'20"E A DISTANCE OF 631.11 FEET TO CORNER #5; THENCE S89°22'37"E A DISTANCE OF 470.06 FEET TO CORNER #6; THENCE S00°03'20"W A DISTANCE OF 460.36 FEET TO CORNER #7; THENCE S89°56'40"E A DISTANCE OF 72.18 FEET TO CORNER #8; THENCE S11°42'08"E A DISTANCE OF 267.55 FEET, TO CORNER #1 THE POINT OF BEGINNING. SAID PARCEL CONTAINING 9.990 ACRES MORE OR LESS.

NOTES:

1. THIS PROPERTY IS SUBJECT TO RESERVATIONS, RESTRICTIONS, COVENANTS AND EASEMENTS OF RECORD OR IN PLACE.
2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE COMMITMENT AND HOMESTEAD SURVEYING, INC. MADE NO ATTEMPT TO RESEARCH ANY EASEMENTS.
3. DATE OF THIS SURVEY WAS NOVEMBER 4, 2011.



HOMESTEAD SURVEYING INC.
P.O. BOX 877
CASTLE ROCK, CO 80104
TEL: (303) 877-4071
FAX: (303) 925-0547



REV.	DATE	DESCRIPTION	DRAWN

BIG R PIT HUNT INVESTMENTS CO 43160 COUNTY ROAD 17-21 ELIZABETH, CO 80107
--

SCALE: 1"=200'
FILE NAME: 11-88-01-BASE
DATE: 11/5/11
DRAWN: JLA
JOB NO.: 11.88.01
SHEET NO.: 1 OF 1

COST SUMMARY WORK

Task description: Cost Summary

Site: Big R Pit

Permit Action: Feb 2021 Inspection

Permit/Job#: M1988052

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 2/5/2021

County: Elbert

Filename: M052-000

User: AME

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Grade pit wall to 3H:1V	DOZER	1	13.93	\$2,613
002	Rip 3.6 acres compacted areas	RIPPER	1	5.90	\$1,184
003	Retopsoil 9.9 acres	SCRAPER1	1	14.31	\$9,079
004	Revegetate 9.9 acres	REVEGE	1	10.00	\$21,260
005	Mobilization/Demobilization	MOBILIZE	1	7.44	\$7,767
<u>SUBTOTALS:</u>				51.58	\$41,903

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$846

Performance bond: 1.05

Total = \$440

Job superintendent: 25.79

Total = \$1,794

Profit: 10.00

Total = \$4,190

TOTAL O & P = \$7,270

CONTRACT AMOUNT (direct + O & P) = \$49,173

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 5.00

\$2,459

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$9,729

TOTAL BOND AMOUNT (direct + indirect) = \$51,632

BULLDOZER WORKTask description: **Grade pit wall to 3H:1V**Site: **Big R Pit** Permit Action: **Feb 2021 Inspection** Permit/Job#: **M1988052****PROJECT IDENTIFICATION**

Task #: **001** State: **Colorado** Abbreviation: **None**
 Date: **2/5/2021** County: **Elbert** Filename: **M052-001**
 User: **AME**

Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**

Basic Machine: **Cat D7R DS XR Series II**
 Horsepower: **240**
 Blade Type: **Semi-Universal**
 Attachment: **NA**
 Shift Basis: **1 per day**
 Data Source: **(CRG)**

Cost Breakdown:

		<u>Utilization %</u>
Ownership Cost/Hour:	\$74.64	NA
Operating Cost/Hour:	\$71.55	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: **\$187.49**
 Total Fleet Cost/Hour: **\$187.49**

MATERIAL QUANTITIES

Initial Volume: **9,893**
 Swell factor: **1.250**
 Loose volume: **12,366 LCY**

Source of estimated volume: **1,855 ft L x 12 ft avg H at 1H:1V**
 Source of estimated swell factor: **Cat Handbook**

HOURLY PRODUCTION

Average push distance: **50 feet**
 Unadjusted hourly production: **1,022.9 LCY/hr**

Materials consistency description: **Compacted fill or embankment 0.9**

Average push gradient: **-5 %**
 Average site altitude: **6,130 feet**

Material weight: **2,650 lbs/LCY**Weight description: **Decomposed rock - 25% Rock, 75% 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8676

Adjusted unit production: 887.47 LCY/hr

Adjusted fleet production: **887.47** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.211/LCY

Total job time: **13.93** Hours

Total job cost: **\$2,613**

BULLDOZER RIPPING WORK

Task description: Rip 3.6 acres compacted areas

Site: Big R Pit Permit Action: Feb 2021 Inspection Permit/Job#: M1988052

PROJECT IDENTIFICATION

Task #: 002 State: Colorado Abbreviation: None
Date: 2/5/2021 County: Elbert Filename: M052-002
User: AME

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D7R DS XR Series II Horsepower: 240
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$74.64</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$71.55</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$7.60</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$5.32</u>	<u>100</u>
Operator Cost/Hour:	<u>\$41.30</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$200.40</u>	
Total Fleet Cost/Hour:	<u>\$200.40</u>	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 3.60 acres Rip Depth (ft): 2.00 Volume: 11,616 BCY or CCY

Source of estimated quantity: DRMS

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.45 feet/pass
Average Ripping Width: 6.50 feet/pass
Average Ripping Length: 300.00 feet/pass
Average Dozer Speed: 88.00 feet/minute
Average Maneuver Time: 0.25 minutes/pass
Production per unit area: 0.734 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.734 Acres/hr
Site Altitude: 6,130 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.61 Acres/hr
Adjusted Hourly Fleet Production: **0.61** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **5.91** Hours

Unit cost: \$328.923 Per acre Total job cost: **\$1,184**

SCRAPER TEAM WORKTask description: **Retopsoil 9.9 acres**Site: **Big R Pit**Permit Action: Feb 2021 InspectionPermit/Job#: M1988052**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 2/5/2021County: ElbertFilename: M052-003User: AMEAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	Cat D7R DS XR Series II
-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	75	NA	50	50
Ownership cost/hour:	\$144.75	NA	\$74.64	NA	\$65.89	\$10.06
Operating cost/hour:	\$145.83	NA	\$53.66	NA	\$29.48	\$9.39
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	NA	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$30.90	NA	\$41.30	NA	\$28.56	\$0.00
Unit Subtotals:	\$321.47	NA	\$169.60	NA	\$123.93	\$19.45
Number of Units:	1	0	1	0	1	1
Group Subtotals:	Work: \$321.47		Support: \$169.60		Maint: \$123.93	\$19.45

Total work team cost/hour: **\$634.45****MATERIAL QUANTITIES**Initial volume: 7,986

CCY

Swell factor: 1.215Loose volume: **9,703**

LCY

Source of estimated volume: 9.9 acres x 6 inch placement depthSource 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 MinutesManeuver and Spread Time: 0.70 MinutesJob Condition Correction:

Site Altitude: 6130 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	350.00	3.00	3.00	6.00	1069	0.37

Haul Time: 0.37 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	350.00	-3.00	3.00	0.00	2937	0.26

Return Time: 0.26 minutesTotal Scraper team cycle time: 2.13 minutesAdjusted for job conditions: 678.03 LCY/HourSelected Number of Scrapers: 1 Scraper(s)Adjusted single scraper team (unit) hourly production: 678.03 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 678.03 LCY/HourUnadjusted unit production/hour: 816.90 LCY/Hour

Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s)Total job time: 14.31 HoursUnit cost: \$0.936 /LCYTotal job cost: \$9,079

REVEGETATION WORKTask description: Revegetate 9.9 acresSite: Big R PitPermit Action: Feb 2021 InspectionPermit/Job#: M1988052**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 2/5/2021County: ElbertFilename: M052-004User: AMEAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	2.00	pound	\$0.34	\$0.67
			Total Fertilizer Materials Cost/Acre	\$0.67

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$37.03
Total Fertilizer Application Cost/Acre	\$37.03

TILLING

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$193.60
Total Tilling Cost/Acre	\$193.60

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
			\$
Totals Seed Mix	0.00	0.00	\$0.00

Application

Description	Cost /Acre
	\$
	\$0.00

Total Seed Application Cost/Acre	
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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
Hackberry, Common	1742	Tubling, 3 cu. in. container (MEANS)	\$1.10	\$0.00	\$1,916.20
Totals Nursery Stock Cost / Acre					\$1,916.20

JOB TIME AND COST

No. of Acres: 9.9
 Estimated Failure Rate: 0%
 *Selected Replanting Work Items: NONE

Cost /Acre: \$2,147.50
 Cost /Acre*: \$0.00

Initial Job Cost: **\$21,260.25**
 Reseeding Job Cost: **\$0.00**
 Total Job Cost: **\$21,260**
 Job Hours: **10.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Mobilization/DemobilizationSite: Big R PitPermit Action: Feb 2021 InspectionPermit/Job#: M1988052**PROJECT IDENTIFICATION**

Task #: 005 State: Colorado Abbreviation: None
 Date: 2/5/2021 County: Elbert Filename: M052-005
 User: AME

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
Cat D7R DS XR Series II	32.01	\$74.64	\$123.81	1	\$198.45	\$123.81	\$250.00
Cat D7R DS XR Series II	35.93	\$82.24	\$123.81	1	\$206.05	\$123.81	\$250.00
Cat 631G	52.50	\$144.75	\$141.54	1	\$286.29	\$141.54	\$250.00
CAT 14M	23.57	\$65.89	\$67.39	1	\$133.28	\$67.39	\$250.00
Subtotals:					\$824.07	\$456.55	\$1,000.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Water Tanker, 2,500 Gal.	\$28.84	1	\$28.84	\$28.84
Light Duty Pickup, 4x4, 3/4 T.	\$13.23	1	\$13.23	\$13.23
Subtotals:			\$42.07	\$42.07

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>AURORA</u>	
Total one-way travel distance:	<u>28.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$7,719.46</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$47.12</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.56</u>	<u>0.56</u>
Return Time (Hours):	<u>0.56</u>	<u>0.56</u>
Loading Time (Hours):	<u>1.30</u>	<u>NA</u>
Unloading Time (Hours):	<u>1.30</u>	<u>NA</u>
Subtotals:	<u>3.72</u>	<u>1.12</u>

JOB TIME AND COST

Total job time:	<u>7.44</u>	Hours
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Total job cost:	<u>\$7,767</u>
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COLORADO DIVISION OF RECLAMATION, MINING AND SAFETY

1313 Sherman Street, Room 215, Denver, Colorado 80203 ph(303) 866-3567

REQUEST FOR TECHNICAL REVISION (TR) COVER SHEET

File No.: M- _____ Site Name: _____

County _____ TR# _____ (DRMS Use only)

Permittee: _____

Operator (If Other than Permittee): _____

Permittee Representative: _____

Please provide a brief description of the proposed revision: _____

As defined by the Minerals Rules, a Technical Revision (TR) is: “a change in the permit or application which does not have more than a minor effect upon the approved or proposed Reclamation or Environmental Protection Plan.” The Division is charged with determining if the revision as submitted meets this definition. If the Division determines that the proposed revision is beyond the scope of a TR, the Division may require the submittal of a permit amendment to make the required or desired changes to the permit.

The request for a TR is not considered “filed for review” until the appropriate fee is received by the Division (as listed below by permit type). Please submit the appropriate fee with your request to expedite the review process. After the TR is submitted with the appropriate fee, the Division will determine if it is approvable within 30 days. If the Division requires additional information to approve a TR, you will be notified of specific deficiencies that will need to be addressed. If at the end of the 30 day review period there are still outstanding deficiencies, the Division must deny the TR unless the permittee requests additional time, in writing, to provide the required information.

There is no pre-defined format for the submittal of a TR; however, it is up to the permittee to provide sufficient information to the Division to approve the TR request, including updated mining and reclamation plan maps that accurately depict the changes proposed in the requested TR.

Required Fees for Technical Revision by Permit Type - Please mark the correct fee and submit it with your request for a Technical Revision.

<u>Permit Type</u>	<u>Required TR Fee</u>	<u>Submitted</u> (mark only one)
110c, 111, 112 construction materials, and 112 quarries	\$216	<input type="checkbox"/>
112 hard rock (not DMO)	\$175	<input type="checkbox"/>
110d, 112d(1, 2 or 3)	\$1006	<input type="checkbox"/>