




MINERALS PROGRAM INSPECTION REPORT
PHONE: (303) 866-3567

The Division of Reclamation, Mining and Safety 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: Kattenberg Pit	MINE/PROSPECTING ID#: M-2004-017	MINERAL: Sand and gravel	COUNTY: Grand
INSPECTION TYPE: Monitoring	WEATHER: Snowing	INSP. DATE: March 23, 2023	INSP. TIME: 11:00
OPERATOR: Oldcastle SW Group, Inc. dba United Companies	OPERATOR REPRESENTATIVE: Brittany Madson	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE: Partial Bond	BOND AMOUNT: \$59,900.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Peter Hays	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: March 29, 2023	

GENERAL INSPECTION TOPICS

This list identifies the environmental and permit parameters inspected and gives a categorical evaluation of each. No problems or possible violations were noted during the inspection. The mine operation was found to be in full compliance with Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials and/or for Hard Rock, Metal and Designated Mining Operations. Any person engaged in any mining operation shall notify the office of any failure or imminent failure, as soon as reasonably practicable after such person has knowledge of such condition or of any impoundment, embankment, or slope that poses a reasonable potential for danger to any persons or property or to the environment; or any environmental protection facility designed to contain or control chemicals or waste which are acid or toxic-forming, as identified in the permit.

(AR) RECORDS----- <u>Y</u>	(FN) FINANCIAL WARRANTY----- <u>N</u>	(RD) ROADS----- <u>Y</u>
(HB) HYDROLOGIC BALANCE----- <u>N</u>	(BG) BACKFILL & GRADING----- <u>N</u>	(EX) EXPLOSIVES----- <u>N</u>
(PW) PROCESSING WASTE/TAILING---- <u>N</u>	(SF) PROCESSING FACILITIES----- <u>N</u>	(TS) TOPSOIL----- <u>N</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>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>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

OBSERVATIONS

The Kattenberg Pit was inspected by Peter Hays with the Division of Reclamation, Mining and Safety (Division/DRMS) as required by the Transfer of Permit and Succession of Operators process pursuant to Rule 1.12. Ms. Brittany Madson with United Companies was present during the inspection. The site was previously inspected by the Division on June 16, 2020 for SO2. A map based on the observations from this inspection and the latest available Google Earth image is attached for reference. The Google Earth image is from 2019 and does not represent the current condition of the site.

Succession of Operators – SO3

On February 7, 2023, Oldcastle SW Group, Inc. dba United Companies submitted a Transfer of Permit and Succession of Operators Application Form (SO3) and provided a replacement financial warranty in the existing amount of \$59,900.00. The Division issued an adequacy review letter for the SO on February 14, 2023. The SO3 application was approved by the Division on March 16, 2023 following the Operator's adequacy response and the acceptance of the financial and performance warranties.

The Division is required to inspect the site and recalculate the reclamation bond within 60 days from the date of the transfer is approved by the Division. The Division currently holds a financial warranty in the amount of \$59,900.00. The Division's review of the financial warranty determined the current financial warranty is inadequate to reclaim the site. The Division calculated the cost to reclaim the site in accordance with the approved Reclamation Plan at \$140,000.00, an increase of \$80,100.00. A copy of the bond estimate for SO3 is attached.

The Division will allow the Operator 14 days to review and comment on the estimate prior to issuance. The Division will issue a notice of surety increase (SI) letter for the required financial warranty amount after the review period. United Companies will have sixty (60) days from the date of the letter to submit the additional financial warranty pursuant to Rule 4.2(2).

Monitoring Observations

The site is an 112c Regular Construction Materials operation permitted for 38.65 acres with 33.39 acres of disturbance. The site was inactive and snow covered at the time of the inspection. The inspection observation were limited due to the snow. The Operator stated the mining operations will proceed in the same manner as with the previous operators. The mining highwall moved to the east since the last inspection. The mining excavation will continue to the south in the future. The overburden and imported concrete stockpiles located southwest of the mining area will need to be relocated prior to the mining activity.

The old mining disturbance area located in the southwest section of the site contained scrap metal, trees and old tires. The Operator stated they were aware the materials would need to be removed from the site and could not be used as backfill materials.

Based on the Google Earth image from 2019, the previous Operator(s) of the pit mined very close to the eastern permit boundary. This issue was cited as a problem by the Division in 2015 and 2016. The current Operator was reminded of the requirement to maintain the required 25 foot offset from the permit boundary and to mine the perimeter slopes at the required final 3H:1V grade.

An updated mine sign indicating United Companies as the Operator was observed as required by Rule 3.1.12.

The approved post-mining land use for the site is rangeland. Overburden stockpiles were observed along the north boundary, in the southeast corner of the site and on the pit floor. The approved Reclamation Plan states, 24 to 60 inches of overburden is present on-site. The plan allows the Operator to sell excess overburden. Based on the Google Earth image, the previous Operator(s) were removing overburden from the stockpiles located in the western and eastern portions of the pit floor. The current Operator was reminded of the requirement to stockpile adequate overburden to reclaim the site.

The approved Reclamation Plan states 6 to 8 inches of topsoil will be salvaged and replaced during reclamation. The topsoil screening and stockpile area located in the southeast section of the site has increased in size to the south since the last inspection. The current Operator was reminded of the requirement to maintain enough topsoil on-site to complete reclamation.

Photographs taken during the inspection are attached. If you need additional information or have any questions, please contact me at Division of Reclamation, Mining and Safety, 1313 Sherman Street, Room 215, Denver, CO 80203, by telephone at 303.866.3567 x 8124, or by email at peter.hays@state.co.us.

Inspection Contact Address

Jason Burkey
Oldcastle SW Group, Inc. dba United Companies
2273 River Road
Grand Junction, CO 81505

Enclosure – Inspection Map, SO3 Bond Estimate

Ec: Jared Ebert, DRMS

PHOTOGRAPHS



Updated Kattenburg Pit sign



View of the old mining area located in the southwest section of the site



View of the snow covered pit floor from the access road looking west



View of the pit floor from the middle of the site looking northwest



View of the pit floor from the middle of the site looking north



View of the pit floor from the middle of the site looking east

Kattenberg Pit

March 23, 2023
SO3 Inspection Map

Legend

- Concrete Stockpile
- Current Mining Excavation Area
- Kattenberg Pit
- Old Mining Area
- Overburden Stockpile
- Permit Boundary - 38.65 Ac
- Topsoil Stockpiles

Cold Springs Greenhouse

Kattenberg Pit

Old Mining Area

United-Granby Land and Gravel

Google Earth

1 mi



COST SUMMARY WORK

Task description: SO3 Bond Estimate

Site: Kattenberg Pit

Permit Action: SO3 Bond Estimate

Permit/Job#: M2004017

PROJECT IDENTIFICATION

Task #: 013

State: Colorado

Abbreviation: None

Date: 3/29/2023

County: Grand

Filename: M017-013

User: PSH

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
023	Backfill 40,000 CY Inert Fill (Asphalt and Concrete)	DOZER	1	67.58	\$17,827
033	Debris Removal	DEMOLISH	1	30.00	\$3,667
043	Highwall Cut/Fill 48,000 CY	DOZER	1	87.17	\$22,993
053	Topsoil Replacement 6" - 20 Acres	SCRAPER1	1	14.97	\$18,342
063	Final Grading - 20 Acres	GRADER	1	19.90	\$3,150
073	Revegetate - 20 Acres	REVEGE	1	40.00	\$41,968
083	Mob / Demob	MOBILIZE	1	4.26	\$6,380
<u>SUBTOTALS:</u>				263.88	\$114,327

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$2,309

Performance bond: 1.05

Total = \$1,200

Job superintendent: 131.94

Total = \$9,913

Profit: 10.00

Total = \$11,433

TOTAL O & P = \$24,855

CONTRACT AMOUNT (direct + O & P) = \$139,182

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \$500

Total = \$500

Engineering work and/or contract/bid preparation: 0.00

Total = \$0

Reclamation management and/or administration: 0.00

\$0

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$25,355

TOTAL BOND AMOUNT (direct + indirect) = \$139,682

\$140,000.00 Rounded

BULLDOZER WORKTask description: **Backfill 40,000 CY Inert Fill (Asphalt and Concrete)**Site: **Kattenberg Pit**Permit Action: **SO3 Bond Estimate**Permit/Job#: **M2004017****PROJECT IDENTIFICATION**Task #: **023**State: **Colorado**Abbreviation: **None**Date: **3/29/2023**County: **Grand**Filename: **M017-023**User: **PSH**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:	\$124.85	NA
Operating Cost/Hour:	\$97.63	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:	\$263.78	
Total Fleet Cost/Hour:	\$263.78	

MATERIAL QUANTITIESInitial Volume: **40,000**Swell factor: **1.000**Loose volume: **40,000 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **852.6 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **0 %**Average site altitude: **7,966 feet**Material weight: **3,300 lbs/LCY**Weight description: **Decomposed rock - 75% Rock, 25% Earth****Job Condition Correction Factor**Operator Skill: **1.000**Source
(EXCL.)

Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6942

Adjusted unit
production: 591.87 LCY/hr

Adjusted fleet
production: **591.87** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.446/LCY

Total job time: **67.58** Hours

Total job cost: **\$17,827**

DEMOLITION WORK

Task description: Debris Removal

Site: Kattenberg Pit

Permit Action: SO3 Bond Estimate

Permit/Job#: M2004017

PROJECT IDENTIFICATION

Task #: 033

State: Colorado

Abbreviation: None

Date: 3/29/2023

County: Grand

Filename: M017-033

User: PSH

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 90.00 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Debris Removal	70 x 30 x 5	Loading and 2 mile haul, no salvage - Machine loading	210.00	CY	\$19.40	\$4,074.00

Job Hours: 30.00

Subtotal
(unadjusted): \$4,074.00

Total Cost
(adjusted for location): \$3,666.60

BULLDOZER WORKTask description: **Highwall Cut/Fill 48,000 CY**Site: **Kattenberg Pit**Permit Action: **SO3 Bond Estimate**Permit/Job#: **M2004017****PROJECT IDENTIFICATION**Task #: **043**State: **Colorado**Abbreviation: **None**Date: **3/29/2023**County: **Grand**Filename: **M017-043**User: **PSH**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:	\$124.85	NA
Operating Cost/Hour:	\$97.63	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:	\$263.78	
Total Fleet Cost/Hour:	\$263.78	

MATERIAL QUANTITIESInitial Volume: **48,000**Swell factor: **1.124**Loose volume: **53,933 LCY**Source of estimated volume: **Division of Reclamation, Mining & Safety**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **852.6 LCY/hr**Materials consistency description: **Compacted fill or embankment 0.9**Average push gradient: **-10 %**Average site altitude: **7,966 feet**Material weight: **2,900 lbs/LCY**Weight description: **Sand and gravel - Dry****Job Condition Correction Factor**Operator Skill: **1.000**Source
(EXCL.)

Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7257

Adjusted unit
production: 618.73 LCY/hr
Adjusted fleet
production: **618.73** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.426/LCY

Total job time: **87.17** Hours
Total job cost: **\$22,993**

SCRAPER TEAM WORKTask description: **Topsoil Replacement 6" - 20 Acres**Site: **Kattenberg Pit**Permit Action: SO3 Bond EstimatePermit/Job#: M2004017**PROJECT IDENTIFICATION**Task #: 053State: ColoradoAbbreviation: NoneDate: 3/29/2023County: GrandFilename: M017-053User: PSHAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 631G
-Dozer:	NA
Support Equipment -Load Area:	Cat D8T - 8SU
-Dump Area:	NA
Road Maintenance -Motor Grader:	CAT 140M
-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	50	NA	100	NA
Ownership cost/hour:	\$200.41	NA	\$124.85	NA	\$75.87	NA
Operating cost/hour:	\$194.76	NA	\$48.82	NA	\$53.81	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	NA	\$0.00	NA
Ripper op. cost/hour:	NA	NA	\$0.00	NA	\$0.00	NA
Operator cost/hour:	\$30.90	NA	\$41.30	NA	\$28.56	NA
Unit Subtotals:	\$426.07	NA	\$214.97	NA	\$158.24	NA
Number of Units:	2	0	1	0	1	0
Group Subtotals:	Work:	\$852.14	Support:	\$214.97	Maint:	\$158.24

Total work team cost/hour: **\$1,225.35****MATERIAL QUANTITIES**Initial volume: 16,133

CCY

Swell factor: 1.000Loose volume: **16,133**

LCY

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

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>51.00 LCY</u>	Adjusted Capacity:	<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: 7966 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: Hard, smooth, stabilized, surfaced, watered, maintained 2.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	2.00	2.00	2806	0.65

Haul Time: 0.65 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	1000.00	0.00	2.00	2.00	2914	0.53

Return Time: 0.53 minutes

Total Scraper team cycle time: 2.68 minutes
 Adjusted for job conditions: 538.88 LCY/Hour
 Selected Number of Scrapers: 2 Scraper(s)
 Adjusted single scraper team (unit) hourly production: 1,077.76 LCY/Hour
 Adjusted multiple scraper team (fleet) hourly production: 1,077.76 LCY/Hour

Unadjusted unit production/hour: 649.25 LCY/Hour
 Optimal Number of Scrapers per push dozer: _____

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: 14.97 HoursUnit cost: \$1.137 /LCY Total job cost: \$18,342

MOTOR GRADER WORK

Task description: Final Grading - 20 Acres

Site: Kattenberg Pit

Permit Action: SO3 Bond Estimate

Permit/Job#: M2004017

PROJECT IDENTIFICATION

Task #: 063

State: Colorado

Abbreviation: None

Date: 3/29/2023

County: Grand

Filename: M017-063

User: PSH

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 140M

Horsepower: 183

Ripper Attachment: _____

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$75.87	NA
Operating Cost/Hour:	\$53.81	100
Ripper Ownership Cost/Hour:	\$0.00	NA
Ripper Operating Cost/Hour:	\$0.00	
Operator Cost/Hour:	\$28.56	NA
Total Unit Cost/Hour:	\$158.24	
Total Fleet Cost/Hour:	\$158.24	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 20.00 acres

Source of estimated acreage: Permit Application

HOURLY PRODUCTION

Average Grader Speed:	<u>1.50</u>	mph
Selected Application:	<u>Finish grading (0-2.5 mph) - 1.5</u>	
Selected Blade Angle:	<u>45</u>	degrees
Effective Blade Length:	<u>8.50</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>6.50</u>	feet
Unadjusted Hourly Unit Production:	<u>1.1818</u>	acres/hour

Job Condition Correction Factors

Site Altitude: 7966 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.85</u>	(1sh/d, mod.)
Net Correction:	<u>0.8500</u>	multiplier

Adjusted Hourly Unit Production: 1.0045 acres/Hour

Adjusted Hourly Fleet Production: **1.0045** acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **19.91** Hours

Unit cost: \$157.52 per acre Total job cost: **\$3,150**

REVEGETATION WORKTask description: Revegetate - 20 AcresSite: Kattenberg PitPermit Action: SO3 Bond EstimatePermit/Job#: M2004017PROJECT IDENTIFICATIONTask #: 073State: ColoradoAbbreviation: NoneDate: 3/29/2023County: GrandFilename: M017-073User: PSHAgency or organization name: DRMSFERTILIZING**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-20-20, 4-8-12, 10-10-10	18.12	pound	\$0.23	\$4.17
			Total Fertilizer Materials Cost/Acre	\$4.17

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$39.64
Total Fertilizer Application Cost/Acre	\$39.64

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.18
Weed control spraying (MEANS 31 31 16.13 3100)	\$290.40
Total Tilling Cost/Acre	\$407.58

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Arizona Fescue - Redondo	0.50	5.74	\$4.63
Indian Ricegrass - Native	2.00	6.47	\$13.00
Smooth Brome - Lincoln	3.50	11.65	\$11.64
Pubescent Wheatgrass - Luna	3.00	6.20	\$10.20
Slender Wheatgrass - Native	1.50	5.48	\$6.94
Totals Seed Mix	10.50	35.54	\$46.40

Application

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Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$421.36	\$842.72
Total Mulch Materials Cost/Acre				\$842.72

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$73.00
Weed spray, truck, aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$135.72

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: 20 Cost /Acre: \$1,708.23
 Estimated Failure Rate: 30% Cost /Acre*: \$1,300.65
 *Selected Replanting Work Items: FERTILIZING,SEEDING,MULCHING

Initial Job Cost: **\$34,164.60**
 Reseeding Job Cost: **\$7,803.90**
 Total Job Cost: **\$41,968**
 Job Hours: **40.00**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob / Demob**Site: **Kattenberg Pit**Permit Action: **SO3 Bond Estimate**Permit/Job#: **M2004017****PROJECT IDENTIFICATION**Task #: **083**State: **Colorado**Abbreviation: **None**Date: **3/29/2023**County: **Grand**Filename: **M017-083**User: **PSH**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:	\$15.25	\$23.06	\$37.58
Operating Cost/Hour:	\$25.26	\$30.83	\$51.41
Operator Cost/Hour:	\$27.71	\$27.71	\$27.71
Helper Cost/Hour:	\$0.00	\$20.22	\$20.22
Total Unit Cost/Hour:	\$68.22	\$101.82	\$136.92

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8SU	47.71	\$124.85	\$101.82	1	\$226.67	\$101.82	\$250.00
CAT 140M	16.68	\$75.87	\$68.22	1	\$144.09	\$68.22	\$250.00
Cat 631G	52.50	\$200.41	\$136.92	2	\$674.66	\$273.84	\$500.00

Subtotals: **\$1,045.42** **\$443.88** **\$1,000.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
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Subtotals: **\$0.00** **\$0.00**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>GRANBY, CO</u>	
Total one-way travel distance:	<u>2.00</u>	miles
Average Travel Speed:	<u>30.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$6,380.25</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$0.00</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.07	0.07
Return Time (Hours):	0.07	0.07
Loading Time (Hours):	1.00	NA
Unloading Time (Hours):	1.00	NA
Subtotals:	2.13	0.13

JOB TIME AND COST

Total job time: 4.27 Hours

Total job cost: \$6,380