



April 24, 2024

Blake Tope
Hill Top Gravel LLC
21225 Scott Rd
Calhan, CO 80808

RE: Simla Highway Pit, File No. M-1995-095, Application for 110 Conversion to a 112c Operation (CN-1), Adequacy Review #2

Dear Blake Tope:

On April 22, 2024, the Division of Reclamation, Mining and Safety (Division) received your adequacy response letter for MR325 at the Foidel Creek Mine, C-1982-056. The Division has reviewed the above referenced adequacy review response letter and material submitted. The following is a list of the adequacy review items from the Division's April 12, 2024, first adequacy review letter followed by the response provided by Twentymile Coal, LLC. If additional information or revision is required, it will be noted. If an item is resolved, that will be indicated.

1. The Division found the application for CN-1 complete on March 11, 2024. Pursuant to Rule 1.6.2(1)(d), upon completeness Hill Top Gravel LLC is required to publish a Public Notice for four consecutive weeks which will initiate a 20-day comment period from the date of the last publication. As of the date of this letter, the Division has yet to receive a proof of publication of the public notice for CN-1. Please provide the Division with a copy of the public notice to ensure that the Public Notice was published as required.
Response: *Proof of publication was provided by Publisher's Affidavit on April 4, 2024, via email. A copy of the Publisher's Affidavit is provided as Attachment 1. Resolved.*
2. Pursuant to Rule 3.1.12(2), boundaries of the affected area will be marked by monuments or other markers that are clearly visible and adequate to delineate such boundaries. Please provide the Division with GPS locations for each of these boundary markers and a .kmz or shape file which outlines the exact permit boundary. ***Response:*** *The location of the boundary markers are as follows (latitude/longitude):*
NE: 39° 6'13.31"N 104° 5'19.66"W
SE: 39° 5'59.78"N 104° 5'19.93"W
NW: 39° 6'12.68"N 104° 5'36.31"W
SW: 39° 5'59.55"N 104° 5'35.72"W
Please see the attached .kmz file showing the permit boundary markers as Attachment 2. Resolved.



EXHIBIT A – Legal Description

3. Legal Description Maps (A 1-3) only show the currently affected acreage boundary. These maps should be updated to show the entire proposed permit area boundary of 40 acres. **Response:** *Please see the following attached revised maps:*

Attachment 3.1 - Exhibit A(1) - Entrance Map (USGS via Google Earth)

Attachment 3.2 - Exhibit A(2) - Entrance (USGS Quad Map)

Attachment 3.3 - Exhibit A(3) - Entrance Map (Aerial via Google Earth)

Resolved.

EXHIBIT B – Index Map

4. Similar to the above Item No. 4, the submitted Index Maps will need to be updated to show the entirety of the proposed 40 acre permit boundary. **Response:** *Please see the attached revised Index Map as Attachment 4 - Exhibit B(1) - Index Map (USGS Quad Map).* **Resolved.**

EXHIBIT C – Pre-mining and Mining Plan Maps

5. Map C(a), showing all adjoining surface owners of record, is missing from the Application Package. Please provide this map, as referenced in the Exhibit C narrative, to the Division. **Response:** *Please see Attachment 5 - Exhibit C(a) - Adjacent Landowners Map.* **Resolved.**

EXHIBIT D –Mining Plan

6. For the purpose of bonding, the Division requests clarification of the Mining Plan. The Mining Plan repeatedly states that a maximum of 10 acres will be disturbed at any one time throughout the life of mine. It also states that contemporaneous reclamation will occur. Exhibit L states that the submitted bond estimate accounts for a maximum of 15 acres of unreclaimed disturbance at one time. Pursuant to the Division's definitions under Rule 1.1, any acreage which has been affected by the mining operation and/or reclaimed but has not yet been formally released is still considered disturbed acreage and must be appropriately bonded for.
 - a) Considering this definition, how does this change the Operator's commitment to having a maximum of 10 acres of disturbance occurring at one time? **Response:** *Based on the provided definition, Operator understands the disturbed acreage includes not only active mining areas but also areas that have been affected by mining operations and reclaimed, perhaps better termed as affected land, but have not yet been formally released. In essence, while the commitment to limit*

active disturbance to 10 acres remains, the understanding of what constitutes disturbed (or affected) acreage expands to include areas fully reclaimed but where vegetative cover has not yet been fully established. Therefore, the Operator's planning and bonding requirements consider both fully disturbed areas (approximately 10 acres) and areas reclaimed and awaiting vegetative establishment (approximately 5 acres) for a total of 15 acres.

*The operator commits to a maximum of 15 acres of disturbed and/or affected acres at any one time and will ensure that the financial warranty will be adequate to cover this disturbance. Once the operation reaches this size, the financial warranty associated with this acreage will "Float" over this maximum bonded area throughout the life of the mining operation. Lagging acreage that has reached reclamation maturity will be accounted for in the Annual Report and Annual Report Maps. However, at this time, the operator does not plan to request final reclamation liability release for these acres until the entire site has been mined and reclaimed. **Resolved.***

- b) Does the Operator intend to apply for release of fully reclaimed acreage as mining progresses through additional phases? If not, the Division will require the bond amount to include reclamation work (maintenance and revegetation tasks) for all acreage undergoing contemporaneous reclamation until such area has been formally released by the Division. **Response:** *No, however, the Operator will request surety reductions of successfully reclaimed acres as mining progresses throughout additional phases. As these are granted, it will be tracked in the Annual Report and associated maps. **Resolved.***

- c) If the Operator intends to commit to a phased operation and only wishes to be bonded for a portion of those phases at one time, the Division will require a commitment from the Operator to alert the Division when such new phase has been entered by the Operator. Thus, prompting a revaluation of the bond.

Response: *Operator commits to providing proper notice to the Division before moving to any additional phase of mining. **Resolved.***

7. Please give an estimate for the size (in acres) of temporary stormwater impoundment to be constructed at the site. **Response:** *The approximate size of temporary stormwater impoundment to be constructed at the site is a quarter ($\frac{1}{4}$) of an acre, approximately 100 x 100 feet. **Resolved.***

EXHIBIT E - Reclamation Plan

8. Please provide a signed statement from the landowner(s) which gives approval / permission for the access road to remain post reclamation. **Response:** *Applicant is also the Landowner and hereby gives permission for the access road to remain post reclamation. Resolved.*

EXHIBIT G - Water Information

9. Please provide the Division with a copy of the CDPHE Stormwater Permit referenced in Section 6.4.7(2)(c). **Response:** *The applicant has an active stormwater permit from CDPHE (Permit No. COG 500000) and understand from Division staff that providing the number is sufficient. Resolved.*

EXHIBIT N – Source of Legal Right to Enter

10. The El Paso County Assessor (screenshot below) shows that the southeastern corner of the permit boundary is owned by a Morris D. Ververs. Please submit proof that Legal Right of Entry has been obtained from this entity. **Response:** *County GIS maps specify that the data is not guaranteed to be reliable nor is it to be relied upon for legal purposes. Here, the highway follows the section lines and mining will occur only within the Applicant's legal boundaries. Resolved.*

EXHIBIT O – Owners of Record of Affected Land (surface Area) and Owners of Substance to be Mined

11. The El Paso County Assessor (screenshot below) shows that the southeastern corner of the permit boundary is owned by a Morris D. Ververs. This entity has already been notified pursuant to Rule 1.6.2(1)(g). However, as an owner of record of affected land, they must also be listed under Exhibit O. Please revise and resubmit Exhibit O with this updated information. **Response:** *County GIS maps specify that the data is not guaranteed to be reliable nor is it to be relied upon for legal purposes. Here, the highway follows the section lines and mining will occur only within the Applicant's legal boundaries. Resolved.*

EXHIBIT S - Permanent Man-made Structures

12. The Division was able to locate a previously signed structures agreement for Simla Hwy aka CR 125 but could not locate a structures agreement for the two fence lines south and east of the affected area, owned by West Wood LLC. Although West Wood LLC has given legal right of entry to Hill Top Gravel LLC to conduct mining operations, an

agreement still needs to be in place to insure the fence structures owned by West Wood LLC. Please submit a signed structures agreement for the two fence lines with the submission of your adequacy response. **Response:** *Applicant is also the Landowner and Manager of West Wood, LLC.* **Resolved.**

EXHIBIT L - Reclamation Costs

13. The Division is currently calculating a reclamation cost estimate for the Simla Highway Pit. This estimate will be provided to Hill Top Gravel LLC upon completion and may be revised based on adequacy responses provided through this review process.

Response: *Applicant has placed a copy of this adequacy review response, with Attachments 1 through 5 identified herein (together, "Amendment"), on file with the El Paso County Clerk and Recorder. Attachment 6 consists of the cover letter to the Clerk and Recorder, together with proof of the Clerk and Recorder's receipt of the Amendment.*

The Division has calculated a reclamation cost estimate for CN-1 based on the above adequacy review responses. A copy of the estimate has been provided with this letter. The Division requests that Hill Top Gravel LLC review this calculation and submit any questions before the application decision date.

This letter shall not be construed to mean that there are no other technical deficiencies in your application. The Division will review your application to determine whether it is adequate to meet the requirements of the Act after submittal of all required items. The Division's proposed decision date for this revision is currently set for June 10, 2024.

If you have any questions, please contact me by email at hunter.ridley@state.co.us or by phone at (720)868-7757.

Sincerely,
Hunter C. Ridley



Environmental Protection Specialist

CC: Zach Trujillo, DRMS

COST SUMMARY WORK

Task description: CN-1

Site: Simla Highway Pit

Permit Action: CN1

Permit/Job#: M1995095

PROJECT IDENTIFICATION

Task #: HCR

State: Colorado

Abbreviation: None

Date: 4/4/2024

County: El Paso

Filename: M095-HCR

User: HR1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001a	Rip compacted areas	RIPPER	1	19.45	\$8,781
001b	Distribute topsoil	DOZER	1	14.12	\$6,005
002a	Grade topsoil	GRADER	1	6.87	\$1,218
003a	Revege 10 acres of active area	REVEGE	1	10.00	\$8,538
003b	Maintenance of 5 reclamation acres (25%)	REVEGE	1	1.25	\$2,547
004	Mob/Demob	MOBILIZE	1	2.96	\$3,997
<u>SUBTOTALS:</u>				54.65	\$31,086

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$628

Performance bond: 1.05

Total = \$326

Job superintendent: 8.32

Total = \$541

Profit: 10.00

Total = \$3,109

TOTAL O & P = \$4,604

CONTRACT AMOUNT (direct + O & P) = \$35,690

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$0

Engineering work and/or contract/bid preparation: 4.25

Total = \$1,517

Reclamation management and/or administration: 5.00

\$1,785

CONTINGENCY: 0.00

Total = \$0

TOTAL INDIRECT COST = \$7,906

TOTAL BOND AMOUNT (direct + indirect) = \$38,992

BULLDOZER RIPPING WORK

Task description: Rip compacted areas

Site: Simla Highway Pit Permit Action: CN1 Permit/Job#: M1995095

PROJECT IDENTIFICATION

Task #: 001A State: Colorado Abbreviation: None
Date: 4/24/2024 County: El Paso Filename: 001a
User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310
Ripper Attachment: 1-Shank Ripper Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</u>	<u>100</u>
Ripper Ownership Cost/Hour:	<u>\$17.40</u>	<u>NA</u>
Ripper Operating Cost/Hour:	<u>\$8.74</u>	<u>100</u>
Operator Cost/Hour:	<u>\$40.04</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$451.48</u>	
Total Fleet Cost/Hour:	<u>\$451.48</u>	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 10.00 acres Rip Depth (ft): 2.00 Volume: 32,267 BCY or CCY

Source of estimated quantity: Exhibit E, Reclamation Plan & L(1) Costs, CN-1

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 3.71 feet/pass
Average Ripping Width: 5.56 feet/pass
Average Ripping Length: 250.00 feet/pass
Average Dozer Speed: 88.00 feet/minute
Average Maneuver Time: 0.25 minutes/pass
Production per unit area: 0.619 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.619 Acres/hr
Site Altitude: 6,400 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.51 Acres/hr
Adjusted Hourly Fleet Production: 0.51 Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: 19.45 Hours

Unit cost: \$878.150 Per acre Total job cost: \$8,781

BULLDOZER WORKTask description: **Distribute topsoil**Site: **Simla Highway Pit**Permit Action: **CN1**Permit/Job#: **M1995095****PROJECT IDENTIFICATION**Task #: **001B**State: **Colorado**Abbreviation: **None**Date: **4/24/2024**County: **El Paso**Filename: **001b**User: **HR1**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:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$40.04	NA

Total unit Cost/Hour: **\$425.34**Total Fleet Cost/Hour: **\$425.34****MATERIAL QUANTITIES**Initial Volume: **12,100**Swell factor: **1.215**Loose volume: **14,702 LCY**Source of estimated volume: **Avg 9" depth over 10 ac**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **100 feet**Unadjusted hourly production: **852.6 LCY/hr**Materials consistency description: **Consolidated stockpile 1.0**Average push gradient: **-25 %**Average site altitude: **6,400 feet**Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****Job Condition Correction Factor**

		<u>Source</u>
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:	0.900	(SSD-FC)
Push gradient:	1.516	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 1.2213

Adjusted unit production: 1,041.28 LCY/hr

Adjusted fleet production: **1041.28** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.408/LCY

Total job time: **14.12** Hours

Total job cost: **\$6,005**

MOTOR GRADER WORK

Task description: Grade topsoil

Site: Simla Highway Pit

Permit Action: CN1

Permit/Job#: M1995095

PROJECT IDENTIFICATION

Task #: 002A

State: Colorado

Abbreviation: None

Date: 4/24/2024

County: El Paso

Filename: 002a

User: HR1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: CAT 12M

Horsepower: 158

Ripper Attachment: _____

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$74.98	NA
Operating Cost/Hour:	\$55.26	100
Ripper Ownership Cost/Hour:	\$0.00	NA
Ripper Operating Cost/Hour:	\$0.00	
Operator Cost/Hour:	\$46.87	NA
Total Unit Cost/Hour:	\$177.11	
Total Fleet Cost/Hour:	\$177.11	

MATERIAL QUANTITIES

Total Area to be graded or ripped: 10.00 acres

Source of estimated acreage: Exhibit E Reclamation Plan, CN-1

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>0</u>	degrees
Effective Blade Length:	<u>12.00</u>	feet
Width of blade overlap per pass:	<u>2.00</u>	feet
Net grading or ripping width per pass:	<u>10.00</u>	feet
Unadjusted Hourly Unit Production:	<u>1.8182</u>	acres/hour

Job Condition Correction Factors

Site Altitude: 6400 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.80</u>	(2sh/d, mod.)
Net Correction:	<u>0.8000</u>	multiplier

Adjusted Hourly Unit Production: 1.4545 acres/Hour

Adjusted Hourly Fleet Production: **1.4545** acres/Hour

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **6.88** Hours

Unit cost: \$121.76 per acre Total job cost: **\$1,218**

REVEGETATION WORKTask description: Revege 10 acres of active areaSite: Simla Highway PitPermit Action: CN1Permit/Job#: M1995095**PROJECT IDENTIFICATION**Task #: 003AState: ColoradoAbbreviation: NoneDate: 4/24/2024County: El PasoFilename: 003aUser: HR1Agency or organization name: DRMS**FERTILIZING****Materials**

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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$451.62

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	0.45	7.35	\$6.18
Buffalograss - Native/Plains	2.40	2.31	\$28.96
Little Bluestem - Native	1.05	6.27	\$14.25
Sideoats Grama - Vaughn	0.90	2.95	\$7.54
Western Wheatgrass - Native	4.00	10.10	\$24.00
Needlegrass, Green - Lodorm	0.75	3.12	\$8.83
Totals Seed Mix	9.55	32.10	\$89.75

Application

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
			\$	\$
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:	10	Cost /Acre:	\$773.37
Estimated Failure Rate:	25%	Cost /Acre*:	\$321.75
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$7,733.70
Reseeding Job Cost:	\$804.38
Total Job Cost:	\$8,538
Job Hours:	10.00

REVEGETATION WORKTask description: Maintenance of 5 reclamation acres (25%)Site: Simla Highway PitPermit Action: CN1Permit/Job#: M1995095**PROJECT IDENTIFICATION**Task #: 003BState: ColoradoAbbreviation: NoneDate: 4/24/2024County: El PasoFilename: M095-003bUser: HR1Agency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	40.00	pound	\$0.62	\$24.93
Triple superphosphate, 0-46-0	40.00	pound	\$0.89	\$35.60
			Total Fertilizer Materials Cost/Acre	\$60.53

Application

Description	Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)	\$41.82
Total Fertilizer Application Cost/Acre	\$41.82

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$112.82
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$451.62

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	0.45	7.35	\$6.18
Buffalograss - Native/Plains	2.40	2.31	\$28.96
Little Bluestem - Native	1.05	6.27	\$14.25
Sideoats Grama - Vaughn	0.90	2.95	\$7.54
Western Wheatgrass - Native	4.00	10.10	\$24.00
Needlegrass, Green - Lodorm	0.75	3.12	\$8.83
Totals Seed Mix	9.55	32.10	\$89.75

Application

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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$429.79	\$859.57
Total Mulch Materials Cost/Acre				\$859.57

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
Total Mulch Application Cost/Acre	\$222.13

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: 1.25 Cost /Acre: \$1,957.42
 Estimated Failure Rate: 25% Cost /Acre*: \$321.75
 *Selected Replanting Work Items: SEEDING

Initial Job Cost: **\$2,446.78**
 Reseeding Job Cost: **\$100.55**
 Total Job Cost: **\$2,547**
 Job Hours: **1.25**

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob**Site: **Simla Highway Pit**Permit Action: CN1Permit/Job#: M1995095**PROJECT IDENTIFICATION**Task #: 004State: ColoradoAbbreviation: NoneDate: 4/23/2024County: El PasoFilename: 004User: HR1Agency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost Data Source: CRG DataTruck 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:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

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 12M	16.01	\$78.07	\$82.29	1	\$160.36	\$82.29	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	1	\$89.02	\$82.29	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	1	\$108.23	\$82.29	\$250.00
Cat D8T - 8SU	47.71	\$241.38	\$158.17	1	\$399.55	\$158.17	\$250.00

Subtotals: **\$757.16** **\$405.04** **\$1,000.00****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	\$100.24	1	\$100.24	\$100.24

Subtotals: **\$100.24** **\$100.24**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: LIMON
 Total one-way travel distance: 27.00 miles
 Average Travel Speed: 55.00 mph

Total Non-Roadable Mob/Demob Cost * \$3,898.23
 * two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$98.42
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.49</u>	<u>0.49</u>
Return Time (Hours):	<u>0.49</u>	<u>0.49</u>
Loading Time (Hours):	<u>0.25</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.25</u>	<u>NA</u>
Subtotals:	<u>1.48</u>	<u>0.98</u>

JOB TIME AND COST

Total job time: 2.96 Hours

Total job cost: \$3,997