



May 3, 2023

David Forenza
Mesa Agg LLC
P.O. Box 7790
Avon, CO 81620

RE: Orchard Mesa Aggr, Permit No. M-1995-005, Proposed Surety Increase SI-3

Dear Mr. Forenza:

This reclamation cost update was in response to the site inspection conducted on April 18, 2023. It is Division policy to periodically update its costs to ensure that the Financial Warranty adequately, reflects the actual current cost of fulfilling the requirements of the approved reclamation plan.

The bond was last recalculated in 2020 with SO-1. The bond was considered sufficient, as the estimated amount was calculated to be \$55,836 and the current required amount was \$56,400.43. Prior to SO-1 there have been no increases since 2013. Below is a table summarizing input values that have been updated in since the SO-1 calculation. This table does not account for price changes resulting from inflation or other RS Means cost changes. Bond calculations are based on a combination of field observations and worst case scenario based on the approved reclamation plan.

Task	Form Used	Description
01a	Dozer	No Changes. Approx. 1100 LF of highwall, portions require backfill. 11,074 CCY graded is sufficient.
02a	Ripper	Estimated 13 ac needs ripping
03a	Loader	Affected acreage ~20 ac, prev. reclaimed is 4.32. 15.68 requires topsoil. 15.68 ac @ 4 in = 8,432 CCY
03b	Dozer	Grade transported volume of topsoil 9,486 LCY
04a	Reveg	Reveg 15.68 ac of affected lands not prev. reclaimed



04b	Reveg	Touch up seeding of prev. reclaimed lands 4.32 ac. (2023 ann rpt) Prev. estimated at 7 ac
05a	Mob	No changes
05b	Mob	No changes

Per policy I wanted to send this out for review prior to issuance. Please look it over and let me know if there are errors or concerns. If no response is received by Friday, June 2, 2023 then I'll issue SI-3 the following Monday as is. SI-3 will result in a total required bond amount of \$78,239, which is an increase of \$21,838.57 over the \$56,400.43 currently held.

Sincerely,



Amy Yeldell
Environmental Protection Specialist

Ec:
Travis Marshall, Senior EPS, Grand Junction DRMS
Ivan Geer

COST SUMMARY WORK

Task description: _____

Site: Orchard Mesa Aggr

Permit Action: 04-2023

Permit/Job#: M1995005

PROJECT IDENTIFICATION

Task #: ACY

State: Colorado

Abbreviation: None

Date: 5/3/2023

County: Mesa

Filename: M005-ACY

User: ACY

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Regrading highwalls from near vertical to 3H:1V	DOZER	1	20.08	\$5,271
02a	Rip compacted areas	RIPPER	1	19.58	\$5,542
03a	Transport topsoil	LOADER	1	41.80	\$5,883
03b	Grade topsoil	DOZER	1	12.57	\$3,300
04a	Reveg of active mine areas	REVEGE	1	24.00	\$27,272
04b	Reveg of unreleased reclaimed areas areas	REVEGE	1	8.00	\$5,120
05a	Initial Mobilization	MOBILIZE	1	2.44	\$3,408
05b	Secondary Mobilization	MOBILIZE	1	2.44	\$1,398
<u>SUBTOTALS:</u>				130.91	\$57,194

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$1,155

Performance bond: 1.05

Total = \$601

Job superintendent: 65.46

Total = \$4,918

Profit: 10.00

Total = \$5,719

TOTAL O & P = \$12,393

CONTRACT AMOUNT (direct + O & P) = \$69,587

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$2,957

Reclamation management and/or administration: 5.00

\$3,479

CONTINGENCY: 3.00

Total = \$1,716

TOTAL INDIRECT COST = \$21,045

TOTAL BOND AMOUNT (direct + indirect) = \$78,239

BULLDOZER WORKTask description: **Regrading highwalls from near vertical to 3H:1V**Site: **Orchard Mesa Aggr**Permit Action: 04-2023Permit/Job#: M1995005**PROJECT IDENTIFICATION**Task #: 01AState: ColoradoAbbreviation: NoneDate: 5/3/2023County: MesaFilename: M005-01aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData 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:	\$40.04	NA

Total unit Cost/Hour: \$262.52Total Fleet Cost/Hour: **\$262.52****MATERIAL QUANTITIES**Initial Volume: 11,074Swell factor: 1.090Loose volume: **12,071 LCY**Source of estimated volume: 2000 LF @ 20'H vertical to 3H:1VSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 4,900 feetMaterial weight: 2,400 lbs/LCYWeight description: Clay and gravel - Dry**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4294

Adjusted unit production: 601.16 LCY/hr

Adjusted fleet production: **601.16** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.437/LCY

Total job time: **20.08** Hours

Total job cost: **\$5,271**

BULLDOZER RIPPING WORK

Task description: Rip compacted areas

Site: Orchard Mesa Aggr

Permit Action: 04-2023

Permit/Job#: M1995005

PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 5/3/2023

County: Mesa

Filename: M005-02a

User: ACY

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU

Ripper Attachment: 3-Shank Ripper

Horsepower: 310

Shift Basis: 1 per day

Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$124.85	NA
Operating Cost/Hour:	\$97.63	100
Ripper Ownership Cost/Hour:	\$13.10	NA
Ripper Operating Cost/Hour:	\$7.30	100
Operator Cost/Hour:	\$40.04	NA
Total Unit Cost/Hour:	\$282.92	
Total Fleet Cost/Hour:	\$282.92	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA

Bank Volume: NA

BCY NA

Area: 13.00 acres

Rip Depth (ft): 2.00

Volume: 41,947 BCY or CCY

Source of estimated quantity: Staff estimates

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth:	<u>2.56</u>	feet/pass
Average Ripping Width:	<u>7.08</u>	feet/pass
Average Ripping Length:	<u>300.00</u>	feet/pass
Average Dozer Speed:	<u>88.00</u>	feet/minute
Average Maneuver Time:	<u>0.25</u>	minutes/pass
Production per unit area:	<u>0.800</u>	acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.800 Acres/hr

Site Altitude: 4,900 feet

Altitude Adj: 1.00 (CAT HB)

Job Efficiency: 0.83 (1 shift/day)

Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.66 Acres/hr

Adjusted Hourly Fleet Production: **0.66** Acres/hr

JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **19.59** Hours

Unit cost: \$426.325 Per acre Total job cost: **\$5,542**

WHEEL LOADER – LOAD AND CARRY WORKTask description: Transport topsoilSite: Orchard Mesa AggrPermit Action: 04-2023Permit/Job#: M1995005**PROJECT IDENTIFICATION**Task #: 03AState: ColoradoAbbreviation: NoneDate: 5/3/2023County: MesaFilename: M005-03aUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 972HAttachment 1: ROPS CabHorsepower: 287Shift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$53.96	NA
Operating Cost/Hour:	\$50.78	100
Operator Cost/Hour:	\$35.97	NA
Total Unit Cost/Hour:	\$140.71	
Total Fleet Cost/Hour:	\$140.71	

MATERIAL QUANTITIESInitial volume: 8,432

CCY

Swell factor: 1.125Loose volume: 9,486

LCY

Source of estimated volume: 4" depth over 15.68 acSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high or less 0.01	0.010	(Cat HB)
Truck Ownership:	Common ownership of trucks and loaders -0.04	-0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		-0.050	minutes
Adjusted Basic Cycle Time:		0.475	minutes

Rolling Resistance – Road ConditionsHaul: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Return: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	500	0.00	5.00	5.00	0.4611	(Cat HB)
Return Route:	500	0.00	5.00	5.00	0.4160	(Cat HB)

Total Travel Time: 0.8771 minutes
 Total Cycle Time: 1.3521 minutes

Load Bucket Capacity

Rated Capacity: 5.60 LCY (heaped)
 Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100
 Adjusted Capacity: 6.16 LCY

Job Condition Correction Factors

Site Altitude: 4900 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production: 273.36 LCY/Hour
 Adjusted Hourly Unit Production: 226.89 LCY/Hour
 Adjusted Hourly Fleet Production: 226.89 LCY/Hour

JOB TIME AND COST

Fleet size: 1 Loader(s) Total job time: 41.81 Hours
 Unit cost: \$0.620 /LCY Total job cost: \$5,883

BULLDOZER WORKTask description: Grade topsoilSite: Orchard Mesa AggrPermit Action: 04-2023Permit/Job#: M1995005**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 5/3/2023County: MesaFilename: M005-03bUser: ACYAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData 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:	\$40.04	NA

Total unit Cost/Hour: \$262.52Total Fleet Cost/Hour: \$262.52**MATERIAL QUANTITIES**Initial Volume: 9,486Swell factor: 1.000Loose volume: 9,486 LCYSource of estimated volume: Transported topsoilSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 4,900 feetMaterial weight: 2,550 lbs/LCYWeight description: Earth - Dry packed**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5390

Adjusted unit production: 754.60 LCY/hr

Adjusted fleet production: **754.6** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.348/LCY

Total job time: **12.57** Hours

Total job cost: **\$3,300**

REVEGETATION WORKTask description: Reveg of active mine areasSite: Orchard Mesa AggrPermit Action: 04-2023Permit/Job#: M1995005**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 5/3/2023County: MesaFilename: M005-04aUser: ACYAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
8-24-24, 10-15-15, 10-20-20	50.00	pound	\$0.35	\$17.50
			Total Fertilizer Materials Cost/Acre	\$17.50

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
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	3.25	10.52	\$36.16
Sand Dropseed	0.25	29.84	\$2.44
Crested Wheatgrass - Fairway	2.00	9.18	\$8.05
Galleta	2.00	7.30	\$44.70
Saltbush, Four Wing	1.00	1.38	\$12.50
Saltbush, Shadscale	1.00	1.49	\$10.00
Winter Fat	1.00	2.55	\$20.50
Totals Seed Mix	10.50	62.26	\$134.34

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
Hay, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$421.36	\$421.36
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$3.04	\$3.04
Total Mulch Materials Cost/Acre				\$424.40

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$73.00
Power mulcher (MEANS 32 91 13.16 0350)	\$141.57
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$277.29

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:	15.68	Cost /Acre:	\$1,242.35
Estimated Failure Rate:	40%	Cost /Acre*:	\$1,242.35
*Selected Replanting Work Items:	FERTILIZING,TILLING,SEEDING,MU LCHING		
Initial Job Cost:	\$19,480.05		
Reseeding Job Cost:	\$7,792.02		
Total Job Cost:	\$27,272		
Job Hours:	24.00		

REVEGETATION WORKTask description: **Reveg of unreleased reclaimed areas areas**Site: **Orchard Mesa Aggr**Permit Action: 04-2023Permit/Job#: M1995005**PROJECT IDENTIFICATION**Task #: 04BState: ColoradoAbbreviation: NoneDate: 5/3/2023County: MesaFilename: M005-04bUser: ACYAgency 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)	\$117.18
Total Tilling Cost/Acre	\$117.18

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Paloma	3.25	10.52	\$36.16
Sand Dropseed	0.25	29.84	\$2.44
Crested Wheatgrass - Fairway	2.00	9.18	\$8.05
Galleta	2.00	7.30	\$44.70
Saltbush, Four Wing	1.00	1.38	\$12.50
Saltbush, Shadscale	1.00	1.49	\$10.00
Winter Fat	1.00	2.55	\$20.50
Totals Seed Mix	10.50	62.26	\$134.34

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
Hay, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$421.36	\$421.36
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$3.04	\$3.04
Total Mulch Materials Cost/Acre				\$424.40

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$73.00
Power mulcher (MEANS 32 91 13.16 0350)	\$141.57
Weed spray, truck, non-aquatic area, nox. [DMG]	\$62.72
Total Mulch Application Cost/Acre	\$277.29

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>4.32</u>	Cost /Acre:	<u>\$1,185.21</u>
Estimated Failure Rate:	<u>0%</u>	Cost /Acre*:	<u>\$0.00</u>
*Selected Replanting Work Items:	<u>NONE</u>		

Initial Job Cost:	\$5,120.11
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$5,120
Job Hours:	8.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Initial Mobilization**Site: **Orchard Mesa Aggr**Permit Action: **04-2023**Permit/Job#: **M1995005****PROJECT IDENTIFICATION**Task #: **05A**State: **Colorado**Abbreviation: **None**Date: **5/3/2023**County: **Mesa**Filename: **M005-05a**User: **ACY**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	53.08	\$137.95	\$136.92	1	\$274.87	\$136.92	\$250.00
CAT 972H	28.00	\$53.96	\$101.82	1	\$155.78	\$101.82	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00

Subtotals: **\$588.13** **\$375.18** **\$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	\$80.76	1	\$80.76	\$80.76

Subtotals: **\$80.76** **\$80.76**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: GRAND JUNCTION
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 45.00 mph

Total Non-Roadable Mob/Demob Cost * \$3,390.33
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$17.95
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.11	0.11
Return Time (Hours):	0.11	0.11
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.22	0.22

JOB TIME AND COST

Total job time: 2.44 Hours

Total job cost: \$3,408

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Secondary Mobilization**Site: **Orchard Mesa Aggr**Permit Action: **04-2023**Permit/Job#: **M1995005****PROJECT IDENTIFICATION**Task #: **05B**State: **Colorado**Abbreviation: **None**Date: **5/3/2023**County: **Mesa**Filename: **M005-05b**User: **ACY**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
Drill/Broadcast Seeder with Tractor	25.00	\$6.25	\$68.22	1	\$74.47	\$68.22	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$14.79	\$68.22	1	\$83.01	\$68.22	\$250.00
Subtotals:					\$157.48	\$136.44	\$500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$80.76	1	\$80.76	\$80.76
Subtotals:			\$80.76	\$80.76

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>GRAND JUNCTION</u>	
Total one-way travel distance:	<u>5.00</u>	miles
Average Travel Speed:	<u>45.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$1,380.28</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$17.95</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.11</u>	<u>0.11</u>
Return Time (Hours):	<u>0.11</u>	<u>0.11</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>1.22</u>	<u>0.22</u>

JOB TIME AND COST

Total job time:	<u>2.44</u>	Hours
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Total job cost:	<u>\$1,398</u>
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