




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: Mamm Creek Sand & Gravel	MINE/PROSPECTING ID#: M-2000-113	MINERAL: Sand and gravel	COUNTY: Garfield
INSPECTION TYPE: Monitoring	WEATHER: Clear	INSP. DATE: May 27, 2025	INSP. TIME: 10:30
OPERATOR: Oldcastle SW Group, Inc. dba United Compas County	OPERATOR REPRESENTATIVE: Jesse Farmer	TYPE OF OPERATION: 112c - Construction Regular Operation	
REASON FOR INSPECTION: Normal I&E Program	BOND CALCULATION TYPE:	BOND AMOUNT: \$188,616.00	
DATE OF COMPLAINT: NA	POST INSP. CONTACTS: None	JOINT INSP. AGENCY: None	
INSPECTOR(S): Todd Jesse	INSPECTOR'S SIGNATURE: 	SIGNATURE DATE: June 18, 2025	

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>N</u>	(FN) FINANCIAL WARRANTY----- <u>Y</u>	(RD) ROADS----- <u>N</u>
(HB) HYDROLOGIC BALANCE----- <u>Y</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>Y</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

This inspection report was conducted as part of the normal monitoring program established by the Colorado Division of Reclamation, Mining, and Safety's Active Mines Program. Mamm Creek Sand and Gravel is a 112c Operation operated by Oldcastle SW Group, Inc. dba United Companies of Mesa County. The site is located 2 miles east of Rifle, CO at an elevation of approximately 5,300 feet. Public access is controlled by a gate off Co Rd 315. Jesse Farmer of Oldcastle was present during the inspection.

Financial Warranty:

The last bond calculation was done in 2019. In an effort to ensure the financial warranty remains adequate to reclaim this site per the requirements of the approved reclamation plan, DRMS has updated the Reclamation Cost Estimate. The updated estimate is attached to this inspection report. Calculations estimate the cost of reclamation to be \$237,368. This is an increase of \$48,752 over the current surety of \$188,616 held by the Division. A Notice of Surety Increase will be sent under a separate cover once the operator has had the opportunity to review the estimate and dispute any calculations.

Fish and Wildlife:

Song birds (redwing black birds) were observed in the wetland area of the permit.

Hydrologic Balance:

Groundwater has been exposed within the permit boundary in two different ponds. Fuel is stored in a double walled tank. No spills were noted during the inspection.

Gen. Compliance With Mine Plan:

Materials are delivered to the Mamm Creek permit via the conveyor that originates in the North Banks pit. Product is then stockpiled or loaded onto trucks for delivery. A scale and office is located near the entrance to the site. One pond is still being used for mining and the other is reclaimed. Undisturbed ground is located on the far western and far eastern portions of the permit.

Signs and Markers:

The mine identification sign and boundary markers are in place and in compliance with Rule 3.1.12. The sign is posted by the entrance to site. The permit boundary is marked with fence line and posts that are easily identifiable as well as earthen berms

Photos that show site conditions can be found at the end of the report.

All responses to this report should be directed to Todd Jesse with the Division's Active Mines Program at DRMS, Room 215, 1001 E. 62nd Ave. Denver, CO 80216. Direct contact can be made at the Division's Grand Junction Field Office, by phone at (720) 688-0626 or by email at todd.jesse@state.co.us.

PHOTOGRAPHS



Photo 1: View to the north of proper mine ID at site entrance.



Photo 2: View to the north of fuel storage.



Photo 3: View to the north of stockpiles and end of conveyor corridor.



Photo 4: View to the east of scale and office near the site entrance.



Photo 5: View to the northeast of undisturbed portion of permit area.

Inspection Contact Address

Jesse Farmer
Oldcastle SW Group, Inc. dba United Companies of Mesa County
2273 River Road
Grand Junction, CO 81502

Enclosure: Reclamation Cost Estimate

CC: Travis Marshall, DRMS

COST SUMMARY WORK

Task description: _____

Site: Mamm Creek Sand & Gravel

Permit Action: 2025-06-17

Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 6/17/2025

County: Garfield

Filename: M113-000

User: TJ1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demo onsite support facilities	DEMOLISH	1	80.00	\$70,663
02a	Mining Area E-Removal of Asphalt and Propane tank	DEMOLISH	1	40.00	\$32,985
02b	Mining Area E-Rip compacted areas	RIPPER	2	1.90	\$1,314
02c	Mining Area E- Grade misc. stockpiles	DOZER	2	0.48	\$200
02d	Mining Area E- topsoil application	DOZER	2	2.65	\$1,705
02e	Mining Area E-Reveg 3 ac	REVEGE	1	5.00	\$6,729
03a	Mining Area C-Dewater pond	PUMPING	1	117.18	\$8,201
03b	Mining Area C-Grading slopes adjacent to river and pad	DOZER	2	3.16	\$2,031
03c	Mining Area C-Topsoil graded slopes	DOZER	2	0.80	\$516
03d	Mining Area C-Reveg 1 ac	REVEGE	1	2.00	\$2,243
04a	Mining Area A-Rip compacted areas	RIPPER	2	7.63	\$5,256
04b	Mining Area B-Transport Topsoil	LOADER	2	35.38	\$7,707
04c	Mining Area A-Spread Topsoil	DOZER	2	6.60	\$4,248
04d	Mining Area A-Reveg 10 ac	REVEGE	1	13.00	\$22,430
05a	Mining Area B-Rip compacted areas	RIPPER	2	1.52	\$1,051
05b	Mining Area B- topsoil application	DOZER	2	2.43	\$1,565
05c	Mining Area B-Reveg 1 ac	REVEGE	1	2.50	\$4,486
06a	Initial Mobilization	MOBILIZE	1	2.40	\$9,611
06b	Secondary Mobilization	MOBILIZE	1	2.40	\$1,448
<u>SUBTOTALS:</u>				327.03	\$184,389

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02

Total = \$3,725

Performance bond: 1.05

Total = \$1,936

Job superintendent: 105.00

Total = \$8,323

Profit: 10.00

Total = \$18,439

TOTAL O & P = \$32,423

CONTRACT AMOUNT (direct + O & P) = \$216,812

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

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

Total = \$500

Engineering work and/or contract/bid preparation: 4.25

Total = \$9,215

Reclamation management and/or administration:	<u>5.00</u>		<u>\$10,841</u>
CONTINGENCY:	0.00	Total =	<u>\$0</u>
		TOTAL INDIRECT COST =	<u>\$52,978</u>
		TOTAL BOND AMOUNT (direct + indirect) =	<u>\$237,367</u>

DEMOLITION WORK

Task description: Demo onsite support facilities

Site: Mamm Creek Sand & Gravel

Permit Action: 2025-06-17

Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 6/17/2025

County: Garfield

Filename: M113-01a

User: TJ1

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 102.20 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale house	60' x 10' x 10'	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	6,000.00	CF	\$0.42	\$2,525.40
Scale house foundation	60' x 10'	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft. - Max. 10,000 ft. haul	140.00	LF	\$4.63	\$647.65
Scale-Loading/Hauling	70' x 8'	Loading and 2 mile haul, no salvage - Machine loading	20.00	CY	\$21.15	\$423.00
Scale-Hauling	70' x 8'	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	10.00	MI	\$4.43	\$44.34
Scale-Footers	70' x 8'	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft. - Max. 10,000 ft. haul	32.00	LF	\$4.63	\$148.04
Conveyor-Belt Strucutre	900 LF x 10" W X 4" H	Conveyor, Demolition Cost only	36,000.00	CF	\$0.44	\$15,685.20
Conveyor-Load/Haul Belt Structure	36000 CF	Loading and 2 mile haul, no salvage - Machine loading	1,333.00	CY	\$21.15	\$28,192.95
Conveyor-Haul Belt Structure	10 mi x 75 trips	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	750.00	MI	\$4.43	\$3,325.13
Conveyor- demo footers	3 pairs	Demo. and on-site disposal in existing pit, 2.0 ft. x 3 ft. - Max. 10,000 ft. haul	24.00	LF	\$13.88	\$333.08
Conveyor-metal support load/haul	3 pairs (2'Dia x 10'H)	Loading and 2 mile haul, no salvage - Machine loading	9.00	CY	\$21.15	\$190.35
Conveyor-metal support haul	10 mi x 9 cy	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	10.00	MI	\$4.43	\$44.34
Conveyor-disposal fees	All non-rubble material	Dump fees - Building construction materials.	1,584.00	CY	\$11.10	\$17,582.40

Job Hours:	<u>80.00</u>	Subtotal (unadjusted):	<u>\$69,141.88</u>	Total Cost (adjusted for location):	<u>\$70,663.00</u>
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DEMOLITION WORK

Task description: Mining Area E-Removal of Asphalt and Propane tank

Site: Mamm Creek Sand & Gravel

Permit Action: 2025-06-17

Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 6/17/2025

County: Garfield

Filename: M113-02a

User: TJ1

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 95.50 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Demo asphalt pad	250' x 250'	Pavement, bituminous, demolition only - 4 in. to 6 in. thick	3,472.20	SY	\$8.66	\$30,069.25
Load asphalt for offsite disposal	31250 cu ft	Loading only, open areas (unconfined) - Track loader	1,158.00	CY	\$0.87	\$1,012.09
Haul asphalt to Casey Pit for Disposal	65 trips 12 miles	Hauling only, per mile, 12-18 CY truck - 50 mph average speed	780.00	MI	\$4.43	\$3,458.13

Job Hours: 40.00

Subtotal
(unadjusted): \$34,539.47

Total Cost
(adjusted for location): \$32,985.19

BULLDOZER RIPPING WORK

Task description: Mining Area E-Rip compacted areas

Site: Mamm Creek Sand & Gravel

Permit Action: 2025-06-17

Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 02B

State: Colorado

Abbreviation: None

Date: 6/17/2025

County: Garfield

Filename: M113-02b

User: TJ1

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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper Ownership Cost/Hour:	\$14.53	NA
Ripper Operating Cost/Hour:	\$7.95	100
Operator Cost/Hour:	\$38.59	NA
Total Unit Cost/Hour:	\$344.10	
Total Fleet Cost/Hour:	\$688.19	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 2.50 acres Rip Depth (ft): 2.00 Volume: 8,067 BCY or CCY

Source of estimated quantity: Onsite observations

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 feet/pass
Average Ripping Width: 7.08 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: 0.789 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.789 Acres/hr
Site Altitude: 5,350 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.65 Acres/hr
Adjusted Hourly Fleet Production: **1.31** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **1.91** Hours

Unit cost: \$525.601 Per acre Total job cost: **\$1,314**

BULLDOZER WORKTask description: Mining Area E- Grade misc. stockpilesSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 02CState: ColoradoAbbreviation: NoneDate: 6/17/2025County: GarfieldFilename: M113-02cUser: TJ1Agency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 500Swell factor: 1.060Loose volume: 530 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 5,350 feetMaterial weight: 2,900 lbs/LCYWeight description: Sand and gravel - Dry**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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3949

Adjusted unit production: 552.86 LCY/hr

Adjusted fleet production: **1105.72** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.582/LCY

Total job time: **0.48** Hours

Total job cost: **\$308**

BULLDOZER WORKTask description: Mining Area E- topsoil applicationSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 02DState: ColoradoAbbreviation: NoneDate: 6/17/2025County: GarfieldFilename: M113-02dUser: TJ1Agency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 3,630Swell factor: 1.115Loose volume: 4,047 LCYSource of estimated volume: 3 ac at 9" depthSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 5,350 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - Loam**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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5453

Adjusted unit production: 763.42 LCY/hr

Adjusted fleet production: **1526.84** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.421/LCY

Total job time: **2.65** Hours

Total job cost: **\$1,705**

REVEGETATION WORKTask description: Mining Area E-Reveg 3 acSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 02E
Date: 6/17/2025
User: TJ1State: Colorado
County: GarfieldAbbreviation: None
Filename: M113-02eAgency 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)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	\$25.83
Big Bluegrass - Sherman	1.00	20.66	\$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	\$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	\$4.89
Western Wheatgrass - Arriba	1.50	3.79	\$13.55
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Sage, Fringed	0.25	20.89	\$24.81
Saltbush, Shadscale	0.50	0.75	\$9.04
Penstemon, Rocky Mountain	0.25	3.92	\$15.35

Totals Seed Mix	7.50	61.81	\$120.75
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Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.13	\$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$3.86	\$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$993.55

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	\$83.26
Total Mulch Application Cost/Acre	\$325.89

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:	3	Cost /Acre:	\$1,794.44
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,794.44
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$5,383.32		
Reseeding Job Cost:	\$1,345.83		
Total Job Cost:	\$6,729		
Job Hours:	5.00		

PUMPING WORK

Task description: Mining Area C-Dewater pond

Site: Mamm Creek Sand & Gravel

Permit Action: 2025-06-17

Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 03A

State: Colorado

Abbreviation: None

Date: 6/18/2025

County: Garfield

Filename: M113-03a

User: TJ1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Submersible pump - 460v, 8 in.	3
Attachment 1:	Suction hose - 6 in. diam., 25 ft.	3
Attachment 2:	Discharge hose - 6 in. D., 25 ft.	24
Labor Unit 1:	Pump operator	1

Horsepower: 95

Shift Basis: 1 per day

Weight: 0.70

(US Tons)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	<u>\$34.71</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$13.20</u>	<u>100</u>
Operator Cost/Hour:	<u>\$22.07</u>	<u>NA</u>
Total Unit Cost/Hour:	<u>\$69.98</u>	

Total Fleet Cost/Hour: \$69.98

PUMPING QUANTITIES

Initial Pond Volume:	<u>195.00</u>		Conversion factor:	<u>325850.5800</u>
Final Pond Volume:	<u>63,540,863.10</u>	gallons		
Total Pond Inflow Surface Area:	<u>40,000</u>	Sq. ft.	Unit inflow rate in gph/sq. ft.:	<u>0.1758</u>
Total Pond Inflow Volume per Hour:	<u>7,032.00</u>	gallons		

Source of estimated volume: 13 ac pond, pumped down 15 ft deep

PUMPING TIME

Maximum Pump Capacity:	<u>170,000</u>	gph/pump
Estimated Suction Head:	<u>10</u>	feet
Estimated Discharge Head:	<u>10</u>	feet
Total Head:	<u>20</u>	feet
CPB Pump Capacity:	<u>168,000</u>	gph/pump
Site Altitude:	<u>5,330</u>	feet
Adjusted Pumping Capacity:	<u>504,000</u>	gph
Initial Unadjusted Pumping Time:	<u>126.07</u>	hours
Inflow during Initial Pumping:	<u>886,546</u>	gallons
Net Unadjusted Pumping Time:	<u>127.83</u>	Hours
Altitude Adjustment Factor:	<u>1.0000</u>	(3% rule)
Pump Efficiency Factor:	<u>0.9167</u>	(55 min./hr.)
Total Adjusted Pumping Time:	<u>117.18</u>	hours

JOB TIME AND COST

Total job time: **117.18** Hours

Unit cost: \$0.000127 /Gallon

Total job cost: **\$8,201**

BULLDOZER WORKTask description: Mining Area C-Grading slopes adjacent to river and padSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 6/17/2025County: GarfieldFilename: M113-03bUser: TJ1Agency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 3,125Swell factor: 1.050Loose volume: 3,281 LCYSource of estimated volume: 3000 LF 15'H 2:1 to 3:1Source 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: -10 %Average site altitude: 5,350 feetMaterial weight: 3,400 lbs/LCYWeight description: Sand and gravel - Wet**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:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.676	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3712

Adjusted unit production: 519.68 LCY/hr

Adjusted fleet production: **1039.36** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.619/LCY

Total job time: **3.16** Hours

Total job cost: **\$2,031**

BULLDOZER WORKTask description: Mining Area C-Topsoil graded slopesSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 03CState: ColoradoAbbreviation: NoneDate: 6/17/2025County: GarfieldFilename: M113-03cUser: TJ1Agency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 1,210Swell factor: 1.115Loose volume: 1,349 LCYSource of estimated volume: 1 ac @ 9"Source 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: -10 %Average site altitude: 5,350 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - Loam**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:	1.225	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6012

Adjusted unit production: 841.68 LCY/hr

Adjusted fleet production: **1683.36** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.382/LCY

Total job time: **0.80** Hours

Total job cost: **\$516**

REVEGETATION WORKTask description: Mining Area C-Reveg 1 acSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 03D
Date: 6/17/2025
User: TJ1State: Colorado
County: GarfieldAbbreviation: None
Filename: M113-03dAgency 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)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	\$25.83
Big Bluegrass - Sherman	1.00	20.66	\$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	\$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	\$4.89
Western Wheatgrass - Arriba	1.50	3.79	\$13.55
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Sage, Fringed	0.25	20.89	\$24.81
			\$

Totals Seed Mix			\$
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Application

Description	Cost /Acre
	\$
Total Seed Application Cost/Acre	\$

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.13	\$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$3.86	\$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$993.55

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	\$83.26
Total Mulch Application Cost/Acre	\$325.89

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 Cost /Acre: \$1,794.44
 Estimated Failure Rate: 25% Cost /Acre*: \$1,794.44
 *Selected Replanting Work Items: TILLING,SEEDING,MULCHING
 Initial Job Cost: \$1,794.44
 Reseeding Job Cost: \$448.61
 Total Job Cost: \$2,243
 Job Hours: 2.00

BULLDOZER RIPPING WORK

Task description: Mining Area A-Rip compacted areas

Site: Mamm Creek Sand & Gravel

Permit Action: 2025-06-17

Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 04A

State: Colorado

Abbreviation: None

Date: 6/17/2025

County: Garfield

Filename: M113-04a

User: TJ1

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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper Ownership Cost/Hour:	\$14.53	NA
Ripper Operating Cost/Hour:	\$7.95	100
Operator Cost/Hour:	\$38.59	NA
Total Unit Cost/Hour:	\$344.10	
Total Fleet Cost/Hour:	\$688.19	

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: Onsite observations

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 feet/pass
Average Ripping Width: 7.08 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: 0.789 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.789 Acres/hr
Site Altitude: 5,350 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.65 Acres/hr
Adjusted Hourly Fleet Production: **1.31** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **7.64** Hours

Unit cost: \$525.601 Per acre Total job cost: **\$5,256**

WHEEL LOADER – LOAD AND CARRY WORKTask description: Mining Area B-Transport TopsoilSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 04BState: ColoradoAbbreviation: NoneDate: 6/18/2025County: GarfieldFilename: M113-04bUser: TJ1Agency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 950HAttachment 1: ROPS CabHorsepower: 197Shift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$36.61	NA
Operating Cost/Hour:	\$35.43	100
Operator Cost/Hour:	\$36.85	NA
Total Unit Cost/Hour:	\$108.89	
Total Fleet Cost/Hour:	\$217.79	

MATERIAL QUANTITIESInitial volume: 12,100

CCY

Swell factor: 1.115Loose volume: 13,492

LCY

Source of estimated volume: 12 ac @ 9" depthSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.500 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 3/4" to 6" diameter 0.00	0.000	(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:		-0.070	minutes
Adjusted Basic Cycle Time:		0.430	minutes

Rolling Resistance – Road ConditionsHaul: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0Return: Soft, rutted dirt, no maintenance or water, 4" tire penetration 8.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	250	0.00	8.00	8.00	0.2899	(Cat HB)
Return Route:	250	0.00	8.00	8.00	0.2629	(Cat HB)

Total Travel Time: 0.5529 minutes
 Total Cycle Time: 0.9829 minutes

Load Bucket Capacity

Rated Capacity: 4.30 LCY (heaped)
 Bucket Fill Factor: 0.875 Loose material - 1/2" to 3/4" (85 - 90%) 0.875
 Adjusted Capacity: 3.76 LCY

Job Condition Correction Factors

Site Altitude: 5350 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: 229.68 LCY/Hour
 Adjusted Hourly Unit Production: 190.64 LCY/Hour
 Adjusted Hourly Fleet Production: 381.27 LCY/Hour

JOB TIME AND COST

Fleet size: 2 Loader(s) Total job time: 35.39 Hours
 Unit cost: \$0.571 /LCY Total job cost: \$7,707

BULLDOZER WORKTask description: Mining Area A-Spread TopsoilSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 04CState: ColoradoAbbreviation: NoneDate: 6/17/2025County: GarfieldFilename: M113-04cUser: TJ1Agency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 12,100Swell factor: 1.000Loose volume: 12,100 LCYSource of estimated volume: 12 ac @ 9"Source 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: 5,350 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - Loam**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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 916.16 LCY/hr

Adjusted fleet production: **1832.32** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.351/LCY

Total job time: **6.60** Hours

Total job cost: **\$4,248**

REVEGETATION WORKTask description: Mining Area A-Reveg 10 acSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 04DState: ColoradoAbbreviation: NoneDate: 6/17/2025County: GarfieldFilename: M113-04dUser: TJ1Agency 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)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	\$25.83
Big Bluegrass - Sherman	1.00	20.66	\$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	\$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	\$4.89
Western Wheatgrass - Arriba	1.50	3.79	\$13.55
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Sage, Fringed	0.25	20.89	\$24.81
Saltbush, Shadscale	0.50	0.75	\$9.04
Penstemon, Rocky Mountain	0.25	3.92	\$15.35

Totals Seed Mix	7.50	61.81	\$120.75
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Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.13	\$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$3.86	\$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$993.55

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	\$83.26
Total Mulch Application Cost/Acre	\$325.89

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:	\$1,794.44
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,794.44
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$17,944.40		
Reseeding Job Cost:	\$4,486.10		
Total Job Cost:	\$22,430		
Job Hours:	13.00		

BULLDOZER RIPPING WORK

Task description: Mining Area B-Rip compacted areas

Site: Mamm Creek Sand & Gravel

Permit Action: 2025-06-17

Permit/Job#: M2000113

PROJECT IDENTIFICATION

Task #: 05A

State: Colorado

Abbreviation: None

Date: 6/17/2025

County: Garfield

Filename: M113-05a

User: TJ1

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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper Ownership Cost/Hour:	\$14.53	NA
Ripper Operating Cost/Hour:	\$7.95	100
Operator Cost/Hour:	\$38.59	NA
Total Unit Cost/Hour:	\$344.10	
Total Fleet Cost/Hour:	\$688.19	

MATERIAL QUANTITIES

Selected estimating method: Area

Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA
Area: 2.00 acres Rip Depth (ft): 2.00 Volume: 6,453 BCY or CCY

Source of estimated quantity: Onsite observations

HOURLY PRODUCTION

Seismic:

Seismic Velocity: NA feet/second

Area:

Average Ripping Depth: 2.56 feet/pass
Average Ripping Width: 7.08 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: 0.789 acres/hour

Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.789 Acres/hr
Site Altitude: 5,350 feet
Altitude Adj: 1.00 (CAT HB)
Job Efficiency: 0.83 (1 shift/day)
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.65 Acres/hr
Adjusted Hourly Fleet Production: **1.31** Acres/hr

JOB TIME AND COST

Fleet size: 2 Grader(s) Total job time: **1.53** Hours

Unit cost: \$525.601 Per acre Total job cost: **\$1,051**

BULLDOZER WORKTask description: Mining Area B- topsoil applicationSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 05BState: ColoradoAbbreviation: NoneDate: 6/17/2025County: GarfieldFilename: M113-05bUser: TJ1Agency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 2,420Swell factor: 1.115Loose volume: 2,698 LCYSource of estimated volume: 2 ac at 9" depthSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 75 feetUnadjusted hourly production: 1,017.1 LCY/hrMaterials consistency description: Consolidated stockpile 1.0Average push gradient: 0 %Average site altitude: 5,350 feetMaterial weight: 2,100 lbs/LCYWeight description: Earth - Loam**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:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5453

Adjusted unit production: 554.62 LCY/hr

Adjusted fleet production: **1109.24** LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)

Unit cost: \$0.580/LCY

Total job time: **2.43** Hours

Total job cost: **\$1,565**

REVEGETATION WORKTask description: Mining Area B-Reveg 1 acSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**Task #: 05C
Date: 6/18/2025
User: TJ1State: Colorado
County: GarfieldAbbreviation: None
Filename: M113-05cAgency 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)	\$117.61
Total Tilling Cost/Acre	\$117.61

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	1.50	4.86	\$25.83
Big Bluegrass - Sherman	1.00	20.66	\$15.85
Intermediate Wheatgrass - Rush	1.50	3.20	\$7.10
Milk Vetch, Cicer - Lutana	0.50	1.66	\$4.89
Western Wheatgrass - Arriba	1.50	3.79	\$13.55
Needlegrass, Green - Lodorm	0.50	2.08	\$4.32
Sage, Fringed	0.25	20.89	\$24.81
Saltbush, Shadscale	0.50	0.75	\$9.04
Penstemon, Rocky Mountain	0.25	3.92	\$15.35

Totals Seed Mix	7.50	61.81	\$120.75
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Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
Total Seed Application Cost/Acre	\$236.64

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$4.13	\$4.13
Herbicide - Glyphosate (Journey)@ 1.0 pt/ac	1.00	ACRE	\$3.86	\$3.86
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$993.55

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Weed spray, truck, non-aquatic area, nox. [DMG]	\$83.26
Total Mulch Application Cost/Acre	\$325.89

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:	2	Cost /Acre:	\$1,794.44
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,794.44
*Selected Replanting Work Items:	TILLING,SEEDING,MULCHING		
Initial Job Cost:	\$3,588.88		
Reseeding Job Cost:	\$897.22		
Total Job Cost:	\$4,486		
Job Hours:	2.50		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Initial Mobilization**Site: **Mamm Creek Sand & Gravel**Permit Action: **2025-06-17**Permit/Job#: **M2000113****PROJECT IDENTIFICATION**

Task #: **06A** State: **Colorado** Abbreviation: **None**
 Date: **6/18/2025** County: **Garfield** Filename: **M113-06a**
 User: **TJ1**

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:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

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
Grove RT760E, 110', 54.40 MT	42.34	\$176.37	\$122.78	1	\$299.15	\$122.78	\$250.00
Cat 385C L 18'-1" Stick	95.42	\$220.92	\$125.64	1	\$346.56	\$125.64	\$250.00
CAT 950H	20.13	\$36.61	\$59.44	2	\$192.10	\$118.88	\$500.00
CAT 973D	29.07	\$120.46	\$122.78	1	\$243.24	\$122.78	\$250.00
Cat D8T - 8SU	53.08	\$187.85	\$125.64	2	\$626.98	\$251.28	\$500.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00
Submersible pump - 460v, 8 in.	0.70	\$9.89	\$59.44	1	\$69.33	\$59.44	\$250.00

Subtotals: **\$1,964.47** **\$919.68** **\$2,500.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
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Light Duty Pickup, 4x4, 1 T. Crew	\$75.09	1	\$75.09	\$75.09
Flatbed Truck, 4x2, 15K GVW	\$64.31	1	\$64.31	\$64.31
Generic 15-18 cy, 6x4	\$129.15	3	\$387.45	\$387.45

Subtotals:	\$526.85	\$526.85
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EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: RIFLE, CO
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 50.00 mph

Total Non-Roadable Mob/Demob Cost * \$9,505.77
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$105.37
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.10	0.10
Return Time (Hours):	0.10	0.10
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.20	0.20

JOB TIME AND COST

Total job time: 2.40 Hours

Total job cost: \$9,611

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Secondary MobilizationSite: Mamm Creek Sand & GravelPermit Action: 2025-06-17Permit/Job#: M2000113**PROJECT IDENTIFICATION**

Task #: 06B State: Colorado Abbreviation: None
 Date: 6/18/2025 County: Garfield Filename: M113-06b
 User: TJ1

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:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

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	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00

Subtotals: **\$187.11** **\$118.88** **\$500.00**

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 4x2, 15K GVW	\$64.31	1	\$64.31	\$64.31

Subtotals: **\$64.31** **\$64.31**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: RIFLE, CO
 Total one-way travel distance: 5.00 miles
 Average Travel Speed: 50.00 mph

Total Non-Roadable Mob/Demob Cost * \$1,435.42
 ** two round trips with haul rig:
 Total Roadable Mob/Demob Cost ** \$12.86
 ** one round trip, no haul rig:

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.10	0.10
Return Time (Hours):	0.10	0.10
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.20	0.20

JOB TIME AND COST

Total job time: 2.40 Hours

Total job cost: \$1,448