

Girardi - DNR, Chris <chris.girardi@state.co.us>

# Keenesburg No. 2 Mine- October 2024 Inspection Report and Updated Bond

1 message

Girardi - DNR, Chris <chris.girardi@state.co.us>

Tue, Jan 21, 2025 at 10:53 AM

To: Brady Reece <breece@capitalsand.com> Cc: Scott Jinks <sjinks@capitalsand.com>, "Krajewski, Dustin" <DKrajewski@trccompanies.com>,

dpatterson@capitalsand.com, Jared Ebert - DNR <jared.ebert@state.co.us>

Hello,

Attached to this email is the Division's Inspection Report for the inspection conducted on October 2, 2024. In addition, attached is an updated cost estimate to complete reclamation at the site.

A hard copy will not be mailed unless requested.

Please let me know if you have any questions or concerns.

Have a great day, Chris

Chris Girardi

**Environmental Protection Specialist Intern** 



P: (720) 793-3041

Physical: 1313 Sherman Street, Room 215, Denver, CO 80203

Mailing: DRMS Room 215, 1001 E 62nd Ave, Denver, CO 80216

chris.girardi@state.us.co |https://drms.colorado.gov/

#### 2 attachments



Keenesburg No.2 Mine\_2025UpdatedCostEstimate.pdf

#### COST SUMMARY WORK

Permit Action: 2025 Cost Estimate Update	Permit/Job#: <u>M2019058</u>	_
State: Colorado	Abbreviation: None	
County: Weld	Filename: M058-00	01
	Permit Action:       2025 Cost Estimate         Update       Update         State:       Colorado         County:       Weld	Permit Action:       2025 Cost Estimate         Update       Permit/Job#:       M2019058         State:       Colorado       Abbreviation:       None         County:       Weld       Filename:       M058-00

#### TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
1 45K	Description	Used	Size	Hours	Cost
001a	Reduce Highwall (2500'x25') sidewalls (300'x12')	DOZER	1	13.66	\$6,506
001b	Regrade Wastepile- estimated 1 yr production	DOZER	2	416.65	\$396,930
002a	Structure demo	DEMOLISH	1	160.00	\$2,100,491
002b	Slab and Footer Demo	DEMOLISH	1	160.00	\$521,342
002c	Sales Road Demo	DEMOLISH	1	80.00	\$347,279
003a	Rip facilities area	RIPPER	2	33.64	\$32,546
003b	Rip Haul Roads	RIPPER	2	20.18	\$19,527
003c	Rip Topsoil Piles TS-0 & TS-1	RIPPER	2	23.07	\$22,317
004a	Topsoil Facilities Area	TRUCK1	2	60.77	\$130,407
004b	Topsoil Waste Pile	TRUCK1	2	184.55	\$396,056
004c	Topsoil Haul Roads	TRUCK1	2	23.62	\$50,694
004d	Topsoil Active Pit Area 184 acres	TRUCK1	2	207.05	\$444,354
005a	Reveg- 66 ac Facilities	REVEGE	1	66.00	\$151,890
005b	Reveg- Waste Pile 164 ac	REVEGE	1	164.00	\$352,349
005c	Reveg- Haul Roads 21 ac	REVEGE	1	21.00	\$48,329
005d	Reveg- Active Pit Area 184 ac	REVEGE	1	184.00	\$395,319
005e	Reveg- Topsoil piles TS-0 & TS-1, 24 ac	REVEGE	1	24.00	\$55,233
006	Mobilize Equipment	MOBILIZE	1	9.04	\$39,535
007a	Vehicles for onsite support	MISCTRUK	2	300.00	\$31,698
007b	Fuel truck 1.5 hour daily, 6 mos	MISCTRUK	1	200.00	\$14,602
007c	Heavy equipment support vehicle 4 hrs/week, 6	MISCTRUK	1	100.00	\$8,032
	mos				
		<u>SUBTO</u>	TALS:	2451.23	\$5,565,436

### **INDIRECT COSTS**

<u>OVERHEAD AND PROFIT:</u>	

Liability insurance: 2.02 Total = \_\_\_\_\_\$112,422 Performance bond: 1.05 Total = \$58,437 Total = Job superintendent: 1,225.62 \$97,155 Profit: Total = \$556,544 10.00 TOTAL O & P = \$824,557 CONTRACT AMOUNT (direct + O & P) = \$6,389,993LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): \_\_\_\_\$ Engineering work and/or contract/bid preparation: \_4

50	Total =	\$0
.25	Total =	\$271,575

Reclamation management and/or administration:	5.00		\$319,500
CONTINGENCY:	0.00	Total =	\$0
		TOTAL INDIRECT COST =	\$1,415,631
ΤΟΤΑ	L BOND AN	MOUNT (direct + indirect) =	\$6,981,069

### BULLDOZER WORK

Task description:		Reduce	e Highwall (2500	)'x25') sidewa	alls (300'x12')					
:	Keenesburg	g No. 2 M	line	Permit Action:	2025 ( 	Cost Estimate	_ Permit/Job#:	M2019	)58	
P	PROJECT IDE	ENTIFIC	CATION							
	T1- #-	0014		<u>C</u> 4-4	Calanda		<b>A b b m m m m</b>	4:	Nama	
	Task #: Date:	$\frac{001A}{1/15/20}$	25	_ State: _	Weld		Abbrevia Filename	tion:	None 	
	User:	CMG	20		,, era		1	•	11000 0014	
	Agency or org	anization	name:	DRI	MS					
E	IOURLY EQU	U <b>IPMEN</b>	T COST							
	Basic Machine	e: _	Cat D9T -	9SU		_				
	Horsepower:	_	405 Semi Univ	versel		_				
	Attachment:	_	3-shank rin	oper		_				
	Shift Basis:	-	1 per day	1 -		_				
	Data Source:	-	(CRG)			_				
<u>C</u>	Cost Breakdowr	<u>n</u> :				Litilization 9/				
	Ownership Co	ost/Hour:	\$253	3.16		NA				
	Operating Cos	st/Hour:	\$164	4.35		100				
	Ripper own. C	Cost/Hour	: \$18.	.79		NA				
	Ripper op. Cos	st/Hour:	\$0.0	0		0				
	Operator Cost	/Hour:	\$40.	04		NA				
	Total unit Cos Total Fleet Co	t/Hour: st/Hour:	\$476 <b>\$476</b>	5.34 5 <b>.34</b>						
N	MATERIAL Q	UANTI	<u>ries</u>							
	Initial Volume	e:	16,103							
	Swell factor:		1.124	7	_					
	Loose volume	·:	18,093 LCY		_					
	Source of estir Source of estir	mated vol mated sw	lume: ell factor:	Division of Cat Handbo	Reclamation,	Mining & Safet	У			
Ē	IOURLY PRO	DUCTI	<u>ON</u>							
	Average push	distance:		50 feet						
	Unadjusted ho	ourly prod	luction:	2,110.5 LCY/	hr					
	Materials cons	sistency d	lescription:	Compact	ed fill or emb	ankment 0.9			-	
	Average push	gradient:	-15 9	%						
	Average site a	ltitude:	4,80	0 feet						
	Material weigl	ht:	2,40	0 lbs/LCY						
	Weight descrij	ption:	Sanc	l - Dry, loose					-	
J	ob Condition C	Correction	Factor S	Source						
	Operator Skill	:		0.750		(AVG.)				
	operator 5km					· · · · · · · · · · · · · · · · · · ·				

Dozing method:	1.100	(50% SL)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.958	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.6277	
Adjusted unit production:	1,324.76 LCY/hr	
Adjusted fleet production:	1324.76 LCY/hr	

#### JOB TIME AND COST

Fleet size:	1 Dozer(s)
Unit cost:	\$0.360/LCY
Total job time:	<b>13.66</b> Hours

\$6,506

Total job cost:

### BULLDOZER WORK

Task description:		Regrae	de Wastepile- es	timated 1 yr	production				
Site:	Keenesburg No. 2 M	ine	Permit Action:	2025 Updat	Cost Estimate e	_ Permit/Job#:	M201	9058	
	PROJECT IDENTIFIC.	ATION							
	Task #:     001B       Date:     1/15/202       User:     CMG	25	State: County:	Colorado Weld		Abbre Filena	viation: me:	None M058-001b	
			_						
	Agency or organization	name:	_DR	MS					
	HOURLY EQUIPMEN	<u>Г COST</u>							
	Basic Machine: Horsepower: Blade Type: Attachment: Shift Basis: Data Source:	Cat D9T - 405 Semi-Univ 3-shank rip 1 per day (CRG)	9SU rersal oper						
	Cost Breakdown:								
	Ownership Cost/Hour: Operating Cost/Hour: Ripper own. Cost/Hour: Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL OUANTIT	\$25: \$16 \$18 \$0.0 \$40 \$470 \$952	3.16         4.35         79         00         .04         5.34         2.67		Utilization % NA 100 NA 0 NA				
	Initial Volume: _7 Swell factor: _1 Loose volume: _7	99,134 .000 <b>99,134</b> LC	Y						
	Source of estimated volu Source of estimated swe	ume: Il factor:	Division of Cat Handbo	Reclamation	, Mining & Safety	/			
	HOURLY PRODUCTIO	<u>DN</u>							
	Average push distance: Unadjusted hourly prod	uction:	100 feet 1,243.2 LCY/	ĥr					
	Materials consistency do	escription:	Loose sto	ockpile 1.2					
	Average push gradient: Average site altitude:	-10 4,80	% 0 feet						
	Material weight:	2,40	0 lbs/LCY						
	Weight description:	Sand	d - Dry, loose						
	Job Condition Correction Operator Skill: Material consistency:	Factor S	Source 0.750 1.200		(AVG.) (CAT HB)				

Dozing method:	1.100	(50% SL)
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:	0.958	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.7714	
Adjusted unit production:	959.00 LCY/hr	
Adjusted fleet production:	1918 LCY/hr	

#### JOB TIME AND COST

Fleet size:	2 Dozer(s)		
Unit cost:	\$0.497/LCY		
Total job time:	<b>416.65</b> Hours		

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\$396,930

Total job cost:

### DEMOLITION WORK

	Task description:	Structu	ire demo				
Site:	Keenesburg No. 2 Mine		Permit Action:	2025 Cost Estima Update	ate Permit/Jo	ob#:	M2019058
<b>PROJE</b>	CT IDENTIFICATION						
Task #	: 002A	State:	Colorado	A	Abbreviation:	Nor	ne
Date:	1/15/2025	County:	Weld	I	Filename:	M0.	58-002a
User:	CMG						
Agenc	y or organization name:		DRMS				

# UNIT COSTS Location adjustment: 89.40 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Dry Sand Storage Building	125x450x20	Bldg. (MN) demo./off- site disposal in approved landfill - Max. 5 mile haul	1,125,000.00	CF	\$0.45	\$505,800.00
Mobile equipment Shop	75x100x25	Bldg. (MN) demo./off- site disposal in approved landfill - Max. 5 mile haul	187,500.00	CF	\$0.45	\$84,300.00
Maintenance Parts Storage	75x150x20	Bldg. (MN) demo./off- site disposal in approved landfill - Max. 5 mile haul	225,000.00	CF	\$0.45	\$101,160.00
Wet Sand and Storage Building	180x610x20	Bldg. (MN) demo./off- site disposal in approved landfill - Max. 5 mile haul	2,196,000.00	CF	\$0.45	\$987,321.60
Air compressor 1 and 2	30x30x16 x2	Bldg. (SN) demo./off- site disposal in approved landfill - Max. 5 mile haul	28,800.00	CF	\$0.35	\$9,947.52
Scales Loadout	110x155	Demo. and on-site disposal in excavated pit, 8 in. thick - Max. 200 ft. push	13,797.00	SF	\$1.65	\$22,806.44
Water Treatment	60x130x20	Bldg. (MN) demo./off- site disposal in approved landfill - Max. 5 mile haul	156,000.00	CF	\$0.45	\$70,137.60
Wet Plant Enclosure	190x190x35	Bldg. (MN) demo./off- site disposal in approved landfill - Max. 5 mile haul	1,263,500.00	CF	\$0.45	\$568,069.60

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
<b>Job Hours:</b>	160.00	(unadjusted):	\$2,349,542.76	location):	\$2,100,491.23

### DEMOLITION WORK

	Task description:	Slab an	d Footer Demo				
Site:	Keenesburg No. 2 Mine		Permit Action:	2025 Cost Estima Update	ate Permit/Jo	b#: <u>M20190</u>	58
PROJE	CT IDENTIFICATION						
Task # Date: User:	: 002B 1/15/2025 CMG	State: County:	Colorado Weld	<i>F</i>	Abbreviation: Filename:	None M058-002b	
Agenc	y or organization name:		DRMS				

# UNIT COSTS Location adjustment: 89.40 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Dry Sand Storage Building	125x450	Demo. and on-site disposal in excavated pit, 12 in. thick - Max. 200 ft. push	56,250.00	SF	\$2.48	\$139,471.88
Mobile equipment Shop	75x100	Demo. and on-site disposal in excavated pit, 12 in. thick - Max. 200 ft. push	7,500.00	SF	\$2.48	\$18,596.25
Maintenance Parts Storage	75x150	Demo. and on-site disposal in excavated pit, 10 in. thick - Max. 200 ft. push	11,250.00	SF	\$2.07	\$23,244.75
Wet Sand and Storage Building	180x610	Demo. and on-site disposal in excavated pit, 12 in. thick - Max. 200 ft. push	109,800.00	SF	\$2.48	\$272,249.10
Air compressor 1 and 2	30x30 x2	Demo. and on-site disposal in excavated pit, 6 in. thick - Max. 200 ft. push	1,800.00	SF	\$1.24	\$2,231.46
Scales Loadout	110x155	Demo. and on-site disposal in excavated pit, 8 in. thick - Max. 200 ft. push	17,050.00	SF	\$1.65	\$28,183.65
Water Treatment	60x130	Demo. and on-site disposal in excavated pit, 6 in. thick - Max. 200 ft. push	7,800.00	SF	\$1.24	\$9,669.66
Wet Plant Enclosure	190x190	Demo. and on-site disposal in excavated pit, 12 in. thick - Max. 200 ft. push	36,100.00	SF	\$2.48	\$89,509.95

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
Job Hours:	160.00	(unadjusted):	\$583,156.70	location):	\$521,342.09

### DEMOLITION WORK

	Task description:	Sales Roa	ad Demo				
Site:	Keenesburg No. 2 Mine	P	ermit Action:	2025 Cost Estimate Update	Permit/Jo	b#:	M2019058
PROJE	CT IDENTIFICATION						
Task #:	002C	State:	Colorado	Abbr	eviation:	None	e
Date:	1/15/2025	County:	Weld	Filen	ame:	M05	8-002c
User:	CMG						
Agency	or organization name:		DRMS				

# UNIT COSTS Location adjustment: 89.40 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Sales road	2800x84x8"	Demo. and on-site disposal in excavated pit, 8 in. thick - Max. 200 ft. push	235,000.00	SF	\$1.65	\$388,455.00

				Total Cost	
		Subtotal		(adjusted for	
Job Hours:	80.00	(unadjusted):	\$388,455.00	location):	\$347,278.77

# BULLDOZER RIPPING WORK

Task description:   Rip facilities area	
bite: Keenesburg No. 2 Mine Permit Action: 2025 Cos Update	st Estimate Permit/Job#: <u>M2019058</u>
PROJECT IDENTIFICATION	
Task #:003AState:ColoradoDate:1/15/2025County:WeldUser:CMG	Abbreviation: None Filename: M058-003a
Agency or organization name: DRMS	
HOURLY EQUIPMENT COST	
Basic Machine:Cat D9T - 9SURipper Attachment:1-Shank Ripper	Horsepower:405Shift Basis:1 per dayD to S(CB C)
Cost Breakdown:	Data Source: (CRG)
Ownership Cost/Hour: \$253.10	Utilization %       6     NA
Operating Cost/Hour: \$164.3	5 100 7 NA
Ripper Ownersnip Cost/Hour: \$15.7	7 <u>NA</u> 5 100
Operator Cost/Hour: \$40.04	4 NA
Total Unit Cost/Hour: \$483.6	7
Total Fleet Cost/Hour: \$967.33	
Alternata Mathaday	ting method: Area
Alternate Methods:Bank Volume:NAea: $35.00$ acresRip Depth (ft): $1.50$	BCY         NA           Volume:         84,700         BCY or
Alternate Methods:       Bank Volume:       NA         acres       Rip Depth (ft):       1.50         Source of estimated quantity:       Permit application	ting method: <u>Area</u> BCY <u>NA</u> Volume: <u>84,700</u> BCY of D
Alternate Methods:       Alternate Methods:         nic:       NA         ea:       35.00         Source of estimated quantity:       Permit application         HOURLY PRODUCTION	ting method: <u>Area</u> BCY <u>NA</u> Volume: <u>84,700</u> BCY or N
Alternate Methods:       Alternate Methods:         nic:       NA         ea:       35.00         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:         Seismic:	ting method: <u>Area</u> BCY <u>NA</u> Volume: <u>84,700</u> BCY or <u>h</u>
Alternate Methods:         nic:       NA         ea:       35.00         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:	ting method: <u>Area</u> BCY <u>NA</u> Volume: <u>84,700</u> BCY or <u>1</u> feet/second
Alternate Methods:         nic:       NA         ea:       35.00         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         NA         Area:         Average Ripping Depth:         4.05	ting method: <u>Area</u> BCY <u>NA</u> Volume: <u>84,700</u> BCY on <u>n</u> feet/second feet/pass
Alternate Methods:         nic:       NA         ea:       35.00         acres       Rip Depth (ft):         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:         Average Ripping Depth:         Average Ripping Width:	BCY       NA         BCY       NA         Volume:       84,700         BCY       BCY or         1       feet/second
Alternate Methods:         nic:       NA         ea:       35.00         source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:         Average Ripping Depth:         Average Ripping Width:         Average Ripping Length:         2000         2000	ting method: <u>Area</u> BCY <u>NA</u> Volume: <u>84,700</u> BCY or feet/second feet/pass feet/pass feet/pass feet/pass feet/pass
Alternate Methods:         nic:       NA         ea:       35.00         source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:         Average Ripping Depth:         Average Ripping Width:         Average Ripping Length:         Average Dozer Speed:         Average Maneuver Time:	ting method: <u>Area</u> BCY <u>NA</u> BCY of NA Volume: <u>84,700</u> BCY of feet/second feet/pass feet/pass feet/pass feet/pass feet/pass feet/pass feet/pass
Alternate Methods:         nic:       NA         ea:       35.00         source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:       Average Ripping Depth:         Average Ripping Length:       4.05         Average Ripping Length:       125.00         Average Maneuver Time:       0.25         Production per unit area:       0.627	ting method: <u>Area</u> BCY <u>NA</u> BCY of B
Alternate Methods:         nic:       NA         ea:       35.00         acres       Rip Depth (ft):         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:       Average Ripping Depth:         Average Ripping Width:       6.08         Average Ripping Length:       125.00         Average Maneuver Time:       0.25         Production per unit area:       0.627	ting method: <u>Area</u> BCY <u>NA</u> Olume: <u>84,700</u> BCY or D D D D D D D D D D D D D D D D D D D
Alternate Methods:         nic:       NA         ea:       35.00         acres       Rip Depth (ft):         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:       Average Ripping Depth:         Average Ripping Length:       4.05         Average Ripping Length:       125.00         Average Maneuver Time:       0.25         Production per unit area:       0.627         Job Condition Correction Factors       Unadjusted Hourly Unit Production:       0.627	ting method: <u>Area</u> BCY <u>NA</u> BCY on NA BCY or NA Acres/hr
Alternate Methods:         nic:       NA         ea:       35.00         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         NA         Area:         Average Ripping Depth:         Average Ripping Length:         Average Ripping Length:         Average Ripping Length:         Average Maneuver Time:         0.25         Production per unit area:         Unadjusted Hourly Unit Production:         0.627         Site Altitude:	ting method: <u>Area</u> BCY <u>NA</u> Volume: <u>84,700</u> BCY or  feet/second feet/pass feet/pass feet/pass feet/pass feet/pass feet/pass Acres/hr feet feet
Alternate Methods:         nic:       NA         ea:       35.00         acres       Rip Depth (ft):         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         NA         Area:       Average Ripping Depth:         Average Ripping Length:       125.00         Average Ripping Length:       125.00         Average Maneuver Time:       0.25         Production per unit area:       0.627         Job Condition Correction Factors       Site Altitude:         Unadjusted Hourly Unit Production:       0.627         Site Altitude:       4,800         Altitude Adj:       1.00	ting method: <u>Area</u> BCY <u>NA</u> BCY on NA BCY or BCY o
Alternate Methods:         nic:       NA         acres       Rip Depth (ft):         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:       Average Ripping Depth:         Average Ripping Length:       4.05         Average Ripping Length:       125.00         Average Ripping Length:       0.25         Production per unit area:       0.627         Job Condition Correction Factors       Site Altitude:         Unadjusted Hourly Unit Production:       0.627         Site Altitude:       4,800         Altitude Adj:       1.00         Job Efficiency:       0.83	ting method: <u>Area</u> BCY <u>NA</u> BCY on BCY or B
Alternate Methods:         nic:       NA         ea:       35.00         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:       NA         Area:       Average Ripping Depth:         Average Ripping Length:       125.00         Average Ripping Length:       125.00         Average Ripping Length:       0.25         Production per unit area:       0.627         Job Condition Correction Factors       Site Altitude:         Unadjusted Hourly Unit Production:       0.627         Site Altitude Adj:       1.00         Job Efficiency:       0.83         Net Correction:       0.83	ting method: <u>Area</u> BCY <u>NA</u> BCY on BCY or B
Alternate Methods:         nic:       NA         ea:       35.00         acres       Rip Depth (ft):         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         NA         Area:         Average Ripping Depth:         Average Ripping Uength:         Average Ripping Length:         125.00         Average Maneuver Time:         0.25         Production per unit area:         0.627         Job Condition Correction Factors         Unadjusted Hourly Unit Production:         0.627         Site Altitude:         4,800         Altitude Adj:         1.00         Job Efficiency:         0.83         Net Correction:         0.83	ting method: <u>Area</u> BCY <u>NA</u> BCY on BCY on BCY or B
Alternate Methods:         nic:       NA         ea:       35.00         acres       Rip Depth (ft):         Source of estimated quantity:       Permit application         HOURLY PRODUCTION         Seismic:       Seismic Velocity:         Area:       Average Ripping Depth:         Average Ripping Length:       125.00         Average Ripping Length:       125.00         Average Ripping Length:       125.00         Average Ripping Length:       0.25         Production per unit area:       0.627         Job Condition Correction Factors       Site Altitude:         Unadjusted Hourly Unit Production:       0.627         Site Altitude:       4,800         Altitude Adj:       1.00         Job Efficiency:       0.83         Net Correction:       0.83         Adjusted Hourly Unit Production:       0.52         Adjusted Hourly Fleet Production:       0.52	ting method: <u>Area</u> BCY <u>NA</u> BCY on BCY or B

Unit cost: \$929.884 Per a	cre	Total job co	ost: \$3	2,546	
<u>B</u>	ULLDOZER RI	PPING W	<u>ORK</u>		
Task description: Rip Haul F	Roads				
Site: Keenesburg No. 2 Mine	Permit Action:	2025 Cost I Update	Estimate	Permit/Job#: <u>M20190</u>	58
<b>PROJECT IDENTIFICATION</b>					
Task #:         003B         St           Date:         1/15/2025         Cou           User:         CMG	ate: Colorado nty: Weld		Abbro F	eviation: <u>None</u> ilename: <u>M058-003b</u>	
Agency or organization name:	DRMS				
HOURLY EOUIPMENT COST					
Basic Machine: Cat D9T -	9SU		Horsepower <sup>.</sup>	405	
Ripper Attachment: 1-Shank R	ipper	_	Shift Basis: Data Source:	1 per day (CRG)	
Cost Breakdown:					
Ownership Cost/Hou	r.	\$253.16	Utilization % NA		
Operating Cost/Hou	r:	\$164.35	100		
Ripper Ownership Cost/Hou	r:	\$15.77	NA		
Ripper Operating Cost/Hou	r:	\$10.35	100		
Operator Cost/Hou	r:	\$40.04	NA		
Total Unit Cost/Hou	r:	\$483.67			
MATERIAL QUANTITIES Alternate Methods:	Selec	ted estimatin	g method: <u>Area</u>	ı	_
Seismic: NA	Bank Volume <sup>.</sup>	NA	BCY	NA	
Area: 21.00 acres	Rip Depth (ft):	1.50	Volume:	50,820	BCY or CCY
Source of estimated q	uantity: Permit a	application			
HOURLY PRODUCTION					
<u>Seismic:</u>	<b>X7 1</b> '	NT A	6 . //	1	
Seismic	velocity:	NA	Ieet/sec	ond	
<u>Area:</u>		4.05	C		
Average Rippi	ng Depth:	4.05	feet/pas	S	
Average Rippin	g Width.	125.00	feet/pas	s	
Average Doz	er Speed:	88.00	feet/min	ute	
Average Maneu	ver Time:	0.25	minutes	/pass	
Production per	unit area:	0.627	acres/hc	bur	
Job Condition Correction Factors					
Unadjusted Hourly Unit Pr	oduction:	0.627	Acres/h	r	
Site	Altitude:	4,800	feet		
Alti	tude Adj:	1.00	(CAT H	B)	
Job E	tticiency:	0.83	(1 shift/	day)	
Net C	orrection:	0.83	multıplı	er	
Adjusted Hourly	Unit Production:	0.52	Acres/hr		

# JOB TIME AND COST

Fleet size:	2	Grader(s)	Total job time:	20.19	Hours
Unit cost:	\$929.884	Per acre	Total job cost:	\$19,527	

### BULLDOZER RIPPING WORK

	Task description:		Rip Topsoil Piles TS-0 & TS-1							
Site	Keenesburg No. 2 M	line	Permi	t Action:	2025 Cost Update	Estimate	e Per	rmit/Job#:	M201905	58
	PROJECT IDENTIFIC	CATION	<u>N</u>							
	Task #: 003C		State:	Colorad	0		Abbrevia	ation:	None	
	Date:         1/15/202:           User:         CMG	5	County:	Weld			Filename	: _	M058-003c	
	Agency or organization	n name:		ORMS						
	HOURLY EQUIPMEN	T COS	<u>T</u>							
	Basic Machine:	Ca	at D9T - 9SU	U	Horsepow	ver:		405		
	Ripper Attachment:	1-	Shank Ripp	er	Shift Basi Data Sour	s: ce:	-	1 per day (CRG)	,	
	Cost Breakdown:					Little	ation 0/			
	Ownership Cost/Hour:			\$253.16		NA	ation 70			
	Operating Cost/Hour:		-	\$164.35		100		-		
	Ripper Ownership Cos	t/Hour:	-	\$15.77		NA				
	Ripper Operating Cost	Hour:	-	\$10.35		100				
	Operator Cost/Hour:		=	\$40.04		NA				
	Total Unit Cost/Hour:		-	\$483.67		-				
	Total Fleet Cost/Hour:		-	\$967.33		-				
	MATERIAL OUANTI	TIFS		G 1 .	, <b>1</b> ,• ,•	.1 1				
	Alternate Methods:	<u>1115</u>		Select	ted estimating m	iethod:	Area	a		
	Alternate Wethous.									
Seismic: Area:	NA 24.00	acres	Bank V Rip Depth	Volume: 1 (ft):	<u>NA</u> 1.50	\	BCY Volume:	NA 58,080		BCY or CCY
	Source of estimated qu	antity:		Perm	nit application					
	HOURLY PRODUCTI	<u>ON</u>								
	<u>Seismic:</u> Seismic Velocity:			N	A		feet/sec	ond		
	Area:									
	Average Ripping Dept	1:		4.0	05		feet/pas	S		
	Average Ripping Widt	h:		6.0	08		feet/pas	s		
	Average Ripping Leng	th:		12	5.00		feet/pas	S		
	Average Dozer Speed:			88	3.00 25		feet/mir	nute		
	Average Maneuver Tin	ne:		0.2	25 627		minutes	s/pass		
		a.			027			Jui		
	Job Condition Correction	1 Factors	<u>s</u>							
	Unadjusted Hourly Un	it Produ	ction:	0.0	627		_ Acres/h	r		
	Site Altitude:			4,8	800		feet			
	Altitude Adj:			1.0	00		(CAT H	IB)		

Job Efficienc Net Correctio	Job Efficiency: Net Correction:		0.83 0.83	(1 shift/day) multiplier	
Adjusted Hou Adjusted Hou JOB TIME A	Adjusted Hourly Unit Production: Adjusted Hourly Fleet Production: JOB TIME AND COST		0.52 1.04	Acres/hr Acres/hr	
Fleet size:	2	Grader(s)	Total job time:	23.07	Hours
Unit cost:	\$929.884	Per acre	Total job cost:	\$22,317	

### TRUCK/LOADER TEAM WORK

Permit/Job#: M2019058
Abhaviation Name
Filename: M058-004a
Maintenance Equipment
Area Motor Water Truck
25 25
2 \$77.29 \$17.11
1 \$14.22 \$9.20
NA NA
\$0.00 \$0.00
\$0.00 \$0.00
\$56.70 \$0.00
7 \$148.21 \$26.31
7 Maint: \$174.52
1 215
1.215
ng & Safety

Description: Rated Payload: Payload Capacit	: y:	Top Soil 87,000 54.38		Pounds LCY					
<u>Truck Bed (volum</u> Struck Volum Heaped Volum Average Volum Adjusted Volum	ne) Basis: ne: ne: ne: ne:	24.20 31.40 27.80 31.40	LCY LCY LCY LCY						
Final Truck Volu	ume Base	d on Number of	Loader Pass	ses:		31.50		_ LCY	
Loading Tool Cap	<u>bacity</u>		Dual	et Size Cle			N	Ň	
			Виск	et Size Cla	ISS:		INF	4	
Rated Capacity:		7.500	LCY (	heaped)	1 1 (1000	/ 1100/\ 1	0.50		
Adjusted Capaci	or: itv:	<u> </u>	LCY	loam or sa	ndy clay (100%	<u>/o - 110%) 1</u>	.050		
Job Condition Co	orrection	<u>s:</u> Site Alt	itude (ft.): <u>4</u>	<u>800</u> feet					
		Truck	Loader		Source				
Altitude Adi:		1.000	1.000		(CAT HB)				
Job Efficiency:		0.830	0.830		(CAT HB)				
Nat Camaatian.		0 930	0.920						
Net Concetion.		0.050	0.050						
Loading Tool Cy	vele Time	e: Numb	er of Loadi	ng Tool Pa	sses Required	to Fill	4		passes
Excavators and E	ront Show	Truck	•						
		<u>, eis.</u>							
Machine Cycle	Time vs	Job Condition Ra	ting:	NA					
Selected Value v	within this	s Basic Rating:	_	NA					
Track Loaders –	- Material	Description:							
Cycle Time Eleme	ents (min.	.):							
Load:	NA	Maneuver:	_	NA	Dump:		0.100		
Wheel and Track maneuver):	k Loaders	s - Unadjusted Ba	asic Loader	Cycle Tim	e (load, dump,		0.550		minutes
Cycle Time Fact	tors					Factor (mi	in.)	Source	
Material:		Material up	to 1/8" dian	neter 0.02		0.020		(Cat HB	
Stockpile:		Conveyor or 0.00	dozer piled	l 10 ft. higl	n and up	0.000		(Cat HB	)
Truck Ownershi	p:	Common ov 0 04	vnership of t	trucks and	loaders -	-0.040		(Cat HB	)
Operation:		Constant on	eration -0.04	4		-0.040		(Cat HB	)
Dump Target:		Nominal tar	get 0.00			0.000		(Cat HB	<u>()</u>
		Net Cycle T	ime Adjustr	nent:		-0.060		minutes	<u>,                                     </u>
		Adjusted Lo	ader Cycle '	Time:		0.490		minutes	
		Net Load Ti	me per Truc	:k:	-	1.570		minutes	

### Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.570	Minutes	Adjusted for site altitude:	1.570	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

Truck Travel (Haul & Return) Time: maintained 2.0

\$1.484 /LCY

Road Condition: Hard, smooth, stabilized, surfaced, watered,

Unit cost:

Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel		
	(Ft)			(%)	(%)	(fpm)	Time		
							(min)		
1	1800	.00	0.00	2.00	2.00	3005	1.062		
				Haul '	Lime.	1.062	n	ninutes	
Return Rov	ute:			IIdul	i iiiie.	1.002	1	mates	
Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel		
C	(Ft)			(%)	(%)	(fpm)	Time		
							(min)		
1	1800	.00	0.00	2.00	2.00	3005	0.744		
			Return Time:			0.744		minutes	
			Total Truck Cy	cle Time:		4.976		minutes	
ling Tool unit	t	970 07		A 11	1.6 . 1 . 66		722.0	0	
uction le Unit Produ	ation	8/0.9/	LCY/Hour	Adjust	ed for job effic	ciency:	122.9	0	LCY/Hour
K OIIII I IOUU	CHOIL	379.82	LCY/Hour	Adjust	ed for job effic	ciency:	315.2	5	LCY/Hour
	rucks <sup>.</sup>	2	Truck(s)	Selecte	d Number of '	Frucks	3		Truck(s)
mal No. of Ti		2	1140K(5)	Selecte		Huckb.	5		TTuek(b)
mal No. of Ti	aons.								
mal No. of Ti Adjuste	ed hour	ly truck team	n production:			945.76		LCY/Ho	ur
mal No. of Tr Adjuste Adjuste	ed hour ed singl	ly truck team e truck/loade	n production: er team productio	n:		945.76 722.90		LCY/Ho LCY/Ho	ur ur
mal No. of Ti Adjuste Adjuste Adjuste	ed hour ed singl ed mult	ly truck team e truck/loade iple truck/loa	n production: er team productio ader team product	n: tion:		945.76 722.90 <b>1,445.81</b>		LCY/Ho LCY/Ho LCY/Ho	ur ur ur
mal No. of Tr Adjuste Adjuste Adjuste <u>JOB TIM</u>	ed hour ed singl ed multi E AND	ly truck team e truck/loade iple truck/loa	n production: er team productio ader team product	n: tion:		945.76 722.90 <b>1,445.81</b>		LCY/Ho LCY/Ho LCY/Ho	ur ur ur

Total job cost:

\$130,407

#### TRUCK/LOADER TEAM WORK

Task description:	Topsoil	Waste Pile					
Site: Keenesburg No	. 2 Mine	Permit Act	tion:	2025 Cost Update	Estimate	Permit/Job#:	M2019058
PROJECT IDENT	IFICATION						
Task #: 004E	3 Sta	ate: C	Colorado		Ab	breviation:	None
Date: 1/15/	/2025 Co	ounty: V	Weld		Fil	ename:	M058-004b
User: CMC	Ĵ						
Agency or organiz	ation name:	DRM	S				
HOURLY EQUIP	MENT COST S	Shift basis: <u>1</u>	per day				
Equipment	Description						
Truck Loader Tear	m -Truck:		Cat 740				
-Loader:	t Load Area		CAT 980	)H			
-Dump Area:	n -Loau Area:	-	Cat D8T	- 8SU			
Road Maintenance	e – Motor Grader:		CAT 14(	)M			
-Water Truck:			Water Ta	anker, 3,500	Gal.		
<u>Cost</u> Breakdown:	Truck/Loa	ader Team	Supp	ort Equipme	nt Ma	untenance Equip	ment
	Truck	Loader	Lo	ad Area	Dump Are	a Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	1	100	25	25
Ownership cost/hour:	\$108.25	\$69.00	NA	1	\$173.32	\$77.29	\$17.11
Operating cost/hour:	\$79.54	\$60.57	NA	1	\$109.71	\$14.22	\$9.20
%Utilization-riper:	NA	0	NA	1	NA	NA	NA
cost/hour:	NA	\$0.00	NA	1	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	1	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$24.82	\$56.84	NA	1	\$40.04	\$56.70	\$0.00
Unit Subtotals:	\$212.61	\$186.41	NA	1	\$323.07	\$148.21	\$26.31
Number of Units:	6	2	0		1	1	1
Group Subtotals:	Work:	\$1,648.48	Suj	pport:	\$323.07	Maint:	\$174.52
Total work team cos	st/hour: <u>\$2,146.</u>	07					
MATERIAL QUA	NTITIES						
Initial volume:	219.607		CCY	Swell factor	r: 1.2	215	
Loose volume:	266,823		LCY				
Source of estimate	d volume:	_	Division o	of Reclamatio	on, Mining a	& Safety	
Source of estimate	a swell factor:		Cat Handl	DOOK			
Total Cost:	0031.	_	\$0.00				
HOURLY PRODI	CTION						
Truck Constitution							
Truck Pavload (weight	ght) Basis:						
M 4 1 1 1	1 (00		1				

uck I ayload (weight) Dasi	13.	
Material weight:	1,600	Pounds/LCY
Description:	Top Soil	

Rated Payload:	87,000	Pounds
Payload Capacity:	54.38	LCY

#### Truck Bed (volume) Basis:

Struck Volume:	24.20	LCY
Heaped Volume:	31.40	LCY
Average Volume:	27.80	LCY
Adjusted Volume:	31.40	LCY

Final Truck Volume Based on Number of Loader Passes:

31.50 LCY

#### Loading Tool Capacity

		Bucket Size Class:	NA	_
Rated Capacity:	7.500	LCY (heaped)		_
Bucket Fill Factor:	1.050	Moist loam or sandy clay (100% - 110	%) 1.050	
Adjusted Capacity:	7.875	LCY		-

Job Condition Corrections:

Site Altitude (ft.): 4800 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time: Number of Truck:	Loading Tool Passes Required to Fill	4	passes
Excavators and Front Shovels:			
Machine Cycle Time vs. Job Condition Rating:	NA		
Selected Value within this Basic Rating:	NA		

Track Loaders - Material Description:

Cycle Time Elements (min.):

Load:	NA	Maneuver:	NA	Dump:	0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump,<br/>maneuver):0.550

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(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:	-0.060	minutes
	Adjusted Loader Cycle Time:	0.490	minutes
	Net Load Time per Truck:	1.570	minutes

### Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.570	Minutes	Adjusted for site altitude:	1.570	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

<u>Truck Travel (Haul & Return) Time:</u> maintained 2.0 Road Condition: Hard, smooth, stabilized, surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time
						(min)
1	3200.00	0.00	2.00	2.00	3005	1.528

					Haul	Time:	1.528	1	ninutes	
	Return Ro	ute:								
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel		
		(Ft)			(%)	(%)	(fpm)	Time (min)		
	1	3200	.00	0.00	2.00	2.00	3005	1.210		
				Return Time:	1		1.210		minutes	
				Total Truck C	ycle Time:		5.908		minutes	
Loadin	g Tool uni	t								
Production		870.97	LCY/Hour	Adjust	ed for job effi	ciency:	722.9	0	LCY/Hour	
Truck	Unit Produ	ction	319.91	LCY/Hour	Adjust	ed for job effi	ciency:	265.5	2	LCY/Hour
Optima	al No. of Ti	rucks:	3	Truck(s)	Selecte	ed Number of	Trucks:	3		Truck(s)
	Adjuste	ed hour	ly truck tean	n production:			796.56		LCY/H	our
	Adjuste	ed singl	e truck/load	er team productio	n:		722.90		LCY/H	our
	Adjuste	ed mult	iple truck/lo	ader team produc	tion:		1,445.8	1	LCY/H	our
	JOB TIM	E AND	COST							
	Fleet size	e:	2	Team(s)	Total jo	b time:	184.55		Hours	5

Unit cost:

\$1.484 /LCY Total job cost:

• F

\$396,056

#### TRUCK/LOADER TEAM WORK

Task description:	Topsoil	Haul Roa	ds					
Site: Keenesburg No	. 2 Mine	Permit Ac	ction:	2025 Cost Update	Estimate	Pe	rmit/Job#:	M2019058
PROJECT IDENT	IFICATION							
Task #:     0040       Date:     1/15/       User:     CM0	Task #:       004C       State:         Date:       1/15/2025       County:         User:       CMG			Colorado Weld			ation: e:	None M058-004c
Agency or organiz	ation name:	DRM	4S					
	MENT COST S	hift basis	l nor da					
HOUKLY EQUIPT	<u>VIENT COST</u> 5	niit basis: <u>.</u>	i per da	<u>iy</u>				
Equipment	Description		C-+ 7	140				
I ruck Loader Tea	m - I ruck:			740 7 080H				,
Support Equipmer	nt -Load Area		NA	70011				
-Dump Area:			Cat I	08T - 8SU				
Road Maintenance	e – Motor Grader:		CAT	140M				
-Water Truck:			Wate	er Tanker, 3,500	Gal.			
Cost Brookdown.	Truck/Los	der Team	S	upport Fauinme	ont ]	Mainten	ance Equipr	nent
<u>Cost Di cakuown</u> .	Truck	Loader		Load Area	Dump A	Area	Motor Grader	Water Truck
%Utilization-machine:	100	100		NA	100		25	25
Ownership cost/hour:	\$108.25	\$69.00		NA	\$173.32	2	\$77.29	\$17.11
Operating cost/hour:	\$79.54	\$60.57		NA	\$109.71	-	\$14.22	\$9.20
%Utilization-riper:	NA	0		NA	NA NA		NA	NA
Ripper own. cost/hour:	NA	\$0.00		NA	\$0.00		\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00		NA	\$0.00		\$0.00	\$0.00
Operator cost/hour:	\$24.82	\$56.84		NA	\$40.04		\$56.70	\$0.00
Unit Subtotals:	\$212.61	\$186.41		NA	\$323.07	7	\$148.21	\$26.31
Number of Units:	6	2		0	1		1	1
Group Subtotals:	Work:	\$1.648.4	8	Support:	\$323.07	7	Maint:	\$174.52
Total work team cos	st/hour: <u>\$2,146.(</u> NTITIES	)7						
Initial volume: Loose volume:	28,109 <b>34,152</b>		CCY LCY	Swell factor	r:	1.215		
Source of estimated volume: Source of estimated swell factor: Material Purchase Cost: Total Cost:			Adequcy response 4/6/20- road area of 21 acres Cat Handbook \$0.00 \$0.00					
<u>HOURLY PRODU</u> Truck Canacity <sup>,</sup>	CTION							
<u>Truck Capacity</u> <u>Truck Payload (weig</u> Material weigh	<u>ght) Basis:</u> t: <u>1,600</u>			Pounds/LCY	7			

Description: Rated Payloa Payload Capac	d: eity:	Top Soil 87,000 54.38		Pound LCY	s				
<u>Truck Bed (volu</u> Struck Volu Heaped Volu Average Volu Adjusted Volu	<u>me) Basis</u> ime: ime: ime: me:	<u>24.20</u> 31.40 27.80 31.40	LCY LCY LCY LCY						
Final Truck Vo	olume Bas	ed on Number of	f Loader P	asses:		31.50		_ LCY	
Loading Tool Ca	apacity		В	ucket Size Cl	ass:		NA	A	
		7 500	L T C	<b>X</b> 7 /1 1)					
Rated Capacity Bucket Fill Fac Adjusted Capa	/: ctor: city:	7.500 1.050 7.875	Mo LC	Y (heaped) ist loam or s Y	andy clay (100%	% - 110%) 1	.050		
Job Condition (	Correction	ns: Site Al	titude (ft.)	): <u>4800</u> feet					
		Truck	Loade	r	Source				
Altitude Adj:		1.000	1.000		(CAT HB)				
Job Efficiency	:	0.830	0.830		(CAT HB)				
Net Correction	.:	0.830	0.830						
Loading Tool (	Cycle Tim	e: Num	ber of Lo	ading Tool P	asses Required	to Fill	4		passes
Excavators and	Front Sho	Truc vels:	k:						
Machine Cycle Selected Value	e Time vs. e within th	Job Condition R is Basic Rating:	ating:	NA NA					
Track Loaders	– Materia	l Description:	-						
Cycle Time Eler	nents (mir	n.):							
Load:	NA	Maneuver	:	NA	Dump:		0.100		
Wheel and Tra maneuver):	ick Loader	rs - Unadjusted E	asic Load	ler Cycle Tin	ne (load, dump,		0.550		minutes
Cycle Time Fa	ctors					Factor (mi	in.)	Source	
Material:		Material up	to 1/8" d	iameter 0.02		0.020		(Cat HE	8)
Stockpile:		Conveyor o 0.00	or dozer pi	iled 10 ft. hig	gh and up	0.000		(Cat HE	3)
Truck Owners	hip:	Common o 0.04	wnership	of trucks and	l loaders -	-0.040		(Cat HE	3)
Operation:		Constant of	peration -(	).04		-0.040		(Cat HE	8)
Dump Target:		Nominal ta	rget 0.00			0.000		(Cat HE	B)
		Net Cycle	Fime Adju	istment:		-0.060		minutes	
		Adjusted L	oader Cyc	ele Time:		0.490		minutes	
		Net Load T	ime per T	ruck:	-	1.570		minutes	

### Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.570	Minutes	Adjusted for site altitude:	1.570	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

Truck Travel (Haul & Return) Time: maintained 2.0

Road Condition: Hard, smooth, stabilized, surfaced, watered,

Haul Rout	e:					
Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel
-	(Ft)		(%)	(%)	(fpm)	Time
						(min)
1	1000.00	0.00	2.00	2.00	3005	0.796
	·					
			Haul	Time:	0.796	minutes

etuin Ko	ute:						
Seg #	Haul Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)		(%)	(%)	(fpm)	Time	
						(min)	
1	1000.00	0.00	2.00	2.00	3005	0.478	
		Datum Tima:			0 478		minutes
	Ketuini Time.						minutes
Total Truck Cycle Time:					4.444		minutes

Loading Tool unit Production	870.97 LCY/Hour		Adjusted for job efficienc	722.90		LCY/Hour	
Fruck Onit Production	425.29	LCY/Hour	Adjusted for job efficienc	y:	352.9	9	LCY/Hour
Optimal No. of Trucks:	2	Truck(s)	Selected Number of Truch	<u>(s:</u>	3		Truck(s)
Adjusted hourl Adjusted single Adjusted multi	y truck team pro e truck/loader tea ple truck/loader	duction: am production: team production:		1,058.98 722.90 <b>1,445.81</b>		LCY/Ho LCY/Ho LCY/Ho	ur ur ur
JOB TIME AND	<u>COST</u>						

Fleet size:	2	Team(s)	Total job time:	23.62	Hours
Unit cost:	\$1.484	/LCY	Total job cost:	\$50,694	

#### TRUCK/LOADER TEAM WORK

Task description:	Topso	oil Active Pit	t Area 1	84 acres			
Site: Keenesburg No	o. 2 Mine	Permit A	ction:	2025 Cost Update	Estimate	Permit/Job#:	M2019058
PROJECT IDENT	TIFICATION						
Task #:       0041         Date:       1/15         User:       CM6	D S /2025 C G	State: County:	Colorad Weld	lo	Abbr Filen	eviation: ame:	None M058-004d
Agency or organiz	zation name:	DRM	AS				
HOURLY EQUIP	MENT COST	Shift basis:	1 per da	<u>y</u>			
Γ	Description						
Equipment Truck Loader Tea	m -Truck		Cat 7	40			
-Loader:	ini - Huck.		CAT	980H			
Support Equipment	nt -Load Area:		NA				
-Dump Area:			Cat D	08T - 8SU			
Road Maintenance	e –Motor Grade	er:	CAT	140M	~ 1		
-Water Truck:			Wate	r Tanker, 3,500	Gal.		
Cast Brookdown	Truck/I	oader Team	C,	innort Fauinme	nt Main	tenance Fauin	ment
<u>Cost Dreakdown</u> .	Truck	Loader		Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100		NA	100	25	25
Ownership cost/hour:	\$108.25	\$69.00		NA	\$173.32	\$77.29	\$17.11
Operating cost/hour:	\$79.54	\$60.57		NA	\$109.71	\$14.22	\$9.20
%Utilization-riper:	NA	0		NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00		NA	\$0.00	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00		NA	\$0.00	\$0.00	\$0.00
Operator cost/hour:	\$24.82	\$56.84		NA	\$40.04	\$56.70	\$0.00
Unit Subtotals:	\$212.61	\$186.41		NA	\$323.07	\$148.21	\$26.31
Number of Units:	6	2		0	1	1	1
Group Subtotals:	Work:	\$1.648.4	.8	Support:	\$323.07	Maint:	\$174.52
Total work team con MATERIAL QUA	st/hour: <u>\$2,140</u> .NTITIES	5.07					
Initial volume: Loose volume:	246,388 299,361		CCY LCY	Swell factor	:: <u>1.21</u> ;	5	
Source of estimated volume: Source of estimated swell factor:			Adequacy response 4/6/20- Cat Handbook				
Total Cost:		-	\$0.00				
HOURLY PRODU	JCTION						
<u>Truck Capacity:</u> <u>Truck Payload (wei</u> Material weigh	<u>ght) Basis:</u> nt: 1.60	0		Pounds/LCY			
Description:	<u></u>	Soil					

Rated Payload:	87,000	Pounds
Payload Capacity:	54.38	LCY

#### Truck Bed (volume) Basis:

Struck Volume:	24.20	LCY
Heaped Volume:	31.40	LCY
Average Volume:	27.80	LCY
Adjusted Volume:	31.40	LCY

Final Truck Volume Based on Number of Loader Passes:

31.50 LCY

#### Loading Tool Capacity

		Bucket Size Class:	NA
Rated Capacity:	7.500	LCY (heaped)	
Bucket Fill Factor:	1.050	Moist loam or sandy clay (100% - 11	0%) 1.050
Adjusted Capacity:	7.875	LCY	

Job Condition Corrections:

Site Altitude (ft.): 4800 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Loading Tool Cycle Time:	Number of Load Truck:	ling Tool Passes Required to Fill	4	passes
Excavators and Front Shovels:				
Machine Cycle Time vs. Job Cond	ition Rating:	NA		
Selected Value within this Basic Ra	ating:	NA		

Track Loaders - Material Description:

Cycle Time Elements (min.):

Load:	NA	Maneuver:	NA	Dump:	0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump,<br/>maneuver):0.550

Cycle Time Factors		Factor (min.)	Source
Material:	Material up to 1/8" diameter 0.02	0.020	(Cat HB)
Stockpile:	Conveyor or dozer piled 10 ft. high and up 0.00	0.000	(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:	-0.060	minutes
	Adjusted Loader Cycle Time:	0.490	minutes
	Net Load Time per Truck:	1.570	minutes

#### Truck Cycle Time:

Truck Exchange Time:	0.60	Minutes	Adjusted for site altitude:	0.600	Minutes
Truck Load Time:	1.570	Minutes	Adjusted for site altitude:	1.570	Minutes
Truck Maneuver and Dump Time:	1.00	Minutes	Adjusted for site altitude:	1.000	Minutes

<u>Truck Travel (Haul & Return) Time:</u> maintained 2.0 Road Condition: Hard, smooth, stabilized, surfaced, watered,

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time
						(min)
1	3500.00	0.00	2.00	2.00	3005	1.627

					Haul	Time:	1.627		minutes	
	Return Ro	ute:					1			
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Trave	1	
		(Ft)			(%)	(%)	(fpm)	Time		
								(min)		
	1	3500	0.00	0.00	2.00	2.00	3005	1.310		
				Return Time:			1.310		minutes	
				Total Truck Cy	cle Time:		6.107		minutes	
Loadir	ıg Tool uni	t								
Produc	ction		870.97	LCY/Hour	Adjust	ed for job effic	ciency:	722.	90	LCY/Hour
Truck	Unit Produ	ction								
			309.48	LCY/Hour	Adjust	ed for job effic	ciency:	256.	87	LCY/Hour
Optima	al No. of T	rucks:	3	Truck(s)	Selecto	ed Number of '	Trucks:	3		Truck(s)
	Adjust	ed hour	ly truck tean	n production:			770.61		LCY/H	our
	Adjust	ed singl	le truck/load	er team production	n:		722.90		LCY/H	our
	Adjust	ed mult	iple truck/lo	ader team product	ion:		1,445.8	1	LCY/H	our
									=	
	JOB TIM	E AND	COST							
	Elect air		2	$\mathbf{T}_{-}$	T-4-1 :-	1. 41	207.05			_

 Fleet size:
 2
 Team(s)
 Total job time:
 207.05
 Hours

 Unit cost:
 \$1.484
 /LCY
 Total job cost:
 \$444,354

#### **REVEGETATION WORK**

Task descript	ion: R	eveg- 66 ac F	acilities					
: <u>Keenesbu</u>	rg No. 2 Mine	Permit	Action:	2025 Upda	Cost Estin	nate P	ermit/Job#:	M2019058
PROJECT ID	ENTIFICATIO	<u>DN</u>						
Task #: Date: User:	005A 1/15/2025 CMG	State: County:	Colora Weld	ado		Abbrev Filenam	iation: ne:	None M058-005a
Agency or or	ganization name	e: <u>D</u>	RMS					
FERTILIZIN	G							
Matarials	<u> </u>							
Descriptio	n			Units / Acre	Unit	Cos	t / Unit	Cost /Acre
						\$		\$
						Tot: Mat Cos	al Fertilizer terials t/Acre	\$0.00
Application								
Descriptio	n							Cost /Acre
								\$
Total Fert	ilizer Applicatio	on Cost/Acre						\$0.00
TILLING								
<b>Descriptio</b> Disc harrow	<b>n</b> wing, 6" deep (M	IEANS 32 91	13.23 610	)0)				<b>Cost /Acre</b> \$117.61
Total Tilli	ng Cost/Acre							\$117.61
<u>SEEDING</u>								
Seed Mix						Rate – PLS LBS /	Seeds per SQ. FT	Cost /Acre
Indiangrass	s - Cheyenne					0.50	1.52	\$6.15
Indian Rice	egrass - Nespar					3.00	9.71	\$51.66
Switchgras	s - Blackwell					1.50	13.40	\$19.83
Sand Love	grass - Bend					2.50	86.09	\$43.54
Little Blue	stem - Camper					0.75	4.48	\$10.19
Sand Drop	seea stem - Garden Co	2				0.50	2 59	\$0.50
Sand Dides						1.00	2.37	Ψ2-1.23

Needlegrass, Green - Lodorm

Prairie Sandreed - Goshen

6.23

4.70

\$12.97

\$12.77

1.50

0.75

Totals Seed Mix	12.00	188.41	\$187.84

# Application

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

# **MULCHING and MISCELLANEOUS**

#### Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

# Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Total Mulch Application Cost/Acre	\$242.63

# NURSERY STOCK PLANTING

Common Name	No/ Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totals Numerous Stock Cost / Acros					£0.00
Totals Nursery Stock Cost / Acre					\$0.00

# JOB TIME AND COST

No. of Acres:	66	Cost /Acre:	\$1,770.28
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,770.28
*Selected Replanting Work Items:	TILLING, SEEDI	NG, MULCHING	

Initial Job Cost:	\$116,838.48	
Reseeding Job Cost:	\$35,051.54	
Total Job Cost:	\$151,890	
Job Hours:	66.00	

# **REVEGETATION WORK**

1	Task descrip	otion:	Reveg- Waste P	ile 164 ac			
Site:	Keenesbu	ırg No. 2 Min	Ре	rmit Action:	2025 Cost Estimate Update	Permit/Jo	b#: <u>M2019058</u>
<u>P</u> ]	<u>ROJECT</u>	IDENTIFIC	ATION				
	Task #:	005B	State:	Colorado		Abbreviation:	None
	Date:	1/15/2025	County:	Weld		Filename:	M058-005b
	User:	CMG	·				
	Age	ency or organiz	zation name: DF	RMS			

# **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
	\$
Total Tilling Cost/Acre	\$0.00

# <u>SEEDING</u>

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indiangrass - Cheyenne	0.50	1.52	\$6.15
Indian Ricegrass - Nespar	3.00	9.71	\$51.66
Switchgrass - Blackwell	1.50	13.40	\$19.83
Sand Lovegrass - Bend	2.50	86.09	\$43.54
Little Bluestem - Camper	0.75	4.48	\$10.19
Sand Dropseed	0.50	59.69	\$6.50
Sand Bluestem - Garden Co.	1.00	2.59	\$24.23
Needlegrass, Green - Lodorm	1.50	6.23	\$12.97
Prairie Sandreed - Goshen	0.75	4.70	\$12.77

5107.04
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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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

# **Application**

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Total Mulch Application Cost/A	scre \$242.63

### **NURSERY STOCK PLANTING**

Common Name	No/ Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	ek Cost / Acre	\$0.00

# JOB TIME AND COST

No. of Acres:	164	Cost /Acre:	\$1,652.67
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,652.67
*Selected Replanting Work Items:	TILLING, SEEDI	NG, MULCHING	

Initial Job Cost:	\$271,037.88
Reseeding Job Cost:	\$81,311.36
Total Job Cost:	\$352,349
Job Hours:	164.00

# **REVEGETATION WORK**

	Keenesb	ourg No. 2 Mine	Permit	Action:	2025 Cost Estimate Update	Permit/Job#:	M2019058
l	ROJECT	IDENTIFICATIO	<u>N</u>				
	Task #: Date: User:	005C 1/15/2025 CMG	State: County:	Colorado Weld	Al	bbreviation: lename:	None M058-005c
	A genev or	organization name	: D	RMS			

	Units /			
Description	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
Indiangrass - Cheyenne	0.50	1.52	\$6.15
Indian Ricegrass - Nespar	3.00	9.71	\$51.66
Switchgrass - Blackwell	1.50	13.40	\$19.83
Sand Lovegrass - Bend	2.50	86.09	\$43.54
Little Bluestem - Camper	0.75	4.48	\$10.19
Sand Dropseed	0.50	59.69	\$6.50
Sand Bluestem - Garden Co.	1.00	2.59	\$24.23
Needlegrass, Green - Lodorm	1.50	6.23	\$12.97
Prairie Sandreed - Goshen	0.75	4.70	\$12.77

Totals Seed Mix	12.00	188.41	\$187.84

# Application

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

# **MULCHING and MISCELLANEOUS**

#### Materials

	Units /			
Description	Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

# Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
Total Mulch Application Cost/Acre	\$242.63

# NURSERY STOCK PLANTING

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
Totala Numany Staala					£0.00
I otals Nursery Stock	Cost / Ac	re			\$0.00

# JOB TIME AND COST

No. of Acres:	21	Cost /Acre:	\$1,770.28
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,770.28
*Selected Replanting Work Items:	TILLING, SEEDI	NG, MULCHING	

Initial Job Cost:	\$37,175.88
Reseeding Job Cost:	\$11,152.76
Total Job Cost:	\$48,329
Job Hours:	21.00

# **REVEGETATION WORK**

Т	Task descrip	otion:	Reveg- Active P	it Area 184 a	c		<u>.</u>
Site:	Keenesbu	ırg No. 2 Min	e Pe	rmit Action:	2025 Cost Estimate Update	Permit/Jo	b#: <u>M2019058</u>
<u>P</u> I	ROJECT	<u>IDENTIFIC</u>	ATION				
		0050	<b>a</b>	<b>C</b> 1 1			
	Task #:	005D	State:	Colorado		Abbreviation:	None
	Task #: Date:	005D 1/15/2025	State: County:	Weld		Abbreviation: Filename:	None M058-005d

# **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
	\$
Total Tilling Cost/Acre	\$0.00

# <u>SEEDING</u>

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indiangrass - Cheyenne	0.50	1.52	\$6.15
Indian Ricegrass - Nespar	3.00	9.71	\$51.66
Switchgrass - Blackwell	1.50	13.40	\$19.83
Sand Lovegrass - Bend	2.50	86.09	\$43.54
Little Bluestem - Camper	0.75	4.48	\$10.19
Sand Dropseed	0.50	59.69	\$6.50
Sand Bluestem - Garden Co.	1.00	2.59	\$24.23
Needlegrass, Green - Lodorm	1.50	6.23	\$12.97
Prairie Sandreed - Goshen	0.75	4.70	\$12.77

5107.04
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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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

# Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
Power mulcher (MEANS 32 91 13.16 0350)		\$157.25
	<b>Total Mulch Application Cost/Acre</b>	\$242.63

### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	ek Cost / Acre	\$0.00

# JOB TIME AND COST

No. of Acres:	184	Cost /Acre:	\$1,652.67
Estimated Failure Rate:	30%	Cost /Acre*:	\$1,652.67
*Selected Replanting Work Items:	TILLING, SEEDI	NG, MULCHING	

Initial Job Cost:	\$304,091.28	
Reseeding Job Cost:	\$91,227.38	
Total Job Cost:	\$395,319	
Job Hours:	184.00	

# **REVEGETATION WORK**

e: <u>Keenesb</u>	urg No. 2 Min	Pe	rmit Action:	2025 Cost Estimate Update	Permit/Jo	b#: <u>M2019058</u>
<u>PROJECT</u>	<u>IDENTIFIC</u>	CATION				
Task #:	005E	State:	Colorado		Abbreviation:	None
Date:	1/15/2025	County:	Weld		Filename:	M058-005e
	~ ~					

# **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
Indiangrass - Cheyenne	0.50	1.52	\$6.15
Indian Ricegrass - Nespar	3.00	9.71	\$51.66
Switchgrass - Blackwell	1.50	13.40	\$19.83
Sand Lovegrass - Bend	2.50	86.09	\$43.54
Little Bluestem - Camper	0.75	4.48	\$10.19
Sand Dropseed	0.50	59.69	\$6.50
Sand Bluestem - Garden Co.	1.00	2.59	\$24.23
Needlegrass, Green - Lodorm	1.50	6.23	\$12.97
Prairie Sandreed - Goshen	0.75	4.70	\$12.77

	<b>Totals Seed Mix</b>	12.00	188.41	\$187.84
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
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$492.78	\$985.56
Total Mulch Materials Cost/Acre				\$985.56

#### Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$85.37
Power mulcher (MEANS 32 91 13.16 0350)		\$157.25
	Total Mulch Application Cost/Acre	\$242.63

# **NURSERY STOCK PLANTING**

Common Name	No/ Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals	Nursery Stoc	ek Cost / Acre	\$0.00

# JOB TIME AND COST

	No. of Acres:	24	Cost /Acre:	\$1,770.28
Estimate	ed Failure Rate:	30%	Cost /Acre*:	\$1,770.28
*Selected Replanti	ng Work Items:	TILLING, SEEDI	NG, MULCHING	
Initial Job Cost:	\$42,486.72			
Reseeding Job Cost:	\$12,746.02			
Total Job Cost:	\$55,233			
Job Hours:	24.00			

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

	Mobilize Equipmen	it			
e: <u>Keenesburg No. 2 Mine</u>	Permi	t Action: 2025 Updat	Cost Estimate e	Permit/Job#	#: <u>M2019058</u>
PROJECT IDENTIFICA	ATION				
Task #:         006           Date:         1/15/2025           User:         CMG	State: _C County: _W	olorado Veld	· ·	Abbreviation: Filename:	None M058-006
Agency or organization	ation name: DRMS	5			
FOUIPMENT TRANSP	ORT RIG COST				
Truck Tractor I Truck Trailer I	Description: GENE	ERIC ON-HIGHW GENERIC FOLDI T	VAY TRUCK TR. 400 HP (2ND H NG GOOSENEC RAILER (25T, 50	ACTOR, 6X4, D ALF, 2006) K, DROP DECK T, AND 100T)	IESEL POWERED, EQUIPMENT
<u>Cost Breakdown:</u>					
Cost Breakdown: Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons		
<u>Cost Breakdown:</u> Available Rig Capacities Ownership Cost/Hou	0-25 Tons Ir: \$10.44	<b>26-50 Tons</b> \$22.18	<b>51+ Tons</b> \$23.94		
<u>Cost Breakdown:</u> Available Rig Capacities Ownership Cost/Hou Operating Cost/Hou	0-25 Tons           ur:         \$10.44           ur:         \$26.48	<b>26-50 Tons</b> \$22.18 \$54.55	<b>51+ Tons</b> \$23.94 \$55.65		
Cost Breakdown: Available Rig Capacities Ownership Cost/Hou Operating Cost/Hou Operator Cost/Hou	0-25 Tons           ur:         \$10.44           ur:         \$26.48           ur:         \$22.52	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52	<b>51+ Tons</b> \$23.94 \$55.65 \$22.52		
Cost Breakdown: Available Rig Capacities Ownership Cost/Hou Operating Cost/Hou Operator Cost/Hou Helper Cost/Hou	0-25 Tons           Ir:         \$10.44           Ir:         \$26.48           Ir:         \$22.52           Ir:         \$0.00	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52 \$23.53	<b>51+ Tons</b> \$23.94 \$55.65 \$22.52 \$23.53		

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/unit	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
_	(TONS)				fleet		
Cat D8T - 8SU	47.71	\$173.32	\$122.78	1	\$296.10	\$122.78	\$250.00
Cat D9T - 9SU	60.01	\$253.16	\$125.64	2	\$757.60	\$251.28	\$250.00
CAT 980H	33.12	\$69.00	\$122.78	2	\$383.56	\$245.56	\$500.00
Cat 740	36.49	\$108.25	\$122.78	6	\$1,386.18	\$736.68	\$1,500.00
CAT 140M	16.68	\$77.29	\$59.44	1	\$136.73	\$59.44	\$250.00
Drill/Broadcast	25.00	\$41.02	\$59.44	2	\$200.92	\$118.88	\$250.00
Seeder with							
Tractor							
Cat 320D L 9'-6"	23.70	\$244.29	\$59.44	2	\$607.46	\$118.88	\$250.00
Stick							

Subtotals: **\$3,768.55** 

\$1,653.50 \$3,250.00

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/	Fleet Size	Haul Trip	Return Trip
	unit		Cost/hr/ fleet	Cost/nr/ fleet
Water Tanker, 3,500 Gal.	\$53.90	1	\$53.90	\$53.90
Lube Truck, 4x2, 190 HP	\$41.41	1	\$41.41	\$41.41
Fuel Tanker, 4x2, 170 HP	\$34.10	1	\$34.10	\$34.10
		Subtotals:	\$129.41	\$129.41

### **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	HUDSON	
Total one-way travel distance:	13.00	miles
Average Travel Speed:	50.00	mph
Total Non-Roadable Mob/Demob Cost *	\$39,467.87 \$67.29	_

Transportation Cycle Time:

Haul Time (Hours): Return Time (Hours):	Non- Roadable Equipment 0.26	Roadable Equipment 0.26 0.26
Loading Time (Hours):	2.00	NA
Unloading Time (Hours):	2.00	NA
Subtotals:	4.52	0.52

### JOB TIME AND COST

Total job time: 9.04 Hours

Total job cost: \$39,535

# MISCELLANEOUS TRUCK WORK

]	Task description:	Vehicles for onsite support	t		
Site:	Keenesburg No. 2 Min	Permit Action	: 2025 Cost Estimate Update	Permit/Job#:	M2019058
P	ROJECT IDENTIFIC	ATION			
	Task #: 007A Date: 1/15/2025 User: CMG	State: <u>Colorado</u> County: <u>Weld</u> zation name: DRMS	,	Abbreviation: <u>No</u> Filename: <u>M(</u>	ne )58-007a
H	OURLY EQUIPMEN	T COST			
	Make and Model: Attachment 1: Attachment 2: Labor Unit 1:	Light Duty Pickup, 4x4, 1 T. General Laborer	Crew	Horsepower: Shift Basis: Weight:	340 1 per day 2.45 (US Tons)
<u>Co</u>	Labor Unit 2:				
	Ownership Cost/Ho Operating Cost/Ho Operator Cost/Ho Total Unit Cost/Ho	Sur:         \$4.12           pur:         \$20.48           pur:         \$28.23           pur:         \$52.83	Utilization % NA 100 NA		
<u>J(</u>	OB TIME AND COS	our: <u>\$105.66</u>			
	Fleet size: 2	Truck(s)	Total job time:	300.00	Hours
	Unit cost:\$105.	66 /Hour	Total job cost:	\$31,698	

# MISCELLANEOUS TRUCK WORK

]	Task description:	Fuel truck 1.5 hour daily, 6	months			
ite:	Keenesburg No. 2 Mine	Permit Action	2025 Cost Estimate Update	Permit/Job#: <u>M2019058</u>		M2019058
<u>P</u> ]	ROJECT IDENTIFIC	ATION				
	Task #:       007B         Date:       1/15/2025         User:       CMG	State: <u>Colorado</u> County: <u>Weld</u>		Abbreviation: Filename:	None M05	e 8-007b
	Agency or organiz	ation name: <u>DRMS</u>				
H	OURLY EQUIPMEN	<u>Г СОЅТ</u>				
	Make and Model: Attachment 1: Attachment 2: Labor Unit 1: Labor Unit 2:	Fuel Tanker, 4x2, 170 HP Tanker Driver - 2+ rear axles		Horsepow Shift Bas Weig	/er: sis: ght:	170 1 per day (US Tons)
C	ost Breakdown:					
	Ownership Cost/Hou Operating Cost/Hou Operator Cost/Hou Total Unit Cost/Hou	ur: \$11.65 ur: \$22.45 ur: \$38.91 ur: \$73.01	Utilization % NA 100 NA			
	Total Fleet Cost/Ho	our: \$73.01				
J	OB TIME AND COS	<u>5T</u>				
	Fleet size: 1	Truck(s)	Total job time:	200.00		Hours
	Unit cost: \$73.0	1 /Hour	Total job cost:	\$14,602	1	

# MISCELLANEOUS TRUCK WORK

Task description:	Heavy equipment support v	vehicle 4 hrs/week, 6 mo	onths	
e: _Keenesburg No. 2 Mine	Permit Action:	2025 Cost Estimate Update	Permit/Job#:	M2019058
PROJECT IDENTIFICA	TION			
Task #:         007C           Date:         1/15/2025           User:         CMG	County: Colorado		Abbreviation: <u>N</u> Filename: <u>N</u>	one 1058-007c
Agency or organizat	tion name: DRMS			
HOURLY EQUIPMENT	COST			
Make and Model: L Attachment 1: Attachment 2: Labor Unit 1: Labor Unit 2:	ube Truck, 4x2, 190 HP anker Driver - 1 rear axle		Horsepower: Shift Basis: Weight:	190 1 per day (US Tons)
Cost Breakdown:				
Ownership Cost/Hour Operating Cost/Hour Operator Cost/Hour Total Unit Cost/Hour	r: \$13.93 r: \$27.48 r: \$38.91 r: \$80.32	Utilization % NA 100 NA		
Total Fleet Cost/Hou	ır: \$80.32			
OB TIME AND COST	<u>ר</u>			
Fleet size: 1	Truck(s)	Total job time:	100.00	Hours
Unit cost: \$80.32	/Hour	Total job cost:	\$8,032	