COST SUMMARY WORK

te: Munroe	Gypsum Quarry	Pe	rmit Action: TR4	Permit/Jol	b#: <u>M1977002HR</u>
PROJECT	DENTIFICA	ΓΙΟΝ			
Task #: Date: User:	8/21/2025	State: County:	Colorado Larimer	Abbreviation: Filename:	None TR4
Aş	gency or organizat	ion name:DF	RMS		

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Highwall blasting	BLASTING	1	49.85	\$46,285
002	Reducing highwall	DOZER	2	16.99	\$17,035
003	Ripping pit floor	RIPPER	2	10.56	\$10,700
004	Rough grading	SITEMAINT ENANCE	1	0.00	\$1,013
005	Topsoil application	SCRAPER1	1	13.16	\$26,906
006	Reveg backfilled and pit area	REVEGE	1	9.00	\$22,323
007	39 holes, 3 ft betonite per hole	BOREHOLE	1	14.00	\$1,369
008	Mobilize equipment to site	MOBILIZE	1	8.50	\$23,684
		TALS:	122.06	\$149,315	

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$3,016
Performance bond:	1.05	Total =	\$1,568
Job superintendent:	61.03	Total =	\$4,585
Profit:	10.00	Total =	\$14.932

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$7,370
Reclamation management and/or administration:	5.00		\$8,671

CONTINGENCY: 0.00 Total = __\$0

TOTAL INDIRECT COST = \$40,642

TOTAL BOND AMOUNT (direct + indirect) = \$189,957

SURFACE BLASTING WORK

te: Munro	e Gypsum Quarry	Permit Action: TR4	Permit/Job#: M1977002HR
PROJEC	CT IDENTIFICAT	<u>ION</u>	
Task #	: 001	State: Colorado	Abbreviation: None
Date	: 8/21/2025	County: Larimer	Filename: TR4
User	: JR2		

	QUANTITY	UNIT
Blast Area Configuration: Wedge-shaped mass	(highwall reduction using balanced cut/	fill)
Blasting Method Description: Conventional surface	e blast (fragmentation only)	
Highwall or Bench Face Angle:	0.50	h:1v
Regraded Slope Angle:	3.00	h:1v
Highwall or Bench Length:	500	feet
Highwall or Bench Width:	88	feet
Highwall or Bench Height:	70.0	feet
Depth to Base of Cut at Highwall:	29.2	feet

BLAST AREA VOLUMES

	QUANTITY	UNIT
Total Volume of Dimensional Mass to be Shot:	19,737	cubic yards
Blast Volume to Subdrill Grade and Blast Pattern Lines:	20,891	cubic yards
Blast Volume to Finish Grade and Blast Pattern Lines:	16,199	cubic yards
Remaining Volume Required to be Re-Shot or Ripped:	3,538	cubic yards

BLAST AREA DESIGN

	QUANTITY	UNIT
Recommended Blasthole Diameter:	4.293	inches
Selected Blasthole Diameter:	7.000	inches
Subdrilling Allowance:	4.5	feet
Blasthole Depth:	21.3	feet
Density of Rock:	Average Density Rock (ANFO	rock density
	Basis)	
Burden to Charge Diameter Ratio:	25	times diameter
Burden:	15.0	feet
Spacing to Burden Ratio:	1.5	times burden
Spacing:	23.0	feet
Cubic Yards of Rock per Blasthole:	248.71	cubic yards
Powder Factor Description:	Medium	rock strength
Powder Factor:	0.575	pounds/cu. yd.
Density of Blasting Agent:	0.85	grams/cc
Quantity of Explosives per Blasthole:	143.01	POUNDS
Height of Powder Column:	10.08	feet
Height of Stemming per Blasthole:	11.25	feet
Stemming to Burden Ratio:	0.75	times burden
Quantity of Stemming per Blasthole:	0.1114	cubic yards
Number of Rows:	4	rows
Number of Blastholes per Row:	21	holes per row
Total Number of Blastholes:	84	holes
Total Length of all Blastholes:	1,792	feet

BLASTING MATERIALS QUANTITIES

	QUANTITY	UNIT
Total Quantity of Stemming Required:	9.35	cubic yards
Total Quantity of Explosives Required:	12,013	pounds
Total Quantity of det. cord/fuse/wire Required:	4,162	linear feet
Quantity of Blasting Caps per Blasthole:	1	cap(s)
Total Quantity of Blasting Caps Required:	84	caps
Quantity of Primers per Blasthole:	0	primer(s)
Total Quantity of Primers Required:	0	primers
Quantity of Delays per Blasthole:	1	delay(s)
Total Quantity of Delays Required:	88	delays

HOURLY EQUIPMENT COST

Shift basis: 1 per day

	Description
Drilling Equipment - Drill:	SCHRAMM T450WS
-Drill Pad Preparation:	Cat D9T - 9SU
Misc. Drill Support Equipment:	NA
Misc. Explosives Support Equipment:	NA
Explosives Delivery –Bulk Truck:	Fuel Tanker, 6x4, 210 HP
-Cap Truck:	NA

	Drilling	Drill Pad	Misc. Drill	Misc. Expl.	Explosives 1	Delivery
Cost Breakdown:	Equipment	Preparation	Support	Support	Bulk Truck	Cap Truck
	Drilling	Dozer			MiscTruck	
%Utilization-machine:	100	20	NA	NA	20	NA
Ownership cost/hour:	\$292.59	\$275.01	NA	NA	\$17.97	NA
Operating cost/hour:	\$200.89	\$32.37	NA	NA	\$7.01	NA
%Utilization-ripper:	NA	10	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$19.59	NA	NA	\$0.00	NA
Ripper op. cost/hour:	NA	\$1.07	NA	NA	\$0.00	NA
Operator cost/hour:	\$65.73	\$39.46	NA	NA	\$65.73	NA
Unit Subtotals:	\$559.21	\$367.50	\$0.00	\$0.00	\$90.71	\$0.00
Number of Units:	1	1	0	0	1	0
Group Subtotals:	\$559.21	\$367.50	\$0.00	\$0.00	\$90.71	\$0.00

Total work team cost/hour: \$1,017.42

MATERIALS COST

	Description	Unit	Unit Cost	Quantity	Total Cost
	Bulk ANFO nom. density (
Blasting Agent:	7,900-15,000 fps)	Pound	\$0.820	12012.535	\$9,850.28
	Cast primer, 0.3 lb (electric				
Primers or Boosters:	or non-electric system)	Each	\$11.880	0.000	\$0.00
	Non-electric cap, inst.				
Blasting Caps:	(non-electric systems)	Each	\$6.400	84.000	\$537.60
	NO DET.				
Det. Cord, fuse, or	CORD/FUSE/WIRE				
wire:	REQUIRED	NA	\$0.000	4162.400	\$0.00
	MS connectors (non-				
Delays:	electric systems)	Each	\$9.108	88.000	\$801.50
	NO MISCELLANEOUS				
Miscellaneous:	MATERIALS REQUIRED	NA	\$0.000	0.000	\$0.00
Drill bits:	Bit life = 1,750	Linear feet	\$1,825.64	1.024	\$1,869.46

\$13,058.84

		Total Ma	nterials Cost:
DRILLING AND EXPLOSIVES PREPARAT	TION TIME		
Total Drilling Length:	1,792		linear feet
Unadjusted Drilling Rate:	82.00		feet/hour
Drilling Time:	34.33		hours
Job Condition Corrections:			
Site Altitude:	6,100		feet
Altitude Adjustment:	0.95		(DRMS est.)
Job Efficiency Factor:	0.67		(CH. Exc. HB)
Adjusted Drilling Rate:	52.19		feet/hour
Explosives Prep. Time:	15.52		hours
JOB TIME AND COST			
	Total Job Time:	49.86	Hours
Unit cost: \$2.216 per cu. yd.	Total Job Cost:	\$46,285	

BULLDOZER WORK

Task description:	Redu	icing mgnwa				
: Munroe Gypsui	n Quarry	Pern	nit Action:	TR4	Permit/Job#:	M1977002HF
PROJECT IDEN	NTIFICATION	<u>ON</u>				
Task #: 002		State:	Colorado		Abbreviation:	None
Date: $8/21/$	2025	County:	Larimer		Filename:	TR4
User: JR2		, <u> </u>			-	
Agency o	r organization	name: DR	MS			
HOURLY EQUI	PMENT CO	OST				
Basic Machine:	Cat D9T - 9					
Horsepower:	405					
Blade Type:	Semi-Unive	ersal				
Attachment:	3-shank rip	per				
Shift Basis:	1 per day					
Data Source:	(CRG)					
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/I			\$275.01	NA		
Operating Cost/H			\$161.84	100		
Ripper own. Cost/H			\$19.59	NA 50		
D: C4/I	iour:		\$5.35	30		
Ripper op. Cost/I			¢20.46	3.7.4		
Ripper op. Cost/F Operator Cost/F Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU	Hour: \$501.: our: \$1,00		\$39.46	NA 		
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume:	Hour: \$501.: pur: \$501.: \$1,00: JANTITIES 27,569		\$39.46	NA NA		
Operator Cost/Hor Total unit Cost/Hor Total Fleet Cost/Hor MATERIAL QU	Hour: \$501 pur: \$5,00 JANTITIES	2.49	\$39.46	NA NA		
Operator Cost/Hor Total unit Cost/Hor Total Fleet Cost/Hor MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated	Hour: \$501 Sur: \$501 \$1,00 SANTITIES 27,569 1.165 32,118 LCY I volume: I swell factor:	2,49	 of Reclamati	ion, Mining & Safety		
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI	Hour: \$501 Sur: \$501 Sur: \$1,00 S	Division c Cat Handb	 of Reclamati			
Operator Cost/Hot Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista	Hour: \$501 Sur: \$501 \$1,00 SANTITIES 27,569 1.165 32,118 LCY I volume: I swell factor: DUCTION nce:	Division orCat Handb	of Reclamati			
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI	Hour: \$501 Sur: \$501 \$1,00 SANTITIES 27,569 1.165 32,118 LCY I volume: I swell factor: DUCTION nce:	Division of Cat Handb	of Reclamati book	ion, Mining & Safety		
Operator Cost/Hor Total unit Cost/Hor Total Fleet Cost/Hor MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	Hour: \$501.: \$1,00: \$1,00: \$27,569 1.165 \$2,118 LCY d volume: d swell factor: DUCTION nce: production:	Division of Cat Handb	of Reclamati book			
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly	Sour: \$501.: \$1,00: \$1		of Reclamati book	ion, Mining & Safety		
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consistent Average push grad	Sour: \$501. \$1,00 \$1,00 \$1,00		of Reclamati book	ion, Mining & Safety		
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consisten Average push grad Average site altitud	Solidar Soli	Division of Cat Handb	of Reclamati book	ion, Mining & Safety		
Operator Cost/Ho Total unit Cost/Ho Total Fleet Cost/Ho MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consisten Average push grad Average site altitud Material weight: Weight description Job Condition Corr	Sour: \$501 \$501 \$1,00 \$1,00 \$1,00 \$1,00 \$1,00 \$1,165 \$27,569 \$1.165 \$32,118 LCY \$1 volume: \$1 swell factor: \$1 swell factor: \$1 cy description \$1 cy description \$1 cert: \$-20 \text{ \frac{6}{0}}\$ \$000 \$2,100 \$1 certion \$2	Division of Cat Handle 105 feet 1,205.7 LCY : Rock, and feet lbs/LCY	of Reclamatioook //hr vg. ripped o	or blasted 0.7		
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROI Average push dista Unadjusted hourly Materials consistent Average push grad: Average site altitude Material weight: Weight description Job Condition Corre Ope	Solidar Soli		of Reclamation ook	ion, Mining & Safety or blasted 0.7 Source (AB.AVG.)		
Operator Cost/H Total unit Cost/Hot Total Fleet Cost/Hot MATERIAL QU Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push dista Unadjusted hourly Materials consistent Average site altitude Material weight: Weight description Job Condition Corr Operator Corr Operator Cost/Hotal Properator Cost/Hotal Total	Sour: \$501 \$501 \$1,00 \$1,00 \$1,00 \$1,00 \$1,00 \$1,165 \$27,569 \$1.165 \$32,118 LCY \$1 volume: \$1 swell factor: \$1 swell factor: \$1 cy description \$1 cy description \$1 cert: \$-20 \text{ \frac{6}{0}}\$ \$000 \$2,100 \$1 certion \$2	Division of Cat Handle 105 feet 1,205.7 LCY : Rock, at 1,205.7 LCY division of Cat Handle 105 feet 1,205.7 LCY 0.9 0.0	of Reclamatioook //hr vg. ripped o	or blasted 0.7		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.426	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.7838

Adjusted unit production: 945.03 LCY/hr
Adjusted fleet production: 1890.06 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.530/LCY

Total job time: 16.99 Hours
Total job cost: \$17,035

BULLDOZER RIPPING WORK

Site: Munroe Gypsu PROJECT IDE				
	m Quarry Permit Action:	TR4	Permit/Job	#: <u>M1977002HR</u>
	NTIFICATION			
Task #: 003	State: Colorado		Abbreviation	None
	/2025 County: Larimer		Filename	
User: JR2				
Agency of	or organization name: DRMS			
HOURLY EQU	IPMENT COST			
Basic M	Iachine: Cat D9T - 9SU		Horsepower:	405
Ripper Atta	chment: 3-Shank Ripper			per day
			Data Source:	(CRG)
Cost Breakdown:				
		***	Utilization %	
	Ownership Cost/Hour:	\$275.01	NA NA	
D:	Operating Cost/Hour:	\$161.84	100	
	Ownership Cost/Hour:er Operating Cost/Hour:	\$19.59 \$10.69	NA 100	
Кіррс	Operating Cost/Hour:	\$39.46	NA	
	Total Unit Cost/Hour:	\$506.59	1771	
	Total Fleet Cost/Hour: \$1,0	13.18		
MATERIAL Q			a mathad. A maa	
Alternate Methods		iected estimating	g method: Area	
	_	27.4	D.C.I.I	27.4
smic: NA Area: 15.00	Bank Volume: acres Rip Depth (ft):	NA 1.00	BCY Volume: 24,200	NA BCY or
	Source of estimated quantity: Depth	calculated base	d on values provided in co	st estimation
HOURLY PRO	<u>DUCTION</u>			
Seismic:				
	Seismic Velocity:	NA	feet/second	
Area:				
	Average Ripping Depth:	2.63	feet/pass	
	Average Ripping Width:	7.67	feet/pass	
	Average Ripping Length:	254.00	feet/pass	
	Average Dozer Speed:	88.00	feet/minute	
	Average Maneuver Time:	0.25	minutes/pass acres/hour	
	Production per unit area:	0.856		
			acres/nour	
Job Condition Cor				
	rection Factors djusted Hourly Unit Production:	0.856	Acres/hr	
·	djusted Hourly Unit Production:	6,000	Acres/hr	
	djusted Hourly Unit Production: Site Altitude: Altitude Adj:	6,000 1.00	Acres/hr feet (CAT HB)	
·	djusted Hourly Unit Production: Site Altitude: Altitude Adj: Job Efficiency:	6,000 1.00 0.83	Acres/hr feet (CAT HB) (1 shift/day)	
·	djusted Hourly Unit Production: Site Altitude: Altitude Adj:	6,000 1.00	Acres/hr feet (CAT HB)	
	djusted Hourly Unit Production: Site Altitude: Altitude Adj: Job Efficiency: Net Correction: Adjusted Hourly Unit Production:	6,000 1.00 0.83 0.83	Acres/hr feet (CAT HB) (1 shift/day) multiplier Acres/hr	
·	djusted Hourly Unit Production: Site Altitude: Altitude Adj: Job Efficiency: Net Correction:	6,000 1.00 0.83 0.83	Acres/hr feet (CAT HB) (1 shift/day) multiplier	
	djusted Hourly Unit Production: Site Altitude: Altitude Adj: Job Efficiency: Net Correction: Adjusted Hourly Unit Production: Adjusted Hourly Fleet Production:	6,000 1.00 0.83 0.83	Acres/hr feet (CAT HB) (1 shift/day) multiplier Acres/hr	
Una	djusted Hourly Unit Production: Site Altitude: Altitude Adj: Job Efficiency: Net Correction: Adjusted Hourly Unit Production: Adjusted Hourly Fleet Production:	6,000 1.00 0.83 0.83	Acres/hr feet (CAT HB) (1 shift/day) multiplier Acres/hr Acres/hr	Hours

SITE MAINTENANCE

Site:	Munroe Gypsum Quarry		Permit Action:	TR4	Permit/.	Job#: M1977002HR
ROJE	CT IDENTIFICATION					
Task #: Date: User:	8/21/2025	State: County:	Colorado Larimer		Abbreviation: Filename:	None TR4
	Agency or organization	on name:	DRMS			

UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Grading	7.00	Cat D9T - 9SU	2.00	EA	\$506.59	\$1,013.18

Job Hours:	0.00	Total Cost:	\$1,013.18

SCRAPER TEAM WORK

Task description:	Topsoil ap	plication				
Site: Munroe Gypsum	ı Quarry	Permit Action:	TR4	Per	mit/Job#: <u>M197</u>	7002HR
PROJECT IDEN	TIFICATION					
Task #: 005	_	State: Colorado		A bbro	viation: None	
Date: 8/21/2		State: <u>Colorado</u> unty: Larimer			lename: TR4	
User: JR2						
Agency or	organization name:	DRMS				
HOURLY EQUI	PMENT_		COSTS	hift basis: <u>1 per d</u>	l <u>ay</u>	
		Equipm	ent Description			
	-S	Scraper: Cat 63'	7G w/push-pull			
			T - 9SU			
Supp	ort Equipment -Loa	d Area: NA p Area: NA				
Road M	aintenance –Motor		4M			
	-Water	Truck: Water	Tanker, 7,000 Gal			
C (D 11	C W	1 70	G AF		3.6 1.4	Б
Cost Breakdown:	Scraper Wo	rk Team Dozer	Support Equi Load Area	pment Dump Area	Maintenance Motor Grader	Water Truck
%Utilization-machine:	100	55	NA	NA	30	25
Ownership cost/hour:	\$285.51	\$275.01	NA NA	NA NA	\$101.88	\$75.70
Operating cost/hour:	\$313.00	\$89.01	NA NA	NA NA	\$21.95	\$19.69
%Utilization-ripper:	NA	0	NA	NA NA	NA	NA
Ripper own. cost/hour:	NA	\$19.59	NA	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	NA	NA	\$0.00	\$0.00
Operator cost/hour:	\$59.78	\$39.46	NA	NA	\$58.07	\$27.87
Unit Subtotals:	\$658.29	\$423.07	NA	NA	\$181.90	\$123.26
Number of Units:	2	1	0	0	1	1
Group Subtotals:	Work:	\$1,739.65	Support:	\$0.00	Maint:	\$305.16
Total work team cos	st/hour: \$2,044.81		11		I	I
MATERIAL QU	<u>ANTITIES</u>					
Initial volume:		CCY	Swell fac	tor: 1.215		
Loose volume:	12,585	LCY				
	urce of estimated vo		of Reclamation,	Mining & Safety		
Source	of estimated swell	factor: Cat Han	dbook			
HOURLY PROD	<u>UCTION</u>					
			Scraper B	owl (volume) Bas	<u>is:</u>	
Material weight:	1,600 lbs/LCY		Struck	Volume: 24.00	L	CY
Material description:	Top Soil		•	Volume: 34.00		CY
Rated Payload:			Average			CY
Payload Capacity:	51.00 LCY		Adjusted (Capacity: 29.00	L	CY

Site Altitude: 6000 feet

Cycle Time:

Job Condition Correction:

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)
Net Correction:	0.830	0.830	

Travel Time:

Road Condition: Hard, smooth, stabilized, surfaced, watered, maintained 2.0

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	210.00	15.00	2.00	17.00	542	0.39
2	790.00	0.00	2.00	2.00	2939	0.44

Haul Time: **0.83** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	790.00	0.00	2.00	2.00	2960	0.40
2	210.00	-15.00	2.00	-13.00	1628	0.19

Return Time: 0.59 minutes Total Scraper team cycle time: 3.02 minutes Adjusted for job conditions: 956.42 LCY/Hour Selected Number of Scrapers: 2 Scraper(s) Adjusted single scraper team (unit) hourly production: LCY/Hour 956.42 Adjusted multiple scraper team (fleet) hourly production: LCY/Hour 956.42

Unadjusted unit production/hour: 1,152.32 LCY/Hour Optimal Number of Scrapers per push dozer:

JOB TIME AND COST

Fleet size:	1	_ Team(s)	Total job time:	13.16	Hours
Unit cost:	\$2.138	/LCY	Total job cost:	\$26,906	

REVEGETATION WORK

Task description:	Reveg backfilled and	l pit area			
Munroe Gypsum Qua	nroe Gypsum Quarry Permit Action: TR4 Permit/Job#				
PROJECT IDENTIFIC	<u>CATION</u>				
Task #:006	State: Co	olorado		Abbreviation:	None
Date: 8/21/2025	County: La	rimer		Filename:	TR4
User: JR2					
Agency or organ	ization name: DRMS				
FERTILIZING					
Materials					
D : 4:		Units /	TT *4	Cost / Unit	Cost /Acre
Description		Acre	Unit	Cost / Unit	Cost/Acre
				\$	\$
				Total Fertilizer	
				Materials	
				Cost/Acre	\$0.00
Application					
Description					Cost /Acre
-					\$
					Ψ
		Total	Fertilizer A	application Cost/Acre	\$0.00
<u> </u>					
Description					Cost /Acre
Disc harrowing, 6" dee	p (MEANS 32 91 13.23	6100)			\$114.13
			To	otal Tilling Cost/Acre	\$114.13

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	0.25	4.08	\$7.33
Indian Ricegrass - Native	1.60	5.18	\$28.33
Little Bluestem - Native	0.88	5.22	\$13.79
Oats - Ajay	4.50	1.34	\$2.97
Mahogany, Mountain	0.25	0.34	\$25.84
Western Wheatgrass - Arriba	2.00	5.05	\$18.50
Totals Seed Mix	9.48	21.21	\$96.76

Application

Description		Cost /Acre
Broadcast seeding [DMG]		\$279.08
	Total Seed Application Cost/Acre	\$279.08

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Hay, delivered	1.00	TON	\$504.56	\$504.56
Total Mulch Materials Cost/Acre				\$504.56

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$239.35
Power mulcher (MEANS 32 91 13.16 0350)		\$141.57
	Total Mulch Application Cost/Acre	\$380.92

NURSERY STOCK PLANTING

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

JOB TIME AND COST

 No. of Acres:
 15
 Cost /Acre:
 \$1,375.45

 Estimated Failure Rate:
 30%
 Cost /Acre*:
 \$375.84

*Selected Replanting Work Items: SEEDING

Initial Job Cost: \$20,631.75

Reseeding Job Cost: \$1,691.28

Total Job Cost: \$22,323

Job Hours: 9.00

BOREHOLE SEALING WORK

Site: _	Munroe Gypsum Quarry		Permit Action:	TR4	Permit/.	Job#: <u>M1977002HR</u>
ROJEC	CT IDENTIFICATION					
ask#:	007	State:	Colorado		Abbreviation:	None
Date: User:	8/21/2025 JR2	County:	Larimer		Filename:	TR4

UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Fill 117 LF with	Bentonite seal - 4 in.	4	117	117.00	LF	\$9.09	\$1,062.95
betonite	(labor, equip, materials)						
Backfill with	General laborer -	NA	NA	13.00	HR	\$23.53	\$305.89
cuttings	Colorado (total incl.						
1	fringes, empl. burden)						

Job Hours: 14.00 Total Cost: \$1,369.00

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Aobilize equipmen	t to site		
e: Munroe Gypsum Quarry	Permi	t Action: TR4	Permit/Jol	b#: <u>M1977002HR</u>
PROJECT IDENTIFICA	ΓΙΟΝ			
Task #: 008	State: C	Colorado	Abbreviation:	None
Date: 8/21/2025	County: L	arimer	Filename:	TR4
User: JR2	<u>—</u>			
Agency or organizat	ion name: DRM:	S		
EQUIPMENT TRANSPO	RT RIG COST			
			Shift basis:	1 nor dov
				1 per day CRG Data
Truck Tractor De	scription: GENI		AY TRUCK TRACTOR, 6X4, 1	DIESEL POWERED,
Truck Trailer De	ogarintian: (400 HP (2ND HALF, 2006) IG GOOSENECK, DROP DEC	V EOLIDMENT
Truck Trailer De	scription.		AILER (25T, 50T, AND 100T)	•
	-	110	7 HEER (231, 301, 7 HVD 1001)	
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hour		\$38.32	\$48.96	
Operating Cost/Hour		\$60.11	\$65.86	
Operator Cost/Hour	\$22.52	\$22.52	\$22.52	

\$22.25

\$143.20

\$0.00

\$75.46

\$22.25

\$159.59

NON ROADABLE EQUIPMENT:

Total Unit Cost/Hour:

Helper Cost/Hour:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/uni	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
_	(TONS)		t		fleet		
Cat D9T - 9SU	66.13	\$294.60	\$159.59	2	\$908.38	\$319.18	\$250.00
Cat 637G w/push-	59.59	\$285.51	\$159.59	2	\$890.20	\$319.18	\$250.00
pull							
CAT 14M	23.57	\$101.88	\$75.46	1	\$177.34	\$75.46	\$250.00
Drill/Broadcast	25.00	\$5.99	\$75.46	2	\$162.90	\$150.92	\$250.00
Seeder with							
Tractor							
Power Mulcher	6.00	\$29.91	\$75.46	1	\$105.37	\$75.46	\$250.00
(Bowie LD-90)							
SCHRAMM	0.00	\$292.59	\$75.46	1	\$368.05	\$75.46	\$250.00
T450WS							

Subtotals: \$2,612.24 \$1,015.66 \$1,500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T.	\$31.11	1	\$31.11	\$31.11
Crew				
Fuel Tanker, 6x4, 210 HP	\$78.23	2	\$156.46	\$156.46
Water Tanker, 7,000 Gal.	\$192.79	1	\$192.79	\$192.79

Subtotals: \$380.36 \$380.36

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: FORT COLLINS

Total one-way travel distance: 25.00 miles

Average Travel Speed: 40.00 mph

Total Non-Roadable Mob/Demob Cost *
 '* two round trips with haul rig:
 Total Roadable Mob/Demob Cost **
 ** one round trip, no haul rig:

\$23,208.32

\$475.45

<u>Transportation Cycle Time:</u>

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.63	0.63
Return Time (Hours):	0.63	0.63
Loading Time (Hours):	1.50	NA
Unloading Time (Hours):	1.50	NA
Subtotals:	4.25	1.25

JOB TIME AND COST

Total job cost: **8.50** Hours

Total job cost: **\$23,684**