

Gagnon - DNR, Nikie <nikie.gagnon@state.co.us>

# Re: Walstrum Quarry M1983033 Inspection Report and Cost Estimate

1 message

Gagnon - DNR, Nikie <nikie.gagnon@state.co.us>

Wed, Jan 29, 2025 at 12:39 PM

To: Phillip Courtney <Phillip.Courtney@martinmarietta.com> Cc: Julie Mikulas <Julie.Mikulas@martinmarietta.com>, Sara Stevenson-Benn - DNR <sara.stevenson-benn@state.co.us>

Hello.

Please see the attached Notice of Surety Increase from the Division for the Walstrum Quarry - File No. M-1983-033. Please make arrangements to submit the financial warranty within 60 days.

Let me know if you have any questions,

Kind regards,

Nikie Gagnon

**Environmental Protection Specialist** 



**COLORADO** Division of Reclamation, Mining and Safety Department of Natural Resources

Cell: 720.527.1640

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

#### Address for FedEx, UPS, or hand delivery:

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

nikie.gagnon@state.co.us | https://www.drms.colorado.gov

On Mon, Jan 13, 2025 at 7:50 AM Phillip Courtney <Phillip.Courtney@martinmarietta.com> wrote:

Received, thank you, Nikie. I will review the bond estimate and let you know if we have any questions.

Regards, Phil

Phillip Courtney Land Manager | West Division

#### Martin Marietta

1627 Cole Boulevard, Suite 200, Lakewood, CO, 80401

t. (720) 612-6232 m. (303) 902-0964

e. phillip.courtney@martinmarietta.com

www.martinmarietta.com

From: Gagnon - DNR, Nikie <nikie.gagnon@state.co.us>
Sent: Sunday, January 12, 2025 8:22 PM
To: Phillip Courtney <Phillip.Courtney@martinmarietta.com>
Cc: Julie Mikulas <Julie.Mikulas@martinmarietta.com>
Subject: Walstrum Quarry M1983033 Inspection Report and Cost Estimate

#### **EXTERNAL SENDER – PLEASE ASSESS AND VERIFY**

Hi Phil.

Please see the attached inspection report for the November 2024 inspection of the Walstrum Quarry. No problems requiring abatement were observed during the inspection.

As part of our routine monitoring and review of permits, the Division recalculated the bond for the site. Please see the attached bond estimate which shows the estimated reclamation liability for the site is \$1,533,035.00, which is an increase of \$433,035.00. Please review the estimate and reach out to me if you have any questions or concerns on the new amount. A notice of surety increase will be sent after January 27, 2025.

Kind regards,

Nikie Gagnon

#### **Environmental Protection Specialist**

COLORADO Division of Reclamation, Mining and Safety Department of Natural Resources

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M1983033\_Walstrum Quarry\_Surety Increase\_2024 RCE.pdf 581K



January 29, 2025

Phillip Cortney Albert Frei & Sons Inc. 1627 Cole Boulevard, Suite 200 Lakewood, CO 80401, CO 80401

### Re: Walstrum Quarry - File No. M-1983-033, Albert Frei & Sons Inc. Surety Increase (SI 1) 2024 Reclamation Cost Estimate

Dear Phillip Cortney:

On January 29, 2025 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$1,533,035.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$433,035.00. Please see the November 14, 2024 inspection report for details regarding why this surety increase is required.

On January 29, 2025, the Division ordered amendment of the current Financial Warranty or submittal of a new Financial Warranty reflecting the increase, within 60 days.

Please make arrangements with Sara M. Stevenson-Benn at the Division's Denver office for submittal of the financial warranty. Any other questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Sara M. Stevenson-Benn by telephone at (303) 918-5415, or by email at Sara.stevenson-benn@state.co.us.

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit if the amount of any increased Financial Warranty has not been provided by March 30, 2025.

If you have any questions, please contact me by telephone at (720) 527-1640, or by email at nikie.gagnon@state.co.us.

Sincerely,

Aikie Bagnon

Nikie Gagnon Environmental Protection Specialist

Enclosure: 2024 Reclamation Cost Estimate

cc: Sara M. Stevenson-Benn, DRMS Jared Ebert, Senior EPS, DRMS



# COST SUMMARY WORK

Т	Task descrip	ption:	2024 Bond Estin	nate				
Site:	Walstrun	n Quarry	Pe	rmit Action:	2024 Inspection	Permit/Jol	o#: <u>M1983033</u>	
<u>P</u> ]	<u>ROJECT</u>	<u>IDENTIFIC</u>	CATION					
	Task #:	000	State:	Colorado		Abbreviation:	None	
	Date:	1/12/2025	County:	Clear Creek		Filename:	M033-000	
	User:	NCG						
	Age	ency or organi	zation name: DF	RMS				

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
IY1	Stages I & Y Revegetation	REVEGE	1	80.00	\$755,516
IY2	Stages I & Y Replace Topsoil	LOADER	1	368.08	\$98,730
IY3	Stages I & Y Bench Construction	DOZER	2	77.01	\$74,607
IY4	Stages I & Y Talus Sloping	DOZER	2	176.62	\$171,095
IY5	Stages I & Y Grading and Shaping	GRADER	] 1	81.55	\$13,205
JM1	Stage J & Misc. Revegetation	REVEGE	] 1	80.00	\$43,826
JM2	Stage J & Misc. Replace Topsoil	LOADER	1	43.86	\$11,766
JM5	Stage J & Misc. Grading and Shaping	GRADER	1	50.63	\$8,199
JM6	Concrete Demo	SITEMAINT	1	40.00	\$29,145
		ENANCE			
JM7	Scrap Removal	SITEMAINT	1	40.00	\$9,450
		ENANCE			
		TALS:	1037.75	\$1,215,539	

## **INDIRECT COSTS**

### OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$24,554
Performance bond:	0.00	Total =	\$0
Job superintendent:	518.87	Total =	\$41,131
Profit:	10.00	Total =	\$121,554
		TOTAL O & P =	\$187,239
		CONTRACT AMOUNT (direct + O & P) = $($	\$1,402,778

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	4.25	Total =	\$59,618
Reclamation management and/or administration:	5.00		\$70,139
CONTINGENCY:	0.00	Total =	\$0
		TOTAL INDIRECT COST =	\$317,496

# **REVEGETATION WORK**

Task description:		Stages I & Y Revegetation	
Site: Walstru	n Quarry	Permit Action: 2024 Inspection	n Permit/Job#: M1983033
<u>PROJECT</u> Task #:	<b>IDENTIFIC</b> IY1	CATION State: Colorado	Abbreviation: None
Date: User:	1/12/2025 NCG	County: Clear Creek	Filename: M033-IY1

# **FERTILIZING**

### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-20-20, 4-8-12, 10-10-10	1.00	pound	\$0.64	\$0.64
			Total Fertilizer Materials	
			Cost/Acre	\$0.64

### **Application**

Description	Cost /Acre
Hydro spreader (MEANS 32 01 90.13 0180)	\$278.78
Total Fertilizer Application Cost/Acre	\$278.78

# **TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$338.80

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	11.90	194.24	\$253.77
Indian Ricegrass - Native	4.08	13.21	\$70.55
Sand Dropseed	6.60	787.88	\$85.86
Canada Wildrye	3.30	8.71	\$33.76
Sandberg Bluegrass - VNS	9.90	210.23	\$143.02
Currant, Wax	1.30	4.48	\$90.17
Slender Wheatgrass - Native	6.60	24.09	\$46.63
Mahogany, Mountain	1.30	1.76	\$131.23
Western Wheatgrass - Barton	9.90	25.00	\$93.02
Rose, Wood's	1.30	0.00	\$69.39
Sage, Fringed	0.70	58.50	\$69.46

Prairie Junegrass	3.30	175.41	\$160.85
Flax, Lewis Blue	1.30	8.62	\$54.99
Penstemon, Rocky Mountain	1.30	20.38	\$79.84
Yarrow, Western	0.70	42.56	\$33.77
Totals Seed Mix	63.48	1,575.06	\$1,416.29

### Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,359.07
	Total Seed Application Cost/Acre	\$1,359.07

### **MULCHING and MISCELLANEOUS**

### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Tordon 22K @ 1.0 pt/ac	1.00	ACRE	\$11.80	\$11.80
Jute mesh #2, stapled (MEANS 31 25 14.16	1.00	ACRE	\$2,758.80	\$2,758.80
0300)				
Total Mulch Materials Cost/Acre				\$2,770.60

### Application

Description	Cost /Acre	
Jute mesh #2 (MEANS 31 25 14.16 0300)	\$2,323.20	
Weed spray, hand, non-aquatic area, nox. [DMG]	\$209.61	
Weed spray, hand, non-aquatic areas, ann. [DMG]	\$136.48	
Total Mu	Ich Application Cost/Acre \$2,669.29	

### **NURSERY STOCK PLANTING**

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

No. of Acres:	79.3	Cost /Acre:	\$8,833.47
Estimated Failure Rate:	25%	Cost /Acre*:	\$2,775.36
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$700,494.17
Reseeding Job Cost:	\$55,021.51
Total Job Cost:	\$755,516
Job Hours:	80.00

# **REVEGETATION WORK**

Tasl	sk descrip	tion:	Stage J & Misc.	Revegetation	n		
Site: V	Walstrum	n Quarry	Per	mit Action:	2024 Inspection	Permit/Jol	o#: <u>M1983033</u>
<u>PRC</u>	DJECT 1	IDENTIFIC	CATION				
7	Task #:	JM1	State:	Colorado		Abbreviation:	None
	Date:	1/12/2025	County:	Clear Creel	k	Filename:	M033-JM1
	User:	NCG					

# **FERTILIZING**

### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
0-20-20, 4-8-12, 10-10-10	1.00	pound	\$0.64	\$0.64
			Total Fertilizer Materials Cost/Acre	\$0.64

### **Application**

Description	Cost /Acre
Hydro spreader (MEANS 32 01 90.13 0180)	\$278.78
Total Fertilizer Application Cost/Acre	\$278.78

# **TILLING**

Description	Cost /Acre
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$338.80

### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	11.90	194.24	\$253.77
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Sand Dropseed	6.60	787.88	\$85.86
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Currant, Wax	1.30	4.48	\$90.17
Slender Wheatgrass - Native	6.60	24.09	\$46.63
Mahogany, Mountain	1.30	1.76	\$131.23
Western Wheatgrass - Barton	9.90	25.00	\$93.02
Rose, Wood's	1.30	0.00	\$69.39
Sage, Fringed	0.70	58.50	\$69.46

Prairie Junegrass	3.30	175.41	\$160.85
Flax, Lewis Blue	1.30	8.62	\$54.99
Penstemon, Rocky Mountain	1.30	20.38	\$79.84
Yarrow, Western	0.70	42.56	\$33.77
Totals Seed Mix	63.48	1,575.06	\$1,416.29

### Application

Description		Cost /Acre
Hydro seeding (MEANS 32 92 19.14 0200)		\$1,359.07
	Total Seed Application Cost/Acre	\$1,359.07

## **MULCHING and MISCELLANEOUS**

### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Tordon 22K @ 1.0 pt/ac	1.00	ACRE	\$11.80	\$11.80
Jute mesh #2, stapled (MEANS 31 25 14.16	1.00	ACRE	\$2,758.80	\$2,758.80
0300)				
Total Mulch Materials Cost/Acre				\$2,770.60

### Application

Description	Cost /Acre	
Jute mesh #2 (MEANS 31 25 14.16 0300)	\$2,323.20	
Weed spray, hand, non-aquatic area, nox. [DMG]	\$209.61	
Weed spray, hand, non-aquatic areas, ann. [DMG]	\$136.48	
Total Mu	Ich Application Cost/Acre \$2,669.29	

### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 1	Nursery Stoc	ck Cost / Acre	\$0.00

No. of Acres:	4.6	Cost /Acre:	\$8,833.47
Estimated Failure Rate:	25%	Cost /Acre*:	\$2,775.36
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$40,633.96
Reseeding Job Cost:	\$3,191.66
Total Job Cost:	\$43,826
Job Hours:	80.00

# WHEEL LOADER - LOAD AND CARRY WORK

Walstrum Quarry	Permit Action:	2024 Inspection	P	ermit/Job#:	M1983033
		<b>`</b>			
PROJECT IDENTIFI	<u>CATION</u>				
Task #: IY2	State: Colorado			reviation:	None
Date: $1/12/2025$	County: Clear Cre	eek		Filename:	M033-IY2
User: NCG					
Agency or organi	zation name: DRMS				
HOURLY EQUIPMEN	NT COST				
Basic Machine: (	CAT 988H	F	Horsepower:	2	475
	ROPS Cab		Shift Basis:		er day
			Data Source:		CRG)
Cost Breakdown:					
COSt DIeakuowii.		Utilization %			
Ownership Cost/He	our: \$131.26	NA			
Operating Cost/He		100			
Operator Cost/He	our: \$36.85	NA			
Total Unit Cost/He	our: \$268.23				
Total Fleet Cost/H					
	lour: \$268.23	-			
MATERIAL QUANTI	TIES				
MATERIAL QUANTI Initial volume:93,	TIES 412 CCY	Swell factor	:		
MATERIAL QUANTI	TIES	Swell factor	: _1.000		
MATERIAL QUANTI Initial volume: 93, Loose volume: Source of	TIES         412       CCY         93,412       LCY         estimated volume:       Division	n of Reclamation, Mi		у	
MATERIAL QUANTI Initial volume: 93, Loose volume: Source of	TIES           412         CCY           93,412         LCY	n of Reclamation, Mi		у	
MATERIAL QUANTI Initial volume: 93, Loose volume: Source of Source of esti	TIES         412       CCY         93,412       LCY         restimated volume:       Division         mated swell factor:       Cat Han	n of Reclamation, Mi		у	
MATERIAL QUANTI Initial volume: 93, Loose volume: Source of	TIES         412       CCY         93,412       LCY         restimated volume:       Division         mated swell factor:       Cat Han	n of Reclamation, Mi		 y	
MATERIAL QUANTI Initial volume: 93, Loose volume: Source of Source of esti	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION	n of Reclamation, Mi Idbook	ining & Safet		minutes
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCTI Loader Cycle Time:	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION       Unadjusted Basic Cycle Time	n of Reclamation, Mi Idbook	ining & Safet	0.575	
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION       Unadjusted Basic Cycle Time         s	n of Reclamation, Mi idbook e (load, dump, manet	ining & Safet	0.575 r (min.)	Source
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Har         ION       Unadjusted Basic Cycle Time         s       .         Material up to 1/8" diameter	n of Reclamation, Mi ndbook e (load, dump, maner ter 0.02	uver): Factor	0.575 r (min.) 020	Source (Cat HB)
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION       Unadjusted Basic Cycle Times         s       .         Material up to 1/8" diamet         Conveyor or dozer piled 1	n of Reclamation, Mi idbook e (load, dump, maneu ier 0.02 0 ft. high and up 0.00	uver): Factor 0 0	0.575 r (min.)	Source (Cat HB) (Cat HB)
MATERIAL QUANTI Initial volume: 93, Loose volume: Source of Source of esti HOURLY PRODUCT Loader Cycle Time: Cycle Time Factors Material Stockpile	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION       Unadjusted Basic Cycle Times         s       .         Material up to 1/8" diameter         Conveyor or dozer piled 1         Common ownership of true	n of Reclamation, Mi idbook e (load, dump, maneu ier 0.02 0 ft. high and up 0.00	uver): Facto 0 0 0 40	0.575 r (min.) 020 000	Source (Cat HB) (Cat HB) (Cat HB)
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCT Loader Cycle Time: Cycle Time Factors Material Stockpile Truck Ownership	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION       Unadjusted Basic Cycle Time         s       .         :       Material up to 1/8" diamet         :       Conveyor or dozer piled 1         :       Constant operation -0.04         :       Nominal target 0.00	n of Reclamation, Mi adbook e (load, dump, manet ter 0.02 0 ft. high and up 0.00 cks and loaders -0.04	ining & Safet iver): Facto 0 0 0 4 -C -C 0 0	0.575 r (min.) 020 000 .040 .040 .040 000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCT Loader Cycle Time: Cycle Time Factors Material Stockpile Truck Ownership Operation	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Har         ION       Constant operation -0.04         Constant operation -0.04       Nominal target 0.00         Net C	n of Reclamation, Mi ndbook e (load, dump, maner ter 0.02 0 ft. high and up 0.00 cks and loaders -0.0 ycle Time Adjustmen	ining & Safet uver): Factor 0 0 0 0 4 -C -C 0 0 1t:C	0.575 r (min.) 020 .000 .040 .040 .040 .000 .060	(Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCT Loader Cycle Time: Cycle Time Factors Material Stockpile Truck Ownership Operation	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Har         ION       Constant operation -0.04         Constant operation -0.04       Nominal target 0.00         Net C	n of Reclamation, Mi adbook e (load, dump, manet ter 0.02 0 ft. high and up 0.00 cks and loaders -0.04	ining & Safet uver): Factor 0 0 0 0 4 -C -C 0 0 1t:C	0.575 r (min.) 020 000 .040 .040 .040 000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCT Loader Cycle Time: Cycle Time Factors Material Stockpile Truck Ownership Operation	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION       Constant operation -0.04         Constant operation -0.04       Nominal target 0.00         Net Cy       Adjust	n of Reclamation, Mi ndbook e (load, dump, maner ter 0.02 0 ft. high and up 0.00 cks and loaders -0.0 ycle Time Adjustmen	ining & Safet uver): Factor 0 0 0 0 4 -C -C 0 0 1t:C	0.575 r (min.) 020 .000 .040 .040 .040 .000 .060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
MATERIAL QUANTI Initial volume:93, Loose volume: Source of Source of esti HOURLY PRODUCTI Loader Cycle Time: Cycle Time Factors Material Stockpile Truck Ownership Operation Dump Target	TIES         412       CCY         93,412       LCY         estimated volume:       Division         mated swell factor:       Cat Han         ION       Constant operation -0.04         Constant operation -0.04       Nominal target 0.00         Net Cy       Adjust	n of Reclamation, Mi ndbook e (load, dump, maner ter 0.02 0 ft. high and up 0.00 icks and loaders -0.0- ycle Time Adjustmen sted Basic Cycle Tim	uver): Facto 0 0 0 4 -C -C 0 0 1t:C e:0	0.575 r (min.) 020 .000 .040 .040 .040 .000 .060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	900	5.00	2.00	7.00	0.9002	(Cat HB)
Return Route:	900	-5.00	2.00	-3.00	0.4804	(Cat HB)

			vel Time: 1.3806 cle Time: 1.8956	minutes
Load Bucket Capacity				
Rated Capac	eity: 9.20	LCY (heaped)		
Bucket Fill Fac	tor: 1.050	Other - moist loam	(100-110%) 1.050	
Adjusted Capac	eity: <b>9.66</b>	LCY		
Job Condition Correction Site Altitude: 7220 fee				
		Source		
Altitude Adj:	1.00	(CAT HB)		
Job Efficiency:	0.83	(1 shift/day)		
Net Correction:	0.83	multiplier		
τ	Inadjusted Hourly Ur			
	Adjusted Hourly Un Adjusted Hourly Fle			
	Aujusteu noully rie	255.7		
JOB TIME AND C	<u>OST</u>			
Fleet size:	1 Loader	(s) Total job ti	me: <b>368.08</b>	Hours

 Unit cost:
 \$1.057
 /LCY
 Total job cost:
 \$98,730

# WHEEL LOADER - LOAD AND CARRY WORK

Walstrum Quarry	Pern	nit Action:	2024 Inspection	Р	ermit/Job#:	M1983033
PROJECT IDENTIF	<b>ICATION</b>					
Task #: JM2	State:	Colorado		Abb	reviation:	None
Date: 1/12/2025	County:	Clear Cree	ek		Filename:	M033-JM2
User: NCG						
Agency or organ	nization name: DR	MS				
HOURLY EQUIPME	ENT COST					
Basic Machine:	CAT 988H			Horsepower:		475
Attachment 1:	ROPS Cab			Shift Basis:	-	ber day
	KOI 5 Cub			Data Source:		CRG)
				2 au 550100.	(	
Cost Breakdown:		I				
	· • • • •		Utilization %			
Ownership Cost/I			NA	_		
Operating Cost/H			100	_		
Operator Cost/I			NA	_		
Total Unit Cost/H	Hour: \$268.2	23				
Total Fleet Cost/	Hour: \$268.	23				
MATERIAL QUANT	<u>TITIES</u>					
		CCV	Swall facto			
Initial volume: 1	1,132		Swell facto	or: <u>1.000</u>		
Initial volume: 1		CCY LCY	Swell facto	or: <u>1.000</u>		
Initial volume: <u>1</u> Loose volume: <u></u> Source of	1,132 11,132 of estimated volume:	LCY Division	of Reclamation, N		у	
Initial volume: <u>1</u> Loose volume: <u></u> Source of	1,132 <b>11,132</b>	LCY	of Reclamation, N		у	
Initial volume: <u>1</u> Loose volume: <u>Source of est</u>	1,132 11,132 of estimated volume: timated swell factor:	LCY Division	of Reclamation, N			
Initial volume: <u>1</u> Loose volume: <u></u> Source of	1,132 11,132 of estimated volume: timated swell factor:	LCY Division	of Reclamation, N		у	
Initial volume: <u>1</u> Loose volume: <u>Source of est</u>	1,132 11,132 of estimated volume: timated swell factor:	LCY <u>Division</u> Cat Hanc	of Reclamation, M lbook	lining & Safet	y 0.575	minutes
Initial volume: <u>1</u> Loose volume: <u>Source of es</u> HOURLY PRODUCT	1,132 11,132 of estimated volume: timated swell factor: <u>FION</u> Unadjusted Basic O	LCY <u>Division</u> Cat Hanc	of Reclamation, M lbook	lining & Safet		minutes
Initial volume: <u>1</u> Loose volume: <u>Source of es</u> Source of es HOURLY PRODUCT	1,132 11,132 of estimated volume: timated swell factor: <b><u>FION</u></b> Unadjusted Basic Oprs	_ LCY _ <u>Division</u> _Cat Hanc Cycle Time	of Reclamation, M lbook (load, dump, mane	fining & Safet euver): Factor	0.575	Source
Initial volume: <u>1</u> Loose volume: <u>Source of</u> Source of es HOURLY PRODUCT Loader Cycle Time: Cycle Time Facto	1,132         11,132         of estimated volume:         timated swell factor: <b>FION</b> Unadjusted Basic Opers         al:         Material up to 1	_ LCY _ <u>Division</u> _Cat Hand Cycle Time /8" diamete	of Reclamation, M lbook (load, dump, mane	fining & Safet euver): Facto 0	0.575 r (min.)	Source (Cat HB)
Initial volume: <u>1</u> Loose volume: <u>Source of</u> Source of es HOURLY PRODUCT Loader Cycle Time: Cycle Time Facto Materia	1,132         11,132         of estimated volume:         timated swell factor: <b>FION</b> Unadjusted Basic Cors         al:       Material up to 1         le:       Conveyor or do	_ LCY _ <u>Division</u> _Cat Hand Cycle Time /8" diameted zer piled 10	of Reclamation, M lbook (load, dump, mane er 0.02	Iining & Safet euver): Facto 000000	0.575 r (min.) 020	Source (Cat HB) (Cat HB)
Initial volume: Loose volume: Source of Source of es <b>IOURLY PRODUC</b> Loader Cycle Time: Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	1,132         11,132         of estimated volume:         timated swell factor:         Unadjusted Basic Operation         Unadjusted Basic Operation         al: Material up to 1         Le: Conveyor or do         operation: Constant operation	LCY Division Cat Hand Cycle Time /8" diamete zer piled 10 rship of truc ion -0.04	of Reclamation, M lbook (load, dump, mane er 0.02 ) ft. high and up 0.0	Ining & Safet         cuver):         Factor         0         00         04         -0	0.575 r (min.) 020 .000 .040 .040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Initial volume: Loose volume: Source of Source of es HOURLY PRODUCT Loader Cycle Time: Cycle Time Facto Materia Stockpil Truck Ownershi	1,132         11,132         of estimated volume:         timated swell factor:         Unadjusted Basic Operation         Unadjusted Basic Operation         al: Material up to 1         Le: Conveyor or do         operation: Constant operation	LCY Division Cat Hand Cycle Time /8" diamete zer piled 10 rship of truc ion -0.04 0.00	of Reclamation, N lbook (load, dump, mane er 0.02 ) ft. high and up 0.0 eks and loaders -0.0	fining & Safet       euver):       Factor       0       00       04       -0       0       0	0.575 r (min.) 020 .000 .040 .040 .040 .000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Initial volume: Loose volume: Source of Source of es <b>IOURLY PRODUC</b> Loader Cycle Time: Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	1,132         11,132         of estimated volume:         timated swell factor:         Unadjusted Basic Operation         Unadjusted Basic Operation         al: Material up to 1         Le: Conveyor or do         operation: Constant operation	LCY Cat Hand Cycle Time /8" diamete zer piled 10 rship of truct ion -0.04 0.00 Net Cy-	of Reclamation, N lbook (load, dump, mane er 0.02 ) ft. high and up 0.0 eks and loaders -0.0 cle Time Adjustme	fining & Safet         euver):         Factor         00         00         04         -00         04         -00         00	0.575 or (min.) 020 .000 .040 .040 .040 .000 .060	(Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Initial volume: Loose volume: Source of Source of es <b>IOURLY PRODUC</b> Loader Cycle Time: Cycle Time Facto Materia Stockpil Truck Ownershi Operatio	1,132         11,132         of estimated volume:         timated swell factor:         Unadjusted Basic Operation         Unadjusted Basic Operation         al: Material up to 1         Le: Conveyor or do         operation: Constant operation	LCY Cat Hand Cycle Time /8" diamete zer piled 10 rship of truct ion -0.04 0.00 Net Cy-	of Reclamation, N lbook (load, dump, mane er 0.02 ) ft. high and up 0.0 eks and loaders -0.0	fining & Safet         euver):         Factor         00         00         04         -00         04         -00         00	0.575 r (min.) 020 .000 .040 .040 .040 .000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
Initial volume: _1 Loose volume: Source of Source of es <b>IOURLY PRODUCT</b> Loader Cycle Time: Cycle Time Facto Materia Stockpil Truck Ownershi Operatio Dump Targe	1,132         11,132         of estimated volume:         timated swell factor: <b>IION</b> Unadjusted Basic Ors         al:       Material up to 1         le:       Conveyor or do         ip:       Common owner         on:       Constant operate         et:       Nominal target	LCY Cat Hand Cycle Time /8" diamete zer piled 10 rship of truct ion -0.04 0.00 Net Cy-	of Reclamation, N lbook (load, dump, mane er 0.02 ) ft. high and up 0.0 eks and loaders -0.0 cle Time Adjustme	fining & Safet         euver):         Factor         00         00         04         -00         04         -00         00	0.575 or (min.) 020 .000 .040 .040 .040 .000 .060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Initial volume: Loose volume: Source of Source of es <b>IOURLY PRODUCT</b> Loader Cycle Time: Cycle Time Facto Materia Stockpil Truck Ownershi Operatio Dump Targe	1,132         11,132         of estimated volume:         timated swell factor: <b>IION</b> Unadjusted Basic Ors         al:       Material up to 1         le:       Conveyor or do         op:       Common owner         on:       Constant operation         et:       Nominal target	LCY Division Cat Hand Cycle Time /8" diamete zer piled 10 rship of truc ion -0.04 0.00 Net Cy Adjust	of Reclamation, M lbook (load, dump, mane er 0.02 ) ft. high and up 0.0 ks and loaders -0.0 cle Time Adjustme ed Basic Cycle Tin	Ining & Safet         euver):         Factor         0         00         04         -00         00         00         00         00         00         00         00         00         00         00         00         00         00         00         00         0         0         0	0.575 or (min.) 020 .000 .040 .040 .040 .000 .060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Initial volume: _1 Loose volume: Source of Source of es <b>IOURLY PRODUCT</b> Loader Cycle Time: Cycle Time Facto Materia Stockpil Truck Ownershi Operatio Dump Targe	1,132         11,132         of estimated volume:         timated swell factor:         Image: Time of the system         Unadjusted Basic (ors)         al:       Material up to 1         le:       Conveyor or do         ip:       Common owner         on:       Constant operate         et:       Nominal target	LCY Division Cat Hand Cycle Time /8" diamete zer piled 10 rship of truc ion -0.04 0.00 Net Cy Adjust	of Reclamation, N lbook (load, dump, mane er 0.02 ) ft. high and up 0.0 eks and loaders -0.0 cle Time Adjustme	Ining & Safet         euver):         Factor         0         00         04         -0         01         00 <t< td=""><td>0.575 or (min.) 020 .000 .040 .040 .040 .000 .060</td><td>Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes</td></t<>	0.575 or (min.) 020 .000 .040 .040 .040 .000 .060	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	900	5.00	2.00	7.00	0.9002	(Cat HB)
Return Route:	900	-5.00	2.00	-3.00	0.4804	(Cat HB)

			Total Travel Total Cycle		1.3806 <b>1.8956</b>	minutes
Load Bucket Capacity						
Rated Capacity: Bucket Fill Factor: Adjusted Capacity:	9.20 1.050 <b>9.66</b>	LCY (hea Other - ma	· ·	(100-1109	%) 1.050	
Job Condition Correction H Site Altitude: <u>7220</u> feet	<u>Factors</u>					
		Source				
Altitude Adj:	1.00	(CAT HB	)			
Job Efficiency:	0.83	(1 shift/da	y)			
Net Correction:	0.83	multiplier				
	justed Hourly Unit		305.76	LCY/	Hour	
Ad	justed Hourly Unit	Production:	253.78	LCY/	Hour	
Adj	usted Hourly Fleet	Production:	253.78	LCY/	Hour	
JOB TIME AND COS	<u>r</u>					
Fleet size: 1	Loader(s)		Total job time		43.86	Hours
Unit cost: \$1.05	57 /LCY		Total job cost		\$11,766	

# BULLDOZER WORK

Task description:	Stages I & Y Bench Constru			
Walstrum Quarry	Permit Action:	2024 Inspection	Permit/Job#:	M1983033
PROJECT IDENTIF	<b>ICATION</b>			
Task #: IY3	State: Colorado		Abbreviation:	None
Date: 1/12/2025	County: Clear Cre		Filename:	M033-IY3
User: NCG				
Agency or organ	nization name: DRMS			
HOURLY EQUIPME				
Basic Machine: Cat	t D9T - 9SU			
Horsepower: 405				
Blade Type: Ser	ni-Universal			
Attachment: 3-s	hank ripper			
	er day			
Data Source: (CH	RG)			
Cost Breakdown:				
Orrenandhin Carat/II	\$050 1 C	Utilization %		
Ownership Cost/Hour:	\$253.16	NA 100		
Operating Cost/Hour: Ripper own. Cost/Hour:	<u>\$164.35</u> \$18.79	100 NA		
Ripper own. Cost/Hour: Ripper op. Cost/Hour:	\$9.48	100		
Operator Cost/Hour:	\$38.59	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	<u>\$484.37</u> <b>\$968.73</b>			
Total Fleet Cost/Hour:	\$968.73			
Total Fleet Cost/Hour: MATERIAL QUANT	\$968.73 <u>TTIES</u>			
Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>155</u> ,	<b>\$968.73</b> <u>TITIES</u> 063			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155, Swell factor: 1.00	<b>\$968.73 TTIES</b> 063 0			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,	\$968.73 TTIES 063 0 063 LCY			
Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: 155, Swell factor: 1.00 Loose volume: 155, Source of estimated volume	\$968.73 TTIES 063 0 063 LCY me:Division of Reclamate	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,	\$968.73 TTIES 063 0 063 LCY me:Division of Reclamate	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,         Source of estimated volu       Source of estimated swell	\$968.73 TTIES 063 0 063 LCY me: Division of Reclamat 1 factor: Cat Handbook	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,         Source of estimated volum       Source of estimated swell         HOURLY PRODUCT       155,	\$968.73 TTIES 063 0 063 LCY me: Division of Reclamat 1 factor: Cat Handbook FION	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT       Average push distance:	\$968.73           TTIES           063           0           063 LCY           me:         Division of Reclamat           1 factor:         Cat Handbook <b>FION</b> 50 feet	tion, Mining & Safety		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,         Source of estimated volum       Source of estimated swell         HOURLY PRODUCT       155,	\$968.73           TTIES           063           0           063 LCY           me:         Division of Reclamat           1 factor:         Cat Handbook <b>FION</b> 50 feet	tion, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155, Swell factor: 1.00 Loose volume: 155, Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance:	\$968.73           TTIES           063           0           063 LCY           me:         Division of Reclamate           1 factor:         Cat Handbook           FION         50 feet           ction:         2,110.5 LCY/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155, Swell factor: 1.00 Loose volume: 155, Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product	\$968.73           TTIES           063           0           063 LCY           me:         Division of Reclamate           1 factor:         Cat Handbook           FION         50 feet           ction:         2,110.5 LCY/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155, Swell factor: 1.00 Loose volume: 155, Source of estimated volume Source of estimated volume Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency dest Average push gradient:	\$968.73           TTIES           063           0           063 LCY           me:         Division of Reclamate           1 factor:         Cat Handbook           FION           50 feet           ction:         2,110.5 LCY/hr           scription:         Rock, avg. ripped of			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,         Source of estimated volu       Source of estimated volu         Source of estimated swell       HOURLY PRODUCT         Average push distance:       Unadjusted hourly product         Materials consistency des       Average push gradient:         Average site altitude:       State	\$968.73           YTTIES           063           0           063 LCY           me:         Division of Reclamat           1 factor:         Cat Handbook           FION         50 feet           ction:         2,110.5 LCY/hr           scription:         Rock, avg. ripped of           0 %         7,220 feet			
Total Fleet Cost/Hour: <b>MATERIAL QUANT</b> Initial Volume:       155,         Swell factor:       1.00         Loose volume:       155,         Source of estimated volum       155,         Source of estimated volum       Source         MOURLY PRODUCT       Average push distance:         Unadjusted hourly product       Materials consistency dest         Average push gradient:       Average site altitude:         Material weight:       Weight description:	\$968.73           TTIES           063           0           063 LCY           me:         Division of Reclamat           1 factor:         Cat Handbook <b>FION</b> 50 feet           ction:         2,110.5 LCY/hr           scription:         Rock, avg. ripped of           0 %         7,220 feet           2,800 lbs/LCY         Granite - Broken	or blasted 0.7		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155, Swell factor: 1.00 Loose volume: 155, Source of estimated volum Source of estimated volum Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight:	\$968.73         YTTIES         063         0         063 LCY         me:       Division of Reclamat         1 factor:       Cat Handbook         PION         scription:       2,110.5 LCY/hr         scription:       Rock, avg. ripped of         0 %       7,220 feet         2,800 lbs/LCY       Granite - Broken         Factor       Factor			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155, Swell factor: 1.00 Loose volume: 155, Source of estimated volus Source of estimated volus Source of estimated swell HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$968.73         TTIES         063         0         063 LCY         me:       Division of Reclamate         1 factor:       Cat Handbook         FION         ction:       50 feet			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155, Swell factor: 1.00 Loose volume: 155, Source of estimated volus Source of estimated volus Source of estimated swell HOURLY PRODUC? Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing me	\$968.73         TTIES         063         0         063 LCY         me:       Division of Reclamate         1 factor:       Cat Handbook         FION         ction:       50 feet	or blasted 0.7 <u>Source</u> (EXCL.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4770	
Adjusted unit production: 1,0	006.71 LCY/hr	
Adjusted fleet production: 20	13.42 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.481/LCY

Total job time:	<b>77.01</b> Hours
Total job cost:	\$74,607

# BULLDOZER WORK

Task description:	Stages I & Y Talus S	Sloping			
Walstrum Quarry	Permit	Action:	2024 Inspection	Permit/Job#:	M1983033
PROJECT IDENTIFI	CATION				
Task #: IY4	State: C	olorado		Abbreviation:	None
Date: 1/12/2025		lear Cree	k	Filename:	M033-IY4
User: NCG				-	
Agency or organ	ization name: DRMS	5			
HOURLY EQUIPME	NT COST				
	D9T - 9SU				
Horsepower: 405					
×1	ni-Universal nank ripper		_		
	er day				
Data Source: (CR					
Cost Breakdown:			Utilization %		
Ownership Cost/Hour:	\$	253.16	NA		
Operating Cost/Hour:		5164.35	100		
Ripper own. Cost/Hour:		\$18.79	NA		
Ripper op. Cost/Hour:		\$9.48	100		
Operator Cost/Hour:		\$38.59	37.4		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$484.37 <b>\$968.73</b>	\$38.39	NA		
Total unit Cost/Hour:	\$484.37 <b>\$968.73</b> ITIES	\$38.39	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>155,0</u> Swell factor: <u>1.000</u>	\$484.37 <b>\$968.73</b> ITIES 063	\$36.37	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155,0 Swell factor: 1.000 Loose volume: 155,0 Source of estimated volum	\$484.37 <b>\$968.73</b> <b>ITIES</b> 063 0 063 LCY ne:Division of F	Reclamatio	  on, Mining & Safety		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 155,0 Swell factor: 1.000 Loose volume: 155,0 Source of estimated volum Source of estimated swell	\$484.37         \$968.73         ITIES         063         0         063 LCY         ne:       Division of F         factor:       Cat Handboor	Reclamatio			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volur         Source of estimated swell         HOURLY PRODUCT	\$484.37 <b>\$968.73</b> <b>ITIES</b> 063 0 063 LCY ne: Division of F factor: Cat Handboor <b>TON</b>	Reclamatio			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volum         Source of estimated swell	\$484.37 <b>\$968.73</b> <b>ITIES</b> 063 0 063 LCY ne: Division of F factor: Cat Handboo CION 50 feet	Reclamationsk			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:	\$484.37         \$968.73         ITIES         063         0         063 LCY         ne:       Division of F         factor:       Cat Handboo         CION         String       50 feet         ettion:       2,110.5 LCY/h	Reclamations in the second sec			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volur         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:	\$484.37 <b>\$968.73</b> <b>ITIES</b> 063 063 063 LCY ne: Division of F factor: Cat Handboo <b>TON</b> ction: 50 feet 20 %	Reclamations in the second sec	on, Mining & Safety		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volum       Source of estimated swell         HOURLY PRODUCT       Average push distance:         Unadjusted hourly product       Materials consistency destance:         Average push gradient:       Average site altitude:	\$484.37         \$968.73         ITIES         063         0         063 LCY         ne:       Division of F         factor:       Cat Handboo         Y         100         101         102         103         104         105         105         1063         1063         1063         1063         1063         1063         1063         1063         1063         1063         1063         105         1063         1063         107         108         108         109         109         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000         1000 <td>Reclamations in the second sec</td> <td>on, Mining &amp; Safety</td> <td></td> <td></td>	Reclamations in the second sec	on, Mining & Safety		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volur         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:	\$484.37 <b>\$968.73</b> <b>ITIES</b> 063 063 063 LCY ne: Division of F factor: Cat Handboo <b>TON</b> tion: 50 feet cription: Rock, avg. 20 %	Reclamations in the second sec	on, Mining & Safety		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average site altitude:         Material weight:         Weight description:	\$484.37         \$968.73         ITIES         063         0         063 LCY         ne:       Division of F         factor:       Cat Handboo         Y         ne:       Division of F         factor:       Cat Handboo         Y       Y         rest       20 feet         20 %       7,220 feet         2,800 lbs/LCY       Granite - Broken	Reclamations in the second sec	on, Mining & Safety		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	\$484.37         \$968.73         ITIES         063         0         063 LCY         ne:       Division of F         factor:       Cat Handboo         CION         etion:       50 feet         2,110.5 LCY/h         cription:       Rock, avg.         20 %         7,220 feet         2,800 lbs/LCY         Granite - Broken         Factor_	Reclamations Reclamations r r ripped on	on, Mining & Safety		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volum       155,0         Source of estimated volum       Source of estimated volum         Source of estimated swell       HOURLY PRODUCT         Average push distance:       Unadjusted hourly product         Materials consistency dest       Average push gradient:         Average site altitude:       Material weight:         Weight description:       Job Condition Correction         Operator S       Operator S	\$484.37         \$968.73         ITIES         063         0         063 LCY         ne:       Division of F         factor:       Cat Handboo         CION         ction:       50 feet         20 %       7,220 feet         2,800 lbs/LCY         Granite - Broken         Factor         Skill:       1.000	Reclamations k r ripped on	on, Mining & Safety 		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       155,0         Swell factor:       1.000         Loose volume:       155,0         Source of estimated volum         Source of estimated volum         Source of estimated swell         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency dest         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	\$484.37         \$968.73         ITIES         063         0         063 LCY         ne:       Division of F         factor:       Cat Handboo         CION         *tion:       50 feet         2,110.5 LCY/h         cription:       Rock, avg.         20 %         7,220 feet         2,800 lbs/LCY         Granite - Broken         Factor         Skill:       1.000         ency:       0.700	Reclamation Reclamation r r ripped on )	on, Mining & Safety		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	0.545	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.821	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.2080	
Adjusted unit production: 43	38.98 LCY/hr	
Adjusted fleet production: 8'	77.96 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$1.103/LCY

Total job time:	176.62 Hours
Total job cost:	\$171,095

### SITE MAINTENANCE

	Task description:	Concrete Demo	
Site:	Walstrum Quarry	Permit Action: 2024 Inspection Permit/Job#:	M1983033
<u>PROJE</u>	CCT IDENTIFICATION	<u>1</u>	
Task # Date User	:: 1/12/2025	State:ColoradoAbbreviation:NoneCounty:Clear CreekFilename:M03	
	Agency or organizat	ion name: DRMS	
<u>UNIT C</u>	<u>COSTS</u>		

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Concrete Footer	40.00	Demo. and on-site	2,800.00	LF	\$10.41	\$29,144.64
Demolition		disposal in existing pit,				
		1.5 ft. x 3 ft Max.				
		10,000 ft. haul				

Job Hours: <u>40.00</u>

Total Cost: \$29,144.64

### SITE MAINTENANCE

ite: Walstrum Quarry	Permit Action: 2024 Inspection	Permit/Job#: <u>M1983033</u>
DJECT IDENTIFICATI	ION	
sk #: _ JM7	State: Colorado	Abbreviation: None
Date: 1/12/2025	County: Clear Creek	Filename: M033-JM7
Jser: NCG		
Agency or organ	ization name: DRMS	

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scrap Removal	40.00	USER PROVIDED ITEM	35.00		\$270.00	\$9,450.00

Job Hours: 40.00

Total Cost: \$9,450.00

# MOTOR GRADER WORK

Fask description:	Stages I & Y Grading a	and Shaping			
Walstrum Quarry	Permit Ac	tion: 2024 Inspect	ion P	ermit/Job#:	M1983033
PROJECT IDENTI	FICATION				
Task #: IY5	State: Colo	orado	Abb	previation:	None
Date: $1/12/2025$		r Creek		Filename:	M033-IY5
User: NCG	00000000 <u>0000</u>				
Agency or orga	anization name: DRMS				
HOURLY EQUIPM	ENT COST				
Basic Machin	e: <u>CAT 140M</u>		Horsepower:	]	183
Ripper Attachmer	nt:		Shift Basis:		er day
			Data Source:	(0	CRG)
Cost Breakdown:					
LOST DIEakuowii.			Utilization %		
Own	ership Cost/Hour:	\$77.29	NA		
	erating Cost/Hour:	\$56.87	100	_	
	ership Cost/Hour:	\$0.00	NA	-	
		\$0.00		_	
Öŗ	erator Cost/Hour:	\$27.76	NA	_	
Tota	al Unit Cost/Hour:	\$161.92			
Tata	l Fleet Cost/Hour:	\$161.92			
	a to be graded or ripped: <u>1</u> ce of estimated acreage: F				acres
		ernint Application			
HOURLY PRODUC					
	Average Grader Speed:	1.50	mph	1) 15	
	Selected Application:		grading (0-2.5 m		
	Selected Blade Angle: Effective Blade Length:	<u> </u>	degrees feet	<b>&gt;</b>	
Width	of blade overlap per pass:	2.00	feet		
	or ripping width per pass:	8.40	feet		
6 6	d Hourly Unit Production:	1.5273	acres/h	our	
ob Condition Correctio	-		te Altitude: <u>7220</u>		
	S	ource			
Altitude Adj:	· · · · · · · · · · · · · · · · · · ·	AT HB)			
Job Efficiency:		/d, fav.)			
Net Correction:	0.9000 mul	tiplier			
	Adjusted Hourly Unit Produc	ction: 1.3745	acres/Hour		
	Adjusted Hourly Fleet Produce		acres/Hour		
1					
IOB TIME AND CO	<u>DST</u>				
Fleet size:	1 Grader(s)	Total job tim	e: <u>81.5</u>	55	Hours
Unit cost: \$11	17.80 per acre	Total job cos	st: <b>\$13,</b> 2	205	
φ1	per acte	1000100	π. φ13,4		

# MOTOR GRADER WORK

Task description:	Stage J & Misc. Gra	ading and	d Shaping			
Walstrum Quarry	Permit	Action:	2024 Inspectio	on ]	Permit/Job#:	M1983033
PROJECT IDENT	<b>IFICATION</b>					
Task #: JM5	State: C	Colorado		Ab	breviation:	None
Date: $1/12/202$			k	110	Filename:	M033-JM5
User: NCG	<u></u> county: <u>c</u>				i nonuno.	11000 0110
Agency or or	ganization name: DRMS	5				
HOURLY EQUIP	MENT COST					
Basic Mach	ine: CAT 140M			Horsepower:		183
Ripper Attachm				Shift Basis:		er day
				Data Source:		CRG)
C . D 11					,	
Cost Breakdown:			1	TT: 11 0/		
0	manshin Cost/II		\$77.00	Utilization %		
	/nership Cost/Hour:		\$77.29	<u>NA</u>	_	
	perating Cost/Hour:		\$56.87	100 NA	_	
	/nership Cost/Hour: perating Cost/Hour:		\$0.00 \$0.00	NA	_	
	Derating Cost/Hour:		\$0.00	NA	_	
	operator Cost/Hour:		\$27.76	INA	_	
10	tal Unit Cost/Hour:		\$161.92			
То	tal Fleet Cost/Hour:	\$16	1.92			
	ea to be graded or ripped:					acres
So	urce of estimated acreage:	Permit	Application			
HOURLY PRODU	CTION					
	Average Grader Speed		1.50	mph		
	Selected Application			grading (0-2.5 r		
	Selected Blade Angle		30	degree	S	
	Effective Blade Length		10.40	feet		
	th of blade overlap per pass		2.00	feet		
	ng or ripping width per pass		8.40	feet		
·	ted Hourly Unit Production	1:	1.5273	acres/h		
Job Condition Correct	ion factors	Source	Sı	te Altitude: 722	<u>u</u> reet	
Altitude Adj	1.00	(CAT HI	3)			
Job Efficiency		$\frac{(CATIII}{1 sh/d, fa}$				
Net Correction		nultiplier				
	Adjusted Hourly Unit Pro	duction:	1.3745	acres/Hou	r	
	Adjusted Hourly Fleet Pro		1.3745	acres/Hou		
JOB TIME AND C	OST					
	1 Grader(s)		Total job time	50.	63	Hours
Unit cost: \$	117.80 per acre		Total job cost	: <b>\$8,</b> 1	199	
	i		5			