

July 2, 2019

Jay Wagner Wagner Construction, Inc. 1850 E. 1st Street Craig, CO 81625

RE: Wagner Rock Pit, Permit No. M-1999-018, Notice of Surety Increase (SI-3)

Dear Mr. Wagner:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed).

Division calculations estimate the cost to reclaim the above referenced site to be \$73,827\$. This is an increase of \$25,520 over the \$48,307 currently held by the Division. This estimate is based on conditions observed during the June 12, 2018 inspection. Therefore, pursuant to Section 34–32.5–117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter. The additional amount needs to be accepted prior to Monday, September 02, 2019. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Please make arrangements with Gabriel Benvenuti at the Division of Reclamation, Mining and Safety Denver Office, phone no. 303.866.3567, ext. 8148 for submittal of the financial warranty. Any questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Gabriel Benvenuti.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 303-866-3567 Ext 8183 or via email at amy.yeldell@state.co.us

Sincerely,

Amy Yeldell

Environmental Protection Specialist

Ec: Travis Marshall, Senior EPS, Grand Junction DRMS



COST SUMMARY WORK

T	Post inspection update 6-12	-2019			
Site:	Wagner Rock Permit Action:	2019-06		Permit/Jo	ob#: <u>M1999018</u>
PI	ROJECT IDENTIFICATION				
	Task #: ACY State: Colorado Date: 6/19/2019 County: Moffat User: ACY			Abbreviation: Filename:	None M018-ACY
	Agency or organization name: DRMS				
<u>T</u> A	ASK LIST (DIRECT COSTS)				
ask	Description	Form Used	Fleet Size	Task Hours	Cost
1a	Demolition of scale house	DEMOLISH	1	8.00	\$278
2a	Grade highwalls to 2H:1V	DOZER	2	65.71	\$31,799
2a 3a	Transport topsoil	LOADER	1	17.20	\$2,460
3b	Spread topsoil	DOZER	2	4.54	\$2,065
4a	Rip compacted areas	RIPPER	2	3.40	\$1,678
5a	Reveg disturbed areas	REVEGE	1	16.00	\$9,677
ба	Hay storage- grade graveled areas	DOZER	2	8.23	\$3,741
7a	Equipment storage- grade graveled areas	DOZER	2	3.08	\$1,403
8a	Initial Mobilization	MOBILIZE	1	2.57	\$3,904
8b	Secondary Mobilization	MOBILIZE	1	2.57	\$729
		SUBTO	TALS:	131.	3 \$57,734
	IDIRECT COSTS VERHEAD AND PROFIT:				
	Liability insurance: 2.02			Total =	\$1,166
	Performance bond: 1.05			_	\$606
	Job superintendent: 65.65			_	\$4,555
	Profit: 10.00			Total =	\$5,773
					\$12,101
	CONT	RACT AMOUNT	(direct +	O & P =	\$69,835
LE	GAL - ENGINEERING - PROJECT MANAGEMENT	:			
	Financial warranty processing (legal/related costs):	\$500		Total =	\$500
	Engineering work and/or contract/bid preparation:	0.00	-	Total =	\$0
	Reclamation management and/or administration:	5.00	=		\$3,492
	CONTINGENCY:	0.00		Total =	\$0
		TOTAL IN	DIRECT	$\Gamma COST = $	\$16,093
	TOTAL BO	ND AMOUNT (di	irect + ir	ndirect) =	\$73,827

DEMOLITION WORK

Task	description:	Demolition of so	cale house				
Site: Wag	gner Rock Pit	Peri	mit Action: 20	19-06	Pe	ermit/Job#: _	M1999018
PROJECT I	DENTIFICATIO	<u>ON</u>					
Date: 6/	1A /19/2019 CY	County: M	olorado offat		Abbreviat Filena		
	Agency or organiz	zation name: DRN	AS .				
UNIT COSTS	<u>1</u>				Location	adjustment:	<u>: 95.50 %</u>
Structure or Descripti	Dimon		nolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale house	8' x 10'	disposa	SN) demo./on-si l in existing pit o ax. 200 ft. push		CF	\$0.18	\$291.20
Job Hours:	: 8.00	Si (unadj	ıbtotal usted):	\$291.20	(adjı	otal Cost usted for ocation):	\$278.10

BULLDOZER WORK

Task description:	Gra	de highwalls to 2H:1V			
: Wagner Rock l	Pit	Permit Action:	2019-06	Permit/Job#:	M1999018
PROJECT IDE	NTIFICATI	ON			
Task #: 02A		State: Colorado		Abbreviation:	None
	/2019	County: Moffat		Filename:	M018-02a
User: ACY	<i>l</i>				
Agency of	or organization	name: DRMS			
HOURLY EQU	IPMENT C	<u>ost</u>			
Basic Machine:	Cat D8T -	8SU			
Horsepower:	310		 ;		
Blade Type:	Semi-Univ	versal			
Attachment:		oper			
Shift Basis:			<u> </u>		
Data Source:	(CRG)				
Cost Breakdown:					
			<u>Utilization %</u>		
Ownership Cost/		\$103.86	NA		
Operating Cost/		\$82.26	100		
Ripper own. Cost/		\$10.43	NA 50	<u></u>	
	Hour:	\$4.19			
Ripper op. Cost/	T T				
Operator Cost/	Hour:	\$41.24	NA		
			NA		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H	sur: \$241 sour: \$483	.98 . 95	NA NA		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL Q Initial Volume: Swell factor:	sur: \$241 sour: \$483 UANTITIES 12,667 1.490	.98 .95	NA NA		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume:	our: \$241 four: \$483 UANTITIES 12,667 1.490 18,874 LCY	.98 .95			
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL Ol Initial Volume: Swell factor: Loose volume: Source of estimate	eur: \$241 sour: \$483 UANTITIES 12,667 1.490 18,874 LCY d volume:	.98 .95 .95 			
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume:	eur: \$241 sour: \$483 UANTITIES 12,667 1.490 18,874 LCY d volume:	.98 .95 .95 			
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate	ur: \$241 our: \$483 UANTITIES 12,667 1.490 18,874 LCY d volume: d swell factor:	.98 .95 .95 			
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL Ol Initial Volume: Swell factor: Loose volume: Source of estimate	ur: \$241 our: \$483 UANTITIES 12,667 1.490 18,874 LCY d volume: d swell factor:	.98 .95 .95 			
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate	ur: \$241 four: \$483 UANTITIES 12,667 1.490 18,874 LCY d volume: d swell factor:	.98 .95 .95 			
Operator Cost/Ho Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate	bur: \$241 four: \$483 UANTITIES 12,667 1.490 18,874 LCY d volume: d swell factor: DUCTION ance:	.98 .95 2 400'L 60'H near vert Cat Handbook			
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista	\$241 \$483 \$48	.98 .95 .95	ical to 2H:1V slope		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grade	\$241 \$483	.98 .95 .95 .95 .95 .96 .97 .98 .99 .90 .90 .90 .90 .90 .90	ical to 2H:1V slope		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consiste	\$241 \$483 \$48	.98 .95 .95	ical to 2H:1V slope		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitu	\$241 \$483 \$48	.98 .95 .95 .95 .96 .97 .98 .995 .90 .90 .90 .90 .90 .90 .9	ical to 2H:1V slope		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitu Material weight: Weight description	\$241 \$483 \$48	.98 .95 .95 .95 .96 .97 .98 .995 .996 .997 .998 .998 .998 .998 .998 .998 .998	deal to 2H:1V slope		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitu Material weight: Weight description Job Condition Cor	\$241 \$483 \$48	.98 .95 .95 .95 .96 .97 .98 .995 .97 .98 .996 .997 .998 .998 .998 .998 .998 .998 .998	deal to 2H:1V slope d or blasted 0.6 Source		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consisted Average push grad Average site altitu Material weight: Weight description Job Condition Cor	\$241 \$483 \$48	.98 .95 .95 .95 .96 .97 .98 .995 .996 .997 .998 .998 .998 .998 .998 .998 .998	dical to 2H:1V slope di or blasted 0.6 Source (AVG.)		
Operator Cost/ Total unit Cost/Ho Total Fleet Cost/H MATERIAL QI Initial Volume: Swell factor: Loose volume: Source of estimate Source of estimate Source of estimate HOURLY PRO Average push dista Unadjusted hourly Materials consister Average push grad Average site altitu Material weight: Weight description Job Condition Cor Op Material	\$241 \$483 \$48	.98 .95 .95 .95 .96 .97 .98 .995 .97 .98 .996 .997 .998 .998 .998 .998 .998 .998 .998	deal to 2H:1V slope d or blasted 0.6 Source		

0.830	(1 SHIFT/DAY)
0.800	(FND-RF)
1.000	(CAT HB)
1.000	(CAT HB)
0.697	(CAT HB)
1.000	(PAT)
	0.800 1.000 1.000 0.697

Net correction: 0.2083

Adjusted unit production: 143.62 LCY/hr
Adjusted fleet production: 287.24 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$1.685/LCY

Total job time: 65.71 Hours
Total job cost: \$31,799

WHEEL LOADER – LOAD AND CARRY WORK

		Transport							
e: Wagner Rock	Pit		Perr	mit Actior	2019-06			Permit/Job#:	M1999018
PROJECT IDE	ENTIFICA	TION							
Task #: 03A	4		State:	Colorad	.0		A	bbreviation:	None
	9/2019		unty:	Moffat				Filename:	M018-03a
User: AC			carrey.	1,101140				1 11011111101	
Agency	or organizat	tion name	: DR	RMS					
HOURLY EQU	JIPMENT	COST							
Basic Mac	hine: CA	Т 972Н					Horsepower	••	287
Attachme		PS Cab					Shift Basis		per day
Attachine	III 1. <u>KO</u>	15 Cao					Data Source		CRG)
							Data Bource		erro)
Cost Breakdown:					1 *****	0/			
01.	. C /II .		0165	= 4	Utilizatio	on %			
	p Cost/Hour g Cost/Hour		\$46.5 \$55.8		NA 100				
	g Cost/Hour or Cost/Hour		\$40.6		NA				
•	it Cost/Hour		\$143.		INA		_		
Total Oil	it Cost/11oui		φ143.	00	_				
Total Fle	et Cost/Hou	r:	\$143	.00	_				
MATERIAL Q	UANTITI	<u>IES</u>							
Initial volun	ne: 3,710	1		001					
				(CCY)	Sw	ell fact	or: 1 125		
Loose volun		4,174		CCY LCY	Swe	ell fact	tor: 1.125		
		4,174	olume:	LCY	Swo		tor: 1.125		
9	ne:	4,174 timated vo		LCY 6" tops			tor: 1.125		
9	Source of esce of estima	4,174 timated vo		LCY 6" tops	soil over 4.6 a		or: 1.125		
Sour	Source of escore of estima	4,174 timated vo	factor:	Cat Ha	soil over 4.6 a	ac		0.525	minutes
Sour HOURLY PRO	Source of estima DDUCTIO ne: U	4,174 timated vo	factor:	Cat Ha	soil over 4.6 a Indbook	ac	neuver):	0.525 etor (min.)	minutes Source
Sour HOURLY PRO Loader Cycle Tin	Source of estima DDUCTIO ne: U	4,174 timated voted swell N Inadjusted Mixed n	factor: Basic naterial	Cycle Tin	soil over 4.6 a indbook ne (load, dum	ac np, mar	neuver): Fac		
Sour HOURLY PRO Loader Cycle Tim Cycle Tim	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile:	timated voted swell N Inadjusted Mixed n Conveyor	Basic haterial or or do	Cycle Tin	soil over 4.6 andbook ne (load, dum	ap, mar	neuver): Fac	etor (min.) 0.020 0.010	Source (Cat HB) (Cat HB)
Sour HOURLY PRO Loader Cycle Tim Cycle Tim Truck O	Source of estima DDUCTIO ne: Une Factors Material: Stockpile: wnership:	4,174 timated voted swell N Unadjusted Mixed n Conveyor Common	Basic naterial or or don	Cycle Tin 0.02 ozer piled cycle Tin	soil over 4.6 a indbook ne (load, dum	ap, mar	neuver): Fac	etor (min.) 0.020 0.010 -0.040	Source (Cat HB) (Cat HB) (Cat HB)
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Dperation:	timated voted swell N Inadjusted Mixed n Conveyor Common Constant	Basic material or or do n owne t operat	Cycle Tin 0.02 ozer piled rship of tr tion -0.04	soil over 4.6 andbook ne (load, dum	ap, mar	neuver): Fac	o.020 0.010 -0.040 -0.040	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O	Source of estima DDUCTIO ne: Une Factors Material: Stockpile: wnership:	4,174 timated voted swell N Unadjusted Mixed n Conveyor Common	Basic material or or do n owne t operat	Cycle Tin 0.02 ozer piled orship of tr tion -0.04 0.00	soil over 4.6 andbook ne (load, dum 10 ft. high or ucks and load	np, mar less 0. ders -0	neuver): Fac 01 .04	o.020 0.010 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Dperation:	timated voted swell N Inadjusted Mixed n Conveyor Common Constant	Basic material or or do n owne t operat	Cycle Tin 0.02 ozer piled orship of tr tion -0.04 0.00 Net C	ne (load, dum 10 ft. high or ucks and load	np, mar less 0. ders -0	neuver): Fac	etor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Dperation:	timated voted swell N Inadjusted Mixed n Conveyor Common Constant	Basic material or or do n owne t operat	Cycle Tin 0.02 ozer piled orship of tr tion -0.04 0.00 Net C	soil over 4.6 andbook ne (load, dum 10 ft. high or ucks and load	np, mar less 0. ders -0	neuver): Fac	o.020 0.010 -0.040 -0.040 0.000	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Dperation: np Target:	4,174 timated voted swell N Inadjusted Mixed n Conveyor Common Constant Nominal	Basic material or or do n owne t operat	Cycle Tin 0.02 ozer piled orship of tr tion -0.04 0.00 Net C	ne (load, dum 10 ft. high or ucks and load	np, mar less 0. ders -0	neuver): Fac	etor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
Sour HOURLY PRO Loader Cycle Tim Cycle Tim Truck O Dum	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Degration: np Target: e - Road Co	timated voted swell N Inadjusted Mixed n Conveyor Common Constan Nominal	Basic naterial or or don owne toperate target	Cycle Tin 0.02 ozer piled rship of tr tion -0.04 0.00 Net C	ne (load, dum 10 ft. high or ucks and load	less 0. ders -0	neuver): Fac	etor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050 0.475	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O Dum Rolling Resistance	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Degration: np Target: e - Road Co	timated voted swell N Inadjusted Mixed n Conveyor Common Constant Nominal	Basic naterial or or don owne toperate target	Cycle Tin 0.02 ozer piled rship of tr tion -0.04 0.00 Net O Adju	ne (load, dum 10 ft. high or ucks and load Cycle Time A asted Basic C	less 0. ders -0	reuver): Fact O1	etor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050 0.475	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O Dum Rolling Resistance	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Degration: np Target: e - Road Co Haul: Return: F	timated voted swell N Inadjusted Mixed n Conveyor Common Constant Nominal	Basic naterial or or don owne toperate target	Cycle Tin 0.02 ozer piled rship of tr tion -0.04 0.00 Net O Adju	ne (load, dum 10 ft. high or ucks and load Cycle Time A asted Basic C	less 0. ders -0	reuver): Fact O1	etor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050 0.475	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O Dun Rolling Resistance	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Dperation: np Target: e - Road Co Haul: Return: Fime	timated voted swell N Inadjusted Mixed n Conveyor Common Constant Nominal Onditions Rutted dirt	Basic naterial or or do n owne t operate target , little i	Cycle Tin 0.02 Discrepiled riship of tr tion -0.04 0.00 Net C Adju	ne (load, dum 10 ft. high or ucks and load Cycle Time A listed Basic C	less 0. djustm ycle Ti 2" tire	neuver): Fac. 01	ctor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050 0.475	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O Dun Rolling Resistance	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Deration: np Target: e - Road Co Haul: F Return: F	timated voted swell N Inadjusted Mixed n Conveyor Common Constan Nominal Onditions Rutted dirt Rutted dirt	Basic naterial or or don owne toperate target	Cycle Tin 0.02 ozer piled rship of tr tion -0.04 0.00 Net C Adju maintenan maintenan	ne (load, dum 10 ft. high or ucks and load Cycle Time A asted Basic C	less 0. djustm ycle Tr	reuver): Factor O1	ctor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050 0.475 5.0 Cravel Time	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes
HOURLY PRO Loader Cycle Tim Cycle Tim Truck O Dun Rolling Resistance	Source of estima DDUCTIO ne: U ne Factors Material: Stockpile: wnership: Deration: np Target: e - Road Co Haul: F Return: F Cime Ler (fe	timated voted swell N Inadjusted Mixed n Conveyor Common Constant Nominal Onditions Rutted dirt	Basic naterial or or do n owne t operate target , little i	Cycle Tim O.02 Ozer piled rship of tr tion -0.04 O.00 Net C Adju maintenan maintenan	ne (load, dum 10 ft. high or ucks and load Cycle Time A listed Basic C	less 0. djustm ycle Ti 2" tire 2" tire	neuver): Fac. 01	ctor (min.) 0.020 0.010 -0.040 -0.040 0.000 -0.050 0.475	Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes

Total Travel Time: 0.7894 minutes
Total Cycle Time: 1.2644 minutes

Load Bucket Capacity

Rated Capacity: _____ 5.60 LCY (heaped)

Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100

Adjusted Capacity: 6.16 LCY

Job Condition Correction Factors

Site Altitude: 6490 feet

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

Unadjusted Hourly Unit Production: 292.32 LCY/Hour Adjusted Hourly Unit Production: 242.62 LCY/Hour Adjusted Hourly Fleet Production: 242.62 LCY/Hour

JOB TIME AND COST

Fleet size:	1	Loader(s)	Total job time:	17.20	Hours
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Unit cost: \$0.589 /LCY Total job cost: \$2,460

BULLDOZER WORK

Task description:	Spread topsoil			
e: Wagner Rock Pit	Permit Action:	2019-06	Permit/Job#:	M1999018
PROJECT IDENTIF	<u>ICATION</u>			
Task #: 03B	State: Colorado		Abbreviation:	None
Date: 6/19/2019	County: Moffat		Filename:	M018-03b
User: ACY			-	
Agency or orga	nization name: DRMS			
HOURLY EQUIPME	ENT COST			
Basic Machine: Ca	t D8T - 8SU			
Horsepower: 310		<u></u>		
	mi-Universal			
Attachment: NA	Λ			
Shift Basis: 1 p	er day			
Data Source: (Cl	RG)			
Cost Breakdown:				
Cost Bitalias III.		Utilization %		
Ownership Cost/Hour:	\$103.86	NA		
Operating Cost/Hour:	\$82.26	100		
Ripper own. Cost/Hour:	\$0.00	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$41.24	NA		
Total unit Cost/Hour:	\$227.26			
Total Fleet Cost/Hour:	\$227.36 \$454.72			
Total Tiect Cost/Hour.	ψτ3τ./2			
MATERIAL QUANT	TITIES			
Initial Volume: 4,17				
Swell factor: 1.00				
Loose volume: 4,17	4 LCY			
Source of estimated volu	me: Transported volume,	6" over 4.6 ac		
Source of estimated swel	l factor: Cat Handbook			
HOURLY PRODUC	<u>TION</u>			
Average push distance:	100 feet			
Unadjusted hourly produ				
Materials consistency des	scription: Loose stockpile 1.	<u> </u>		
Average push gradient:	0 %			
Average site altitude:	6,490 feet			
Material weight:	2,550 lbs/LCY			
-			<u> </u>	
Weight description:	Earth - Dry packed			
Job Condition Correction		Source		
Operator		(AVG.)		
Material consist		(CAT HB)		
Dozing me		(GEN.)		
Visil	bility: 1.000	(AVG.)		

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

Net correction: 0.5390

Adjusted unit production: 459.55 LCY/hr
Adjusted fleet production: 919.1 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.495/LCY

Total job time: 4.54 Hours
Total job cost: \$2,065

BULLDOZER RIPPING WORK

	Task description:	_Rip c	ompacted areas				
Site	: Wagner Rock	Pit	Permit Action:	2019-06	Permit/Jol	b#: <u>M1999</u>	018
	PROJECT IDI	ENTIFICATIO	<u>ON</u>				
	Task #: 04A	A	State: Colorado		Abbreviation	n: None	
		9/2019	County: Moffat		Filename		4a
	User: AC	ĽΥ					
	Agency	or organization	name: DRMS				
	HOURLY EQ	UIPMENT CO	<u>OST</u>				
	Basic 1	Machine: Cat	D8T - 8SU		Horsepower:	310	
	Ripper Att	achment: 3-Sl	nank Ripper		Shift Basis:	1 per day	
					Data Source:	(CRG)	
	Cost Breakdown:						
				****	Utilization %		
		Ownership Co		\$103.86	NA 100		
	Rinne	Operating Co er Ownership Co		\$82.26 \$10.43	100 NA		
		per Operating Co		\$8.38	100		
	тарь	Operator Co		\$41.24	NA		
		Total Unit Co		\$246.17			
		Total Fleet Co	st/Hour: \$492	2.33			
	MATERIAL Q	HANTITIES	Solo	ected estimating	g method: Area		
	Alternate Method		Seic	cted estimating	method. Area		
Caiamia			Bank Volume:	NI A	BCY	NT A	
Seismic: Area:	NA 3.98	acres	Rip Depth (ft):	NA 2.00	Volume: 12,842	NA	BCY or CCY
		Source of estin	nated quantity: Rec Pla	an			-
	HOURLY PRO						
	-	<u> </u>					
	Seismic:	S	Seismic Velocity:	NA	feet/second		
				1111			
	Area:	Avaroa	e Ripping Depth:	2.56	feet/pass		
			e Ripping Depth. E Ripping Width:	7.08	feet/pass		
			Ripping Length:	100.00	feet/pass		
		U	ige Dozer Speed:	88.00	feet/minute		
			Maneuver Time:	0.25	minutes/pass		
		Product	ion per unit area:	0.703	acres/hour		
	Job Condition Co	rrection Factors					
	Un	adjusted Hourly	Unit Production:	0.703	Acres/hr		
			Site Altitude:	6,490	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day)		
			Net Correction:	0.83	multiplier		
		Adjusted 1	Hourly Unit Production:	0.58	Acres/hr		
			Hourly Fleet Production:	1.17	Acres/hr		
	JOB TIME AN	ND COST					
	Fleet size:	2	Grader(s)	Total job tim	ne: 3.41	Н	ours
	Unit cost:	\$421.636	Per acre	Total job cos	st: \$1,678		

REVEGETATION WORK

Task description:	Reveg disturbed areas				
Site: Wagner Rock Pit	Permit Action: _	2019-06	Permit/Job#:	M1999018	
PROJECT IDENTIFICA	TION				

Task #:05AState:ColoradoAbbreviation:NoneDate:6/19/2019County:MoffatFilename:M018-05a

User: ACY

Agency or organization name: DRMS

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
10-34-0, 18-46-0, 5-10-5	200.00	pound	\$0.34	\$68.00
			Total Fertilizer Materials	
			Cost/Acre	\$68.00

Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$36.15
	Total Fertilizer Application Cost/Acre	\$36.15

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$101.93
Total Tilling Cost/Acre	\$101.93

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Nespar	0.19	0.62	\$1.69
Prairie Clover, Purple - Kaneb	0.06	0.41	\$3.39
Sandberg Bluegrass - VNS	0.20	4.25	\$1.68
Lupine, Silver	0.56	0.33	\$39.19
Thickspike Wheatgrass - Critana	0.57	2.02	\$3.92
Muttongrass	0.03	0.62	\$1.03
Western Wheatgrass - Arriba	2.40	6.06	\$15.60
Rabbitbrush, Rubber	0.03	0.45	\$1.93
Sweetvetch, Utah or Northern	0.22	0.10	\$16.50
Needle and Thread	0.27	0.71	\$11.30
Sagebrush, Mountain or Big	0.10	5.28	\$1.98

Prairie Junegrass	0.04	2.13	\$1.04
Flax, Lewis Blue	0.06	0.40	\$0.99
Serviceberry, Utah	0.02	0.04	\$1.35
Penstemon, Palmer	0.03	0.66	\$1.64
Totals Seed Mix	4.78	24.06	\$103.21

Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$232.00
	Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

141011415				
Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - 2,4D @ 1.0 pt/ac	1.00	ACRE	\$2.74	\$2.74
Herbicide - Escort @ 1.0 pt/ac	1.00	ACRE	\$179.00	\$179.00
Herbicide - Plateau @ 1.0 pt/ac	1.00	ACRE	\$10.11	\$10.11
Herbicide - Tordon 22K @ 1.0 pt/ac	1.00	ACRE	\$12.15	\$12.15
Herbicide - Transline @ 1.0 pt/ac	2.00	ACRE	\$9.34	\$18.68
Total Mulch Materials Cost/Acre				\$222.68

Application

Description		Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]		\$71.50
	Total Mulch Application Cost/Acre	\$71.50

NURSERY STOCK PLANTING

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

JOB TIME AND COST

 No. of Acres:
 8.58
 Cost /Acre:
 \$835.47

 Estimated Failure Rate:
 35%
 Cost /Acre*:
 \$835.47

*Selected Replanting Work Items: FERTILIZING,TILLING,SEEDING,MU

LCHING

Initial Job Cost: \$7,168.33

Reseeding Job Cost: \$2,508.92

Total Job Cost: Job Hours: 16.00

BULLDOZER WORK

Wagner Rock Pi	t	Pern	nit Action:	2019-06	Permit/Job#:	M1999018
PROJECT IDEN	TIFICATIO	ON				
Task #: 06A		State:	Colorado		Abbreviation:	None
Date: 6/19/2	019	County:	Moffat		Filename:	M018-06a
User: ACY		• -			-	
Agency or	organization	name: DR	MS			
HOURLY EQUI						
Basic Machine:	Cat D8T - 8					
Horsepower:	310			<u> </u>		
Blade Type:	Semi-Unive	ersal				
Attachment:	NA			_		
Shift Basis:	1 per day					
Data Source:	(CRG)					
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/He	our:		\$103.86	NA		
Operating Cost/He	our:		\$82.26	100		
Ripper own. Cost/He			\$0.00	NA		
Ripper op. Cost/H			\$0.00	0		
Operator Cost/He	our:		\$41.24	NA		
Total unit Cost/Hou Total Fleet Cost/Hou	\$227.3 ur: \$454.7					
Total unit Cost/Hour	\$227.3 ur: \$454.7		_			
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL QU. Initial Volume:	r: \$227 ur: \$454.' ANTITIES 4,302					
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL QU. Initial Volume: Swell factor:	\$227 \$454. ANTITIES 4,302 1.245 5,356 LCY volume:		depth			
Total unit Cost/Hour Total Fleet Cost/Hour MATERIAL QU. Initial Volume: Swell factor: Loose volume: Source of estimated	\$227 \$454. ANTITIES 4,302 1.245 5,356 LCY volume: swell factor:	8 ac @ 4"	depth			
Total unit Cost/Hour Total Fleet Cost/Hour Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD	### \$227 #################################	8 ac @ 4" Cat Handb	depth			
Total unit Cost/Hour Total Fleet Cost/Hour Total Unit Cost Fleet Fleet Cost Fleet Fleet Cost Fleet Fleet Cost Fleet Fle	### \$227 #################################	8 ac @ 4"	depth			
Total unit Cost/Hour Total Fleet Cost/Hour End Total Fleet	### \$227 #################################	8 ac @ 4" Cat Handb 100 feet 852.6 LCY/b	depth boook	stockpile 1.1		
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distan Unadjusted hourly p	### \$227 #################################	8 ac @ 4" Cat Handt 100 feet 852.6 LCY/t	depth boook	stockpile 1.1		
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly push Materials consistence Average push gradients	\$227 \$454.7 \$454.7 \$4,302 1.245 5,356 LCY volume: swell factor: PUCTION ce: production: sy description ent: 6,490	8 ac @ 4" Cat Handt 100 feet 852.6 LCY/t	depth boook	stockpile 1.1		
Total unit Cost/Hour Total Fleet Cost/Hour Swell factor: Loose volume: Source of estimated Source of estimated Flour PROD Average push distant Unadjusted hourly publication Materials consistence Average push gradie Average site altitude	\$227 \$454.7 \$454.7 \$4,302 1.245 5,356 LCY volume: swell factor: PUCTION ce: production: sy description ent: 6,490	8 ac @ 4" Cat Handb 100 feet 852.6 LCY/b Partly colored feet lbs/LCY	depth boook	stockpile 1.1		
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Corre	### \$227 #################################		depth book hr	Source		
Total unit Cost/Hour Total Fleet Cost/Hour Initial Volume: Swell factor: Loose volume: Source of estimated Source of estimated HOURLY PROD Average push distant Unadjusted hourly p Materials consistence Average push gradie Average site altitude Material weight: Weight description: Job Condition Correct Open	### \$227 #################################		depth book onsolidated	Source (AVG.)		
Total unit Cost/Hour Total Fleet Cost/Hour Part Fleet Cost Fleet Fle	### \$227 #################################	8 ac @ 4" Cat Handb 100 feet 852.6 LCY/b : Partly co feet lbs/LCY 1.1	depth book hr	Source		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3818

Adjusted unit production: 325.52 LCY/hr
Adjusted fleet production: 651.04 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.698/LCY

Total job time:
Total job cost:

8.23 Hours
\$3,741

BULLDOZER WORK

Task description:	Equipme	ent storage- grade g	raveled areas		
Wagner Rock Pi	<u>t</u>	Permit Action:	2019-06	Permit/Job#:	M1999018
PROJECT IDEN	TIFICATION				
Task #: 07A	_	State: Colorado		Abbreviation:	None
Date: $\frac{6/19}{2}$	019	County: Moffat		Filename:	M018-07a
User: ACY					
		e: DRMS			
Agency or	organization nam	e. DRMS			
HOURLY EQUI	PMENT COST				
Basic Machine:	Cat D8T - 8SU				
Horsepower:	310				
Blade Type:	Semi-Universal		<u> </u>		
Attachment:	NA				
Shift Basis:	1 per day				
Data Source:	(CRG)				
Cost Breakdown:			ı		
0 11 0 77		#102.0 5	<u>Utilization %</u>		
Ownership Cost/He		\$103.86	NA 100		
Operating Cost/He		\$82.26	100 NA		
Ripper own. Cost/He Ripper op. Cost/He		\$0.00	NA 0		
** *		\$0.00			
Operator Cost/He	our:	\$41.24	NA		
MATERIAL QU. Initial Volume: Swell factor:	1,613 1.245				
Loose volume:	2,008 LCY				
Source of estimated Source of estimated		ac @ 4" depth Cat Handbook			
HOURLY PROD	UCTION				
Average push distan	ce: 100) feet			
Unadjusted hourly p		2.6 LCY/hr			
Materials consistence	y description:	Partly consolidated	stockpile 1.1		
Average push gradie Average site altitude					
Material weight:	3,300 lbs/	LCY			
Weight description:	Basalt				
Job Condition Corre		0.750	Source		
	ator Skill:	0.750	(AVG.)		
Material co		1.100	(CAT HB)		
	g method:	1.000	(GEN.)		
	Visibility:	1.000	(AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3818

Adjusted unit production: 325.52 LCY/hr
Adjusted fleet production: 651.04 LCY/hr

JOB TIME AND COST

Fleet size: 2 Dozer(s)
Unit cost: \$0.698/LCY

Total job time: 3.08 Hours
Total job cost: \$1,403

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: <u>Ini</u>	tial Mobilization	l			
e: Wagner Rock Pit	Permi	t Action:2019-	06	Permit/Job	#: <u>M1999018</u>
PROJECT IDENTIFICAT	<u>ION</u>				
Task #: 08A	State: C	Colorado	Ab	breviation:	None
Date: 6/19/2019 User: ACY	County: N	loffat		Filename:	M018-08a
Agency or organizatio	n name: DRMS	S			
EQUIPMENT TRANSPOR	T RIG COST				
			Shift	basis: 1	per day
			Cost Data S	ource: C	RG Data
Truck Tractor Desc	cription: GENI	ERIC ON-HIGHV	WAY TRUCK TRAC 400 HP (2ND HAL	, ,	DIESEL POWERED,
Truck Trailer Desc	cription:	GENERIC FOLD	ING GOOSENECK,	, ,	K EQUIPMENT
	1		TRAILER (25T, 50T,		
Cost Breakdown:					
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons		
Ownership Cost/Hour:	\$17.20	\$29.63	\$38.69		
Operating Cost/Hour:	\$26.56	\$47.02	\$55.69		
Operator Cost/Hour:	\$23.63	\$23.63	\$23.63		
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53		

NON ROADABLE EQUIPMENT:

Total Unit Cost/Hour:

\$67.39

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 D8T - 8SU	53.08	\$114.29	\$141.54	2	\$511.66	\$283.08	\$500.00
CAT 972H	28.00	\$46.54	\$123.81	1	\$170.35	\$123.81	\$250.00
Drill/Broadcast	25.00	\$18.15	\$67.39	1	\$85.54	\$67.39	\$250.00
Seeder with							
Tractor							

\$123.81

\$141.54

\$767.55 \$474.28 \$1,000.00 Subtotals:

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.	\$48.58	1	\$48.58	\$48.58
Crew				

Subtotals:	\$48.58	\$48.58
Subjoiais:	340.20	∌ 40.⊃0

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

CRAIG, CO
miles
5.00
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job time:	2.57	Hours
Total job cost:	\$3.904	

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Secondary Mobil	ization		
ite: Wagner Rock Pit	Peri	mit Action: 2019-0	6 Permit/Jo	b#: M1999018
PROJECT IDENTIFICA	ATION			
Task #: 08B Date: 6/19/2019 User: ACY	State: County:	Colorado Moffat	Abbreviation: Filename:	None M018-08b
Agency or organiz	ation name: DR	MS		
EQUIPMENT TRANSP	ORT RIG COST	<u>r</u>		
				1 per day CRG Data
Truck Tractor I	Description: GE	NERIC ON-HIGHW	AY TRUCK TRACTOR, 6X4, 400 HP (2ND HALF, 2006)	DIESEL POWERED,
Truck Trailer I	Description:		NG GOOSENECK, DROP DEC RAILER (25T, 50T, AND 100T)	~
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	
Ownership Cost/Hou	ır: \$17.20	\$29.63	\$38.69	
Operating Cost/Hou	ır: \$26.56	\$47.02	\$55.69	
Operator Cost/Hou	ır: \$23.63	\$23.63	\$23.63	
Helper Cost/Hor	ır: \$0.00	\$23.53	\$23.53	

NON ROADABLE EQUIPMENT:

Total Unit Cost/Hour:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/uni t	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Drill/Broadcast Seeder with Tractor	25.00	\$18.15	\$67.39	1	\$85.54	\$67.39	\$250.00

\$141.54

\$123.81

\$67.39

Subtotals: \$85.54 \$67.39 \$250.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$48.58	1	\$48.58	\$48.58

Subtotals: \$48.58 \$48.58

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:

Total one-way travel distance:

Average Travel Speed:

CRAIG, CO
miles
5.00
mph

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	0.14	0.14
Return Time (Hours):	0.14	0.14
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.29	0.29

JOB TIME AND COST

Total job cost: 2.57 Hours

Total job cost: \$729

Wagner Rock Pit M-1999-018

Task: 2016-06 -Post inspection 6-12-19 update

Updates from CN-1 calculation Changes

Elevation: 6,490 ft.

CIRCES program was last updated on 7/1/2019

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