COST SUMMARY WORK

Farm Ro	ad Source	Pe	rmit Action:	New permit	Permit/Jo	b#: M2019033
ROJECT	IDENTIFICA	<u>CION</u>				
Task #:	001	State:	Colorado		Abbreviation:	None
Date:	8/28/2019	County:	Montrose		Filename:	M033-001
User:	SJM				.	

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
	Description	Used	Size	Hours	Cost
002	knockdown highwall	DOZER	1	5.13	\$1,282
003	final grading3:1	GRADER	1	5.42	\$1,029
004	grading pit floor side slopes	GRADER	1	5.42	\$1,029
005	rip pit floor	RIPPER	1	8.41	\$2,103
006	mob-demob	MOBILIZE	1	0.68	\$2,373
007	remove stockpiles	LOADER	1	28.19	\$2,871
008	material haul off site	MISCTRUK	1	40.00	\$3,494
		93.25	\$14,181		

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	0.00	Total =	\$0
Performance bond:	1.05	Total =	\$149
Job superintendent:	0.00	Total =	\$0
Profit:	10.00	Total =	\$1,418
		TOTAL O & P =	\$1,567
		CONTRACT AMOUNT (direct + $O \& P$) =	\$15,748

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	10.00	Total =	\$1,575
Reclamation management and/or administration:	7.10		\$1,118
CONTINGENCY:	3.00	Total =	\$425
	TOTAL IN	DIRECT COST =	\$5,185
TOTAL BO	ND AMOUNT (di	rect + indirect) =	\$19,366

COST SUMMARY WORK

Farm Ro	ad Source	Permit Action:	New permit	Permit/Job#:	M2019033
<u>ROJECT</u>	IDENTIFICA	ATION			
Task #:	001 8/28/2019	State: <u>Colorado</u> County: Montrose		Abbreviation:	None
Date:				Filename:	M033-001

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
002	knockdown highwall	DOZER	1	5.13	\$1,282
003	final grading3:1	GRADER	1	5.42	\$1,029
004	grading pit floor side slopes	GRADER	1	5.42	\$1,029
005	rip pit floor	RIPPER	1	8.41	\$2,103
006	mob-demob	MOBILIZE	1	0.68	\$2,373
007	remove stockpiles	LOADER	1	28.19	\$2,871
008	material haul off site	MISCTRUK	1	40.00	\$3,494
	\$14,181				

BULLDOZER WORK

Task description:	Knockdown highwall				
Farm Road Source	Permit A	ction:	New permit	Permit/Job#:	M2019033
PROJECT IDENTI	FICATION				
Task #: 002	State: Co	lorado		Abbreviation:	None
Date: 8/28/2019	County: Mc	ontrose		Filename:	M033-002
User: SJM				-	
A genery or ore	anization name: DRMS				
HOURLY EQUIPM	ENT COST				
Basic Machine: C	at D8T - 8SU				
Horsepower: 3	10				
Blade Type: S	emi-Universal				
	shank ripper				
	per day				
Data Source: (0	CRG)				
Cost Breakdown:					
		1	Utilization %		
Ownership Cost/Hour		03.86	NA		
Operating Cost/Hour		82.26	100		
Ripper own. Cost/Hour		13.90	NA		
Ripper op. Cost/Hour		\$8.74	100		
Operator Cost/Hour	: \$	41.24	NA		
Total unit Cont/IIaum	\$240.00				
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$249.99 \$249.99				
Total Fleet Cost/Hour: MATERIAL QUAN	\$249.99				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume:2,0	\$249.99 TITIES				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0	\$249.99 TITIES 100				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0	\$249.99 TITIES 000 000 000 LCY	clamati	on Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0	\$249.99 TITIES 100 100 100 100 LCY ume: Division of Re		on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol	\$249.99 TITIES 000 000 000 LCY ume: Division of Re		on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 1.0 2.0 Source of estimated vol Source of estimated swe	\$249.99 TITIES 000 000 000 LCY ume: Division of Re ell factor: Cat Handbook		on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol 2,0 Source of estimated vol 2,0 Mource of estimated vol 2,0 Source of estimated vol 2,0 Mource of estimated vol 2,0 Mource of estimated vol 2,0 Source of estimated vol 2,0 MOURLY PRODUCE 2,0	\$249.99 TITIES 000 000 000 LCY ume: Division of Re ell factor: Cat Handbook CTION		on, Mining & Safety		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 1.0 2,0 Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance:	\$249.99 TITIES 000 000 LCY ume: Division of Re ell factor: Cat Handbook CTION 60 feet		on, Mining & Safety		2
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol 2,0 Source of estimated vol 2,0 Mource of estimated vol 2,0 Source of estimated vol 2,0 Mource of estimated vol 2,0 Mource of estimated vol 2,0 Source of estimated vol 2,0 MOURLY PRODUCE 2,0	\$249.99 TITIES 000 000 LCY ume: Division of Re ell factor: Cat Handbook CTION 60 feet		on, Mining & Safety		12
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 1.0 2,0 Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance:	\$249.99 TITIES 000 000 000 LCY ume: Division of Re cll factor: Cat Handbook CTION auction: 60 feet 1,246.9 LCY/hr		on, Mining & Safety		Ξ.
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol 2,0 Source of estimated vol 2,0 Source of estimated swo 2,0 HOURLY PRODUC 2,0 Average push distance: 0 Unadjusted hourly prod Materials consistency d	\$249.99 TITIES 000 000 000 LCY ume: ell factor: Cat Handbook CTION 60 feet uction: 1,246.9 LCY/hr escription: Compacted				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol 2,0 Source of estimated vol 2,0 Source of estimated vol 2,0 MATERIAL QUAN 2,0 Source of estimated vol 2,0 Source of estimated swo 2,0 HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: 2,0	\$249.99 TITIES 000 000 000 LCY ume: Division of Re ell factor: Cat Handbook CTION 60 feet uction: 1,246.9 LCY/hr escription: Compacted 10 %				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d	\$249.99 TITIES 000 000 000 LCY ume: ell factor: Cat Handbook CTION 60 feet uction: 1,246.9 LCY/hr escription: Compacted				Ξ.
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol 2,0 Source of estimated vol 2,0 Source of estimated vol 2,0 MATERIAL QUAN 2,0 Source of estimated vol 2,0 Source of estimated swo 2,0 HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: 2,0	\$249.99 TITIES 000 000 000 LCY ume: Division of Re ell factor: Cat Handbook CTION 60 feet uction: 1,246.9 LCY/hr escription: Compacted 10 %				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude:	\$249.99 TITIES 000 000 000 LCY ume: Division of Re cat Handbook CTION 60 feet uction: 1,246.9 LCY/hr escription: Compacted is 10 % 5,000 feet	fill or er			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude: Material weight:	\$249.99 TITIES 000 000 000 LCY ume: Division of Re cat Handbook CTION 60 feet uction: 1,246.9 LCY/hr escription: Compacted = 10 % 5,000 feet 2,850 lbs/LCY Gravel - Dry (1/4""-2"	fill or er			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operato	\$249.99 TITIES 000 000 000 LCY ume: Division of Re cat Handbook CTION action: 60 feet 1,246.9 LCY/hr escription: Compacted 10 % 5,000 feet 2,850 lbs/LCY Gravel - Dry (1/4""-2"" on Factor 0.750	fill or er	nbankment 0.9		X
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Material consi	\$249.99 TITIES 000 000 000 LCY ume: Division of Re cat Handbook CTION 60 feet uction: 60 feet 1,246.9 LCY/hr escription: Compacted 10 %	fill or er	nbankment 0.9 Source (AVG.) (CAT HB))		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 2,0 Swell factor: 1.0 Loose volume: 2,0 Source of estimated vol Source of estimated vol Source of estimated swo HOURLY PRODUC Average push distance: Unadjusted hourly prod Materials consistency d Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Material consi Dozing m	\$249.99 TITIES 000 000 000 LCY ume: Division of Re cat Handbook CTION 60 feet uction: 60 feet 1,246.9 LCY/hr escription: Compacted 10 %	fill or er	nbankment 0.9 Source (AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.807	(CAT HB)
Blade type:	1.000	(PAT)

Adjusted unit production:	389.91 LCY/hr	
Adjusted fleet production:	389.91 LCY/hr	

JOB TIME AND COST

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.641/LCY	
Total job time:	5.13 Hours	

Total Job time.	S.I.S HOUIS	
Total job cost:	\$1,282	

MOTOR GRADER WORK

Task description:	Final grading3:1			
Site: Farm Road Source	Permit Action:	New permit	Permit/Job#	: M2019033
PROJECT IDENTIE	FICATION			
Task #: 003 Date: 8/28/2019 User: SJM	State: Colorado County: Montrose		Abbreviation: Filename:	None M033-003
Agency or orga	anization name: DRMS			
HOURLY EQUIPM	ENT COST			
Basic Machin Ripper Attachmer				297 per day CRG)
Cost Breakdown:		ł		
Ope	ership Cost/Hour: rating Cost/Hour: ership Cost/Hour:	\$82.71 \$70.09 \$4.44	Utilization % NA 100 NA	
	rating Cost/Hour:	\$3.92	100	
-	erator Cost/Hour:	\$28.52	NA	
Tota	l Unit Cost/Hour:	\$189.67		
Total	Fleet Cost/Hour: \$189	9.67		
MATERIAL QUAN	TITIES			
	to be graded or ripped: 9.98			
	ce of estimated acreage: Rec pla	ın		acres
HOURLY PRODUC				
<u>moondri i kobee</u>	Average Grader Speed:	1.50	mnh	
	Selected Application:		mph grading (0-2.5 mph) - 1.5	
	Selected Blade Angle:	30	degrees	
	Effective Blade Length:	13.90	feet	
	of blade overlap per pass:	2.00	feet	
	or ripping width per pass: d Hourly Unit Production:	11.90	feet	
Job Condition Correction	•	2.1636 Sit	acres/hour te Altitude: 5000 feet	
	Source			
Altitude Adj:	1.00 (CAT HE	3)		
Job Efficiency:	0.85 (2sh/d, fav	7.)		
Net Correction:	0.8500 multiplier			
	Adjusted Hourly Unit Production: Adjusted Hourly Fleet Production:	1.8391 1.8391	acres/Hour acres/Hour	
JOB TIME AND CO	ST			
	1 Grader(s)	Total job time	5.43	Hours
Unit cost: \$10	3.13 per acre	Total job cost	: \$1,029	

MOTOR GRADER WORK

Task description:	Grading pit flo	or side slopes				
Farm Road Source	P	ermit Action:	New permit]	Permit/Job#:	M2019033
PROJECT IDENT	FICATION					
Task #: 004	State	: Colorado		Δh	breviation:	None
Date: $\frac{8/28}{201}$		and an and a second sec			Filename:	M033-004
User: SJM					i nename.	11055-004
·	ganization name: I	ORMS				
HOURLY EQUIPN						
Basic Mach				Llongen ettient		297
Ripper Attachm		linner		Horsepower: Shift Basis:		ber day
Ripper Attacian		Cipper		Data Source:	and the second se	CRG)
				Data Source.	(
Cost Breakdown:			1	Litilization 0/		
<u>Our</u>	mership Cost/Hour:		\$82.71	Utilization % NA		
	berating Cost/Hour:		\$82.71	100	_	
	nership Cost/Hour:		\$70.09	NA	_	
	berating Cost/Hour:		\$3.92	100	_	
	perator Cost/Hour:		\$28.52	NA	_	
То	tal Unit Cost/Hour:		\$189.67		_	
	1.51					
10	al Fleet Cost/Hour:	\$189	9.0/			
HOURLY PRODU	rce of estimated acre	age: <u>Rec pla</u>				
	Average Grader		1.50	mph		
	Selected Appli			grading (0-2.5 n		
	Selected Blade		30	degree	S	
Wa	Effective Blade L	<u> </u>	13.90	feet		
	h of blade overlap pe g or ripping width pe		2.00	feet feet		
	ted Hourly Unit Prod		2.1636	leet acres/h	our	
Job Condition Correcti		,		ite Altitude: 500		
		Source				
Altitude Adj:	1.00	(CAT HE	3)			
Job Efficiency:	0.85	(2sh/d, fay				
Net Correction:	0.8500	multiplier				
	Adjusted Hourly Un	it Production	1.8391	acres/Hou	r	
	Adjusted Hourly Fle		1.8391	acres/Hou		
JOB TIME AND C					-	
		、 、		_		
Fleet size:	1 Grader(S)	Total job time	e:5.4	13	Hours
Unit cost:\$	103.13 per acre		Total job cos	it:\$1,0	129	

BULLDOZER RIPPING WORK

	Task description:	Rip pit floor				
Site	: Farm Road Source	Permit Act	ion: New permit	Permit/J	ob#: M2019033	
	PROJECT IDENTIFIC	CATION				
	Task #: 005	State: Colo	rado	Abbreviatio	on: None	
	Date: 8/28/2019	County: Mon	trose	Filenan		
	User: SJM					
	Agency or organi	zation name: DRMS				-:
	HOURLY EQUIPMEN	NT COST				
	Basic Machine:	Cat D8T - 8SU		Horsepower:	310	
	Ripper Attachment:	1-Shank Ripper		Shift Basis:	1 per day	-
				Data Source:	(CRG)	-
	Cost Breakdown:					
				Utilization %		
		hip Cost/Hour:	\$103.86	NA		
		ting Cost/Hour:	\$82.26 \$13.90	100		
		ting Cost/Hour:	\$13.90	<u>NA</u> 100		
		ator Cost/Hour:	\$41.24	NA		
	-	Jnit Cost/Hour:	\$249.99			
	T-4-1 F	1	CR 40.00			
		leet Cost/Hour:	\$249.99			
	MATERIAL QUANTI	<u>TIES</u>	Selected estimating	method: Seismic		
	Alternate Methods:					
Seismic:	12,000 BC	Y Bank Volu	me: 12,000	BCY	Midrange	
Area:	NA acre	s Rip Depth (ft): NA	Volume: NA	BC	CY or CCY
	Source of	of estimated quantity: R	ec plan			
	HOURLY PRODUCT	ION				-
	Seismic:	Seismic Velocity:	1	feet/second		
			L	1000 3000110		
	Area:	Versee Dinning Douth	NIA	for a to be a set		
		Average Ripping Depth:	NA NA	feet/pass feet/pass		
		verage Ripping Length:	NA	feet/pass		
		Average Dozer Speed:	NA	feet/minute		
		verage Maneuver Time:	NA	minutes/pass		
	P	roduction per unit area: _	NA	acres/hour		
	Job Condition Correction F	<u>actors</u>				
	Unadjusted H	Hourly Unit Production:	1,718.40	Cu. yds./hr		
		Site Altitude:	5,000	feet		
		Altitude Adj:	1.00	(CAT HB)		
		Job Efficiency:	0.83	(1 shift/day)		
		Net Correction:	0.83	multiplier		
	Ad	justed Hourly Unit Produc	tion: 1,426.27	Cu. yds./hr		
	Adj	usted Hourly Fleet Produc		Cu. yds./hr		
	JOB TIME AND COST	<u>r</u>				
	Fleet size:1	Grader(s)	Total job tim	e: 8.41	Hours	
	Unit cost:\$0.17	5 Per cu. yd.	Total job cos	st:\$2,103		

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task descrip	otion: Mo	b-demob						
e: Farm Ro	ad Source	Permit	Action	New	permit	P	ermit/Job#:M	2019033
PROJECT	IDENTIFICATI	ON						
Task #: Date: User:	006 8/28/2019 SJM	State: C	olorado Iontrose				viation: <u>None</u> ename: <u>M033</u>	-006
Age	ency or organization	n name: DRMS	5					
EQUIPME	NT TRANSPOR	T RIG COST						
	Truck Tractor Desc	ription: GENE	ERIC ON	1-HIGH	WAY TRU		ce: <u>CRG Da</u> R, 6X4, DIESEL	ta
	Truck Trailer Desc	ription: C	ENERI		ING GOC	(2ND HALF, 2 SENECK, DR (25T, 50T, AN	OP DECK EQU	IPMENT
Cost Breakdo	wn:							
	Rig Capacities	0-25 Tons		0 Tons	51+	- Tons		
	ership Cost/Hour:	\$17.20	\$2	29.63	\$3	38.69		
	rating Cost/Hour:	\$26.56		7.02	the second se	55.69		
	erator Cost/Hour:	\$23.63		23.63		23.63		
	lelper Cost/Hour:	\$0.00		23.53		23.53		
Total	Unit Cost/Hour:	\$67.39	\$1	23.81	\$1	41.54		
NON ROAL	DABLE EQUIPN	AENT:						
Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Cost/ t	Rig hr/uni	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
CAT 16M	28.73	\$87.15	\$123.	81	1	\$210.96	\$123.81	\$250.00
Cat D8T - 8S		\$114.29	\$141.		1	\$255.83	\$141.54	\$250.00
CAT 950H	20.13	\$27.37	\$67.3		1	\$94.76	\$67.39	\$250.00
Cat 730	25.19	\$58.61	\$67.3	9	1	\$126.00	\$67.39	\$250.00
					Subtotals:	\$687.55	\$400.13	\$1,000.00
σωνασι	E EQUIPMENT	•.						
Machine De		Total Cost/hr/	1	Fleet Siz	A	Haul Trip	Return Trip	
		unit				Cost/hr/ fleet	Cost/hr/ fleet	

Subtotals:

\$0.00

\$0.00

EQUIPMENT HAUL DISTANCE and Time

MONTROSE	
6.00	miles
35.00	mph
\$2,372.92	
\$0.00	
	6.00 35.00 \$2,372.92

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.17	0.17
Return Time (Hours):	0.17	0.17
Loading Time (Hours):	0.00	NA
Unloading Time (Hours):	0.00	NA
Subtotals:	0.34	0.34

JOB TIME AND COST

Total job time:	0.69	Hours
Total job cost:	\$2,373	

CIRCES Cost Estimating Software

WHEEL LOADER - LOAD AND CARRY WORK

Task description:	Remove stockpi	les				
e: Farm Road Source	ad Source Permit Action: New permit Permit/Job#: M201903		M2019033			
PROJECT IDENTIF	ICATION					
Task #: 007 Date: 8/28/2019 User: SJM	State: County:	Colorado Montrose			Abbreviation: Filename:	None M033-007
Agency or orga	nization name: D	RMS				
HOURLY EQUIPM	ENT COST					
Basic Machine: Attachment 1:	CAT 950H ROPS Cab			Horsepov Shift Ba Data Sou	isis: 1 p	197 Der day CRG)
Cost Breakdown:		1	Utilization %			
Ownership Cost/	Hour: \$27.	37	NA			
Operating Cost/			100			
Operator Cost/			NA			
Total Unit Cost/	Hour: \$101	.84				
Total Fleet Cost	/Hour: \$10	1.84				
MATERIAL QUANT	<u>FITIES</u>					
Initial volume: Loose volume:	10,000 10,000	CCY LCY	Swell fact	tor: <u>1.00</u>	00	
	of estimated volume stimated swell factor		of Reclamation, 1 lbook	Mining &	Safety	
HOURLY PRODUC	<u>TION</u>					
Loader Cycle Time:	Unadjusted Basic	Cycle Time	(load, dump, mar	neuver): _	0.500	minutes
Cycle Time Factor					Factor (min.)	Source
Materi	ial: Material 1/8"		eter -0.02		-0.020	(Cat HB)
Stockpi					0.020	(Cat HB)
Truck Ownersh			s 0.04		0.040	(Cat HB)
Operatio					-0.040	(Cat HB)
Dump Targ	et: Nominal targe				0.000	(Cat HB)
			cle Time Adjustn		0.000	minutes
		Adjust	ed Basic Cycle T	ime:	0.500	minutes

Rolling Resistance – Road Conditions

Haul:Very hard, smooth, asphalt or concrete, no tire penetration 1.2Return:Very hard, smooth, asphalt or concrete, no tire penetration 1.2

Haul and Return Time

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	20	0.00	1.20	1.20	0.0144	(Cat HB)
Return Route:	20	0.00	1.20	1.20	0.0139	(Cat HB)

		Total Travel Time:0.0282minutesTotal Cycle Time:0.5282minutes
Load Bucket Capacity		
Rated Capacity:	4.30	LCY (heaped)
Bucket Fill Factor:	0.875	Loose material - 1/2" to 3/4" (85 - 90%) 0.875
Adjusted Capacity:	3.76	LCY
Job Condition Correction Fr Site Altitude: <u>5000</u> feet	actors	
		Source
Altitude Adj:	1.00	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.83	multiplier
Unadj	usted Hourly Unit	Production: 427.37 LCY/Hour

Jnadjusted Hourry Onit Production:	427.37	LC Y/Hour
Adjusted Hourly Unit Production:	354.72	LCY/Hour
Adjusted Hourly Fleet Production:	354.72	LCY/Hour

JOB TIME AND COST

Fleet size:	1	Loader(s)	Total job time:	28.19	Hours
Unit cost:	\$0.287	/LCY	Total job cost:	\$2,871	

MISCELLANEOUS TRUCK WORK

PROJECT IDENTIFICAT	CION			
Task #: 008	State: Colorado		Abbreviation:	None
Date: 8/28/2019 User: SJM	County: Montrose		Filename:	M033-008
Agency or organization	on name: DRMS			
HOURLY EQUIPMENT	COST			
	ck Tractor, 6x4, 50K GVW	1	Horsepow	ver: 310
Attachment 1:			Shift Bas	
Attachment 2: Labor Unit 1: Flatbed Driver - 2+ rear axles			Weig	tht: 9.50 (US Tons
Labor Unit 2:	ood Diivoi 27 iodi dixios		?:	(05 1005
Ownership Cost/Hour: Operating Cost/Hour: Operator Cost/Hour: Total Unit Cost/Hour: Total Fleet Cost/Hour:	\$19.45 \$39.66 \$28.26 \$87.36 \$87.36	Utilization % NA 100 NA		
JOB TIME AND COST		Total job time:	40.00	Hours
Unit cost:\$87.36	/Hour	Total job cost:	\$3,494	