# COST SUMMARY WORK

	New Hor	izon North M	<b>line</b> Pe	ermit Action:	RN2	Permit/Jol	b#: <u>C2010089</u>
PR	OJECT	IDENTIFIC	CATION				
	Task #:	000	State:	Colorado		Abbreviation:	None
	Task #: Date:	000 4/18/2022	State: County:	Colorado Montrose		Abbreviation: Filename:	None C089-000

# TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
004	Regrade Facilities Area	DOZER	2	9.75	\$11,481
010	Rip Facilities Area	RIPPER	2	5.76	\$7,442
031	Finish Grade Facilities Area	GRADER	1	5.02	\$878
040	Regrade Pond NHN-001	DOZER	1	29.79	\$9,857
041	Regrade Pond NHN-002	DOZER	1	40.05	\$13,252
043	Regrade Ditch NHN-001 East	DOZER	1	5.48	\$1,813
044	Regrade Ditch NHN-001 West	DOZER	1	1.37	\$453
046	Regrade Ditch NHN-002	DOZER	1	2.74	\$907
055	Replace Topsoil from Stockpile to 2013 Pit Area	TRUCK1	1	15.62	\$32,606
056	Replace Topsoil from Stockpile to 2014 Pit Area	TRUCK1	1	17.34	\$42,240
057	Replace Topsoil from Stockpile to 2015 Pit Area	TRUCK1	1	17.34	\$42,240
058	Replace Topsoil from Stockpile to 2016 Pit Area	TRUCK1	1	24.86	\$60,561
059	Replace Topsoil from Stockpile to Facilities Area	TRUCK1	1	4.75	\$9,914
060	Replace Topsoil from Stockpile to Topsoil Stockpile Area	DOZER	2	2.05	\$2,411
061	Replace Topsoil from Stockpile Overburden Stockpile Are	TRUCK1	1	8.78	\$18,330
062	Replace Topsoil from Stockpile to West Haul Road	TRUCK1	1	6.34	\$15,434
064	Replace Topsoil from Stockpile to South Acces Road	TRUCK1	1	1.76	\$4,277
066	Replace Topsoil from Stockpile to Pond NHN-001 and Ditches	TRUCK1	1	5.31	\$11,090
067	Replace Topsoil from Stockpile to Pond NHN-002 and Ditches	TRUCK1	1	2.94	\$7,152
075	Reseed Pit Areas with Dryland Mix #8 (seeded20172020)	REVEGE	1	75.26	\$12,510
076	Reseed Pit Areas with Irrigated Pasture Mix #5	REVEGE	1	36.40	\$33,161
077	Seed areas in long term facilities with Dryland seed mix 8	REVEGE	1	18.80	\$16,909
088	Drill Seed Cover Crop on IP	REVEGE	1	55.20	\$21,651
095	Demolish and Remove All Structures	DEMOLISH	1	80.00	\$56,320
100	Plug and Seal All Monitoring Wells	BOREHOLE	1	36.00	\$3,750
105	Clean Sediment Ponds	TRUCK1	1	95.40	\$34,074
106	Site Maintenance Over Liability Period (6 more years)	SITEMAINT ENANCE	1	120.00	\$41,840
110	Mobilize/Demobilize Equipment for Initial Reclamation	MOBILIZE	1	11.77	\$28,220
111	Mobilize/Demobilize Equipment for Pond Cleaning	MOBILIZE	1	8.22	\$2,971
112	Mobilize/Demobilize Equipment for Site Maintenance	MOBILIZE	1	8.22	\$34,288
113	Mobilize/Demobilize Equipment for Pond Removal	MOBILIZE	1	8.22	\$3,686

39	Weed Spraying 5 ac/yr X	5 yr	REVEGE	1	25.00	\$6,431
0	Irrigation		NA	1	1.00	\$114,148
			<u>SUBT</u>	OTALS:	786.54	\$702,297
IN	DIRECT COSTS					1
<u>0</u> \	VERHEAD AND PROFIT:					
	Liability insurance:	2.02				4,186
	Performance bond:	1.05 393.27				374
	Job superintendent: Profit:	10.00				3,327 ),230
	Tiont.	10.00		TOTAL		20,117
		CONT	RACT AMOUN'			22,414
LE	EGAL - ENGINEERING - PR	OJECT MANAGEMENT	:			
	Financial warranty process	ing (legal/related costs):	\$0		Total = \$0	
	Engineering work and/or of		6.00		Total =	9,345
	Reclamation management		4.50		\$37	7,009
		CONTINGENCY:	0.00		Total = $\$0$	
			TOTAL	INDIRECT	COST =	06,471
		TOTAL BO	ND AMOUNT (	direct + in	direct) = \$90	)8,768

Task description:	Regra	ade Faciliti	es Area			
New Horizon North	Mine	Per	rmit Action:	RN2	Permit/Jol	b#: <u>C2010089</u>
PROJECT IDENTIF	<u>ICATIO</u>	<u>N</u>				
Task #:     004       Date:     2/14/2022       User:     JHB	2	State: County:	Colorado Montrose		Abbreviation: Filename:	None 004-RN2
Agency or orga	nization n	ame: DR	RMS			
HOURLY EQUIPMI	ENT COS	ST				
	at D11T -					
Horsepower: 85				_		
1	niversal			_		
Attachment: N				_		
	per day			_		
	CRG)			_		
Cost Breakdown:						
				<u>Utilization %</u>		
Ownership Cost/Hour:			\$274.04	NA		
Operating Cost/Hour:			\$273.21	100		
Ripper own. Cost/Hour:			\$0.00	NA		
Ripper op. Cost/Hour:			\$0.00	0		
			\$41.30	NA		
Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT	\$588.5 <b>\$1,177</b>					
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>19</u> , Swell factor: <u>1.1</u>	\$588.5 \$1,177 <b>STITIES</b> 360 25					
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19, Swell factor: 1.1 Loose volume: 21,	\$588.5 \$1,177 TITIES 360 25 780 LCY	.10				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: <u>19</u> , Swell factor: <u>1.1</u>	\$588.5 \$1,177 (ITIES 360 25 780 LCY lume:					
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19, Swell factor: 1.1 Loose volume: 21, Source of estimated vol Source of estimated sw	\$588.5 <b>\$1,177</b> <b>TITIES</b> 360 25 <b>780</b> LCY lume: ell	Map 2.05				
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19, Swell factor: 1.1 Loose volume: 21, Source of estimated vol Source of estimated sw factor:	\$588.5 \$1,177 (ITIES 360 25 780 LCY lume: ell FION	Map 2.05	lbook			
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19, Swell factor: 1.1 Loose volume: 21, Source of estimated vol Source of estimated vol Source of estimated sw factor: HOURLY PRODUCT Average push distance: Unadjusted hourly	\$588.5 \$1,177 CITIES 360 25 780 LCY lume: ell FION	Map 2.05 Cat Hand 100 feet 2,870.3 LC	lbook Y/hr	  nbankment 0.9		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 19, Swell factor: 1.1 Loose volume: 21, Source of estimated vol Source of estimated sw factor: HOURLY PRODUCT Average push distance: Unadjusted hourly production: Materials consistency d Average push	\$588.5 \$1,177 CITIES 360 25 780 LCY lume: ell FION	Map 2.05 Cat Hand 100 feet 2,870.3 LC	lbook Y/hr	  nbankment 0.9		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       19,         Swell factor:       1.1         Loose volume:       21,         Source of estimated vol       Source of estimated sw         factor:       HOURLY PRODUCT         Average push distance:       Unadjusted hourly         production:       Materials consistency dom	\$588.5 \$1,177 <b>ETTIES</b> 360 25 <b>780</b> LCY lume: ell <b>FION</b>	.10 Map 2.05 Cat Hand 2,870.3 LC : Compa	lbook Y/hr	  nbankment 0.9		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       19,         Swell factor:       1.1         Loose volume:       21,         Source of estimated vol       Source of estimated sw         factor:       HOURLY PRODUC'         Average push distance:       Unadjusted hourly         production:       Materials consistency defined and production:         Average push       gradient:	\$588.5 \$1,177 STITIES 360 25 780 LCY lume: ell FION 	.10 Map 2.05 Cat Hand 2,870.3 LC : Compa	lbook Y/hr			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       19,         Swell factor:       1.1         Loose volume:       21,         Source of estimated vol       Source of estimated sw         factor:       HOURLY PRODUCC         Average push distance:       Unadjusted hourly         production:       Materials consistency of         Average push       gradient:         Average site altitude:       Average site altitude:	\$588.5 \$1,177 CITIES 360 25 780 LCY lume: ell FION 	<ul> <li>Map 2.05         <ul> <li>Cat Hand</li> <li>100 feet</li> <li>2,870.3 LC</li> <li>Compa</li> </ul> </li> <li>feet</li> <li>lbs/LCY</li> </ul>	lbook Y/hr			
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       19,         Swell factor:       1.1         Loose volume:       21,         Source of estimated vol       Source of estimated sw         factor:       HOURLY PRODUCT         Average push distance:       Unadjusted hourly         production:       Materials consistency of         Average push       gradient:         Average site altitude:       Material weight:         Weight description:       Keight description:	\$588.5 \$1,177 STTIES 360 25 780 LCY lume: ell FION 0 % 5,000 2,650 1 Decon 1 Factor	Map 2.05 Cat Hand 100 feet 2,870.3 LC : <u>Compa</u> feet lbs/LCY nposed rock	V/hr cted fill or er	75% Earth		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       19,         Swell factor:       1.1         Loose volume:       21,         Source of estimated vol       Source of estimated sw         factor:       HOURLY PRODUCT         Average push distance:       Unadjusted hourly         production:       Materials consistency of         Average push       gradient:         Average site altitude:       Material weight:         Weight description:       Goundition Correction         Operator       Operator	<u>\$588.5</u> <b>\$1,177</b> <b>CITIES</b> <u>360</u> <u>25</u> <b>780</b> LCY lume: ell <b>FION</b> <u>-</u> description <u>0</u> % <u>5,000</u> <u>2,650</u> <u>Decon</u> <u>1 Factor</u> • Skill:	Map 2.05         Cat Hand         100 feet         2,870.3 LC         :Compa         feet         lbs/LCY         iposed rock         0.7	book           Y/hr           cted fill or er	75% Earth Source (AVG.)		
Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       19,         Swell factor:       1.1         Loose volume:       21,         Source of estimated vol       Source of estimated sw         factor:       HOURLY PRODUCT         Average push distance:       Unadjusted hourly         production:       Materials consistency of         Average push       gradient:         Average site altitude:       Material weight:         Weight description:       Keight description:	<u>\$588.5</u> <b>\$1,177</b> <b>CITIES</b> 360 25 <b>780</b> LCY lume: ell <b>FION</b> 0% 5,000 2,650 Decon 1 Factor • Skill: tency:	Map 2.05         Cat Hand         100 feet         2,870.3 LC         :Compa         feet         lbs/LCY         nposed rock         0.1         0.2         0.3	V/hr cted fill or er	75% Earth		

Visibili	ty:	1.000	(AVG.)
Job efficient	cy:	0.830	(1 SHIFT/DAY)
Spoil pi	ile:	0.800	(FND-RF)
Push gradient:		1.000	(CAT HB)
Altitud	de:	1.000	(CAT HB)
Material Weig	t:	0.868	(CAT HB)
Blade typ	pe:	1.000	(PAT)
Net correction	on:	0.3890	
Adjusted unit production:	1,1	16.55 LCY/hr	
Adjusted fleet production:	223	<b>33.1</b> LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.527/LCY

Total job time:	<b>9.75</b> Hours
Total job cost:	\$11,481

## BULLDOZER RIPPING WORK

ite: New Horizon							
	North Mine	Permit Action:	RN2		Permit/Job#:	C201008	9
PROJECT IDE	NTIFICATIO	N					
Task #: 010	C	State: Colorado		Abbre	eviation: N	one	
Date: 2/1	5/2022	County: Montrose		F	ilename: 01	10-RN2	
User: JH	В						
Agency	or organization na	ame: DRMS					
HOURLY EQU	IPMENT COS	<u>ST</u>					
Basic M	Machine: Cat I	D11T - 11U		Horsepower:	850		
Ripper Atta	achment: <u>1-Sha</u>	ank Ripper	_	Shift Basis:	1 per d		
				Data Source:	(CRC	j)	
Cost Breakdown:							
	Ownership Cost	/Hour:	\$274.04	Utilization % NA			
	Operating Cost		\$273.21	100			
	r Ownership Cost	t/Hour:	\$37.99	NA			
Rippe	er Operating Cost		\$18.69	100			
	Operator Cost		\$41.30	NA			
	Total Unit Cost	t/Hour:	\$645.23				
	Total Fleet Cost	t/Hour: <b>\$1,29</b>	0.46				
ic: NA ea: 8.30	acres	Bank Volume: Rip Depth (ft):	NA 3.00	BCY Volume:	40,172	NA	BCY or
	Source of estima	ted quantity: Map 2.0					
	Source of estima	and quantity. Thup 2.	05.3(3)-3				
HOURLY PRO		ieu quantity. <u>Inap 2.</u>	05.3(3)-3				
HOURLY PRO			05.3(3)-3				
HOURLY PRO	DUCTION	ismic Velocity:	NA	feet/seco	ond		
<u>Seismic:</u>	DUCTION			feet/seco	ond		
	DUCTION Sei						
<u>Seismic:</u>	DUCTION Sei Average I Average I	ismic Velocity: Ripping Depth: Ripping Width:	NA 5.29 7.94	feet/pass	5 5		
<u>Seismic:</u>	DUCTION Sei Average I Average I Average R	ismic Velocity: Ripping Depth: Ripping Width: Lipping Length:	NA 5.29 7.94 200.00	feet/pass feet/pass feet/pass	5 5 5		
<u>Seismic:</u>	DUCTION Sei Average I Average R Average R Average R	ismic Velocity: Ripping Depth: Ripping Width: Lipping Length: e Dozer Speed:	NA 5.29 7.94 200.00 88.00	feet/pass feet/pass feet/pass feet/min	s s ute		
<u>Seismic:</u>	DUCTION Sei Average I Average R Average R Average M	ismic Velocity: Ripping Depth: Ripping Width: Lipping Length: e Dozer Speed: Ianeuver Time:	NA 5.29 7.94 200.00 88.00 0.25	feet/pass feet/pass feet/pass feet/min minutes	s s ute /pass		
<u>Seismic:</u> <u>Area:</u>	DUCTION Sei Average I Average R Average R Average M Average M Productio	ismic Velocity: Ripping Depth: Ripping Width: Lipping Length: e Dozer Speed:	NA 5.29 7.94 200.00 88.00	feet/pass feet/pass feet/pass feet/min	s s ute /pass		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average R Average M Productio <u>rection Factors</u>	ismic Velocity: Ripping Depth: Ripping Width: Lipping Length: e Dozer Speed: Ianeuver Time: n per unit area:	NA 5.29 7.94 200.00 88.00 0.25 0.867	feet/pass feet/pass feet/pass feet/min minutes acres/ho	s s ute /pass ur		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average R Average M Average M Productio	ismic Velocity: Ripping Depth: Ripping Width: Lipping Length: e Dozer Speed: Ianeuver Time: n per unit area:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867	feet/pass feet/pass feet/pass feet/min minutes	s s ute /pass ur		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average R Average M Productio <u>rection Factors</u>	ismic Velocity: Ripping Depth: Ripping Width: Dozer Speed: Ianeuver Time: n per unit area: n the Production: Site Altitude:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867 5,000	feet/pass feet/pass feet/pass feet/min minutes acres/ho Acres/hi feet	s s ute /pass ur		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average R Average M Productio <u>rection Factors</u> djusted Hourly U	ismic Velocity: Ripping Depth: Ripping Width: Dozer Speed: Ianeuver Time: n per unit area: n the Production: Site Altitude: Altitude Adj:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867 5,000 1.00	feet/pass feet/pass feet/pass feet/min minutes acres/ho Acres/hi feet (CAT H	s s ute /pass ur f B)		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average R Average M Productio rection Factors djusted Hourly U	ismic Velocity: Ripping Depth: Ripping Width: ipping Length: e Dozer Speed: Ianeuver Time: n per unit area: n per unit area: Site Altitude: Altitude Adj: Job Efficiency:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867 5,000 1.00 0.83	feet/pass feet/pass feet/pass feet/min minutes acres/ho Acres/hu feet (CAT H (1 shift/	s s ute /pass ur r B) day)		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average R Average M Productio <u>rection Factors</u> djusted Hourly U	ismic Velocity: Ripping Depth: Ripping Width: e Dozer Speed: aneuver Time: n per unit area: n per unit area: Site Altitude: Altitude Adj: Job Efficiency: Net Correction:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867 5,000 1.00 0.83 0.83	feet/pass feet/pass feet/pass feet/pass feet/min minutes, acres/ho Acres/hi feet (CAT H (1 shift/ multipli	s s ute /pass ur r B) day)		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average R Average M Productio rection Factors djusted Hourly U Adjusted Hourly U	ismic Velocity: Ripping Depth: Ripping Width: ipping Length: e Dozer Speed: Ianeuver Time: n per unit area: n per unit area: Site Altitude: Altitude Adj: Job Efficiency:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867 5,000 1.00 0.83	feet/pass feet/pass feet/pass feet/min minutes acres/ho Acres/hu feet (CAT H (1 shift/	s s ute /pass ur r B) day)		
Seismic: Area: Job Condition Cor	DUCTION Sei Average I Average R Average M Productio rection Factors djusted Hourly U Adjusted Hourly U	ismic Velocity: Ripping Depth: Ripping Width: ipping Length: e Dozer Speed: Ianeuver Time: n per unit area: n per unit area: nit Production: Site Altitude: Altitude Adj: Job Efficiency: Net Correction: purly Unit Production:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867 5,000 1.00 0.83 0.83 0.72	feet/pass feet/pass feet/pass feet/min minutes acres/ho Acres/hr (CAT H (1 shift/ multipli Acres/hr	s s ute /pass ur r B) day)		
Seismic: Area: Job Condition Cor Una	DUCTION Sei Average I Average R Average M Productio rection Factors djusted Hourly U Adjusted Hourly U	ismic Velocity: Ripping Depth: Ripping Width: ipping Length: e Dozer Speed: Ianeuver Time: n per unit area: n per unit area: nit Production: Site Altitude: Altitude Adj: Job Efficiency: Net Correction: purly Unit Production:	NA 5.29 7.94 200.00 88.00 0.25 0.867 0.867 5,000 1.00 0.83 0.83 0.72	feet/pass feet/pass feet/pass feet/min minutes acres/ho Acres/hr (CAT H (1 shift/ multipli Acres/hr Acres/hr	s s ute /pass ur r B) day)	Hours	

### MOTOR GRADER WORK

	Finish Grade Facilities An	ca		
e: New Horizon Nort	th Mine Permit Actio	n: RN2	Per	mit/Job#: <u>C2010089</u>
PROJECT IDENTI	<b>IFICATION</b>			
Task #: 031	State: Colorado	0	Abbrevia	tion: None
Date: 2/15/202	County: Montros	e	Filen	ame: 031-RN2
User: JHB				
Agency or or	ganization name: DRMS			
HOURLY EQUIPM	<u>MENT COST</u>			
Basic Mach	nine: CAT 14M		Horsepower:	259
Ripper Attachm			Shift Basis:	1 per day
			Data Source:	(CRG)
Cost Breakdown:				
Cost Dicardo wil.			Utilization %	
Ow	vnership Cost/Hour:	\$85.80	NA	
Op	perating Cost/Hour:	\$60.40	100	
	vnership Cost/Hour:	\$0.00	NA	
	perating Cost/Hour:	\$0.00		
	Deperator Cost/Hour:	\$28.56	NA	
То	otal Unit Cost/Hour:	\$174.76		
Tot	tal Fleet Cost/Hour: \$1	74.76		
MATERIAL QUAN	<u>NTITIES</u>			
Total Are	ea to be graded or ripped: <u>8.30</u>	2 05 2-1		acres
Total Are Sou	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u>	2.05.2-1		acres
Total Are	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u>		mph	acres
Total Are Sou	ea to be graded or ripped: <u>8.30</u> nrce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed:	1.50	mph	
Total Are Sou	ea to be graded or ripped: <u>8.30</u> Irce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed: <u></u> Selected Application: <u></u>	1.50 Finish	grading (0-2.5 mph)	
Total Are Sou	ea to be graded or ripped: <u>8.30</u> Irce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed: <u>Selected Application</u> : <u>Selected Blade Angle</u> :	1.50 Finish 30	grading (0-2.5 mph) degrees	
Total Are Sou <u>HOURLY PRODU</u>	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Effective Blade Length</u> : <u></u>	1.50 Finish 30 12.10	grading (0-2.5 mph) degrees feet	
Total Are Sou HOURLY PRODUC	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed: <u>Selected Application:</u> Selected Blade Angle: <u>Effective Blade Length</u> : th of blade overlap per pass: <u></u>	1.50 Finish 30 12.10 2.00	grading (0-2.5 mph) degrees feet feet	
Total Are Sou HOURLY PRODUC Widt Net gradin	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Effective Blade Length</u> : <u></u>	1.50 Finish 30 12.10 2.00 10.10	grading (0-2.5 mph) degrees feet	
Total Are Sou <b>HOURLY PRODU</b> Widt Net gradin	ea to be graded or ripped: <u>8.30</u> Irce of estimated acreage: <u>Map</u> CTION Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Effective Blade Length</u> : th of blade overlap per pass: <u>Selected Plade Length</u> : Effective Blade Length: <u>Selected Plade Length</u> : th of blade overlap per pass: <u>Selected Plade Length</u> : th of blade overlap per pass: <u>Selected Plade Length</u> : <u>Select</u>	1.50 Finish 30 12.10 2.00 10.10 1.8364	grading (0-2.5 mph) degrees feet feet feet feet	· 1.5
Total Are Sou <u>HOURLY PRODUC</u> Widt Net gradin Unadjust	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Selected Blade Angle</u> : Effective Blade Length: <u>Selected Blade Length</u> : Effective Blade Length: <u>Selected Blade Angle</u> :	1.50 Finish 30 12.10 2.00 10.10 1.8364 S	grading (0-2.5 mph) degrees feet feet feet acres/hour	· 1.5
Total Are Sou HOURLY PRODUC Widt Net gradin Unadjust	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <u>CTION</u> Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Selected Blade Angle</u> : Effective Blade Length: <u>Selected Blade Angle</u> : Effective Blade Length: <u>Selected Blade Angle</u> : <u>Selected Blade Angle</u> : <u>Selected Blade Angle</u> : <u>Selected Blade Angle</u> : <u>Selected Blade Angle</u> : <u>Selected Blade Angle</u> : <u>Selected Blade Angle</u> : <u>Source</u> <u>Selected Blade Angle</u> : <u>Source</u> <u>Source</u>	1.50 Finish 30 12.10 2.00 10.10 1.8364 Sce	grading (0-2.5 mph) degrees feet feet feet acres/hour	· 1.5
Total Are Sou HOURLY PRODUC Widt Net gradin Unadjust Job Condition Correctio	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <b>CTION</b> Average Grader Speed: <u>Selected Application:</u> Selected Blade Angle: <u>Selected Blade Angle</u> Effective Blade Length: <u>Selected Blade Length</u> th of blade overlap per pass: <u>Selected Hourly Unit Production</u> ted Hourly Unit Production: <u>Source</u> is <u>1.00</u> (CAT H	1.50 Finish 30 12.10 2.00 10.10 1.8364 S ce HB)	grading (0-2.5 mph) degrees feet feet feet acres/hour	· 1.5
Total Are Sou HOURLY PRODUC Widt Net gradin Unadjust Job Condition Correction Altitude Adj	ea to be graded or ripped: <u>8.30</u> Irce of estimated acreage: <u>Map</u> CTION Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Selected Blade Angle</u> : Effective Blade Length: <u>Selected Blade Length</u> : th of blade overlap per pass: <u>Source</u> ted Hourly Unit Production: <u>Source</u> in <u>1.00</u> (CAT H <u>1.00</u> (1sh/d, 1)	1.50 Finish 30 12.10 2.00 10.10 1.8364 S ce HB) fav.)	grading (0-2.5 mph) degrees feet feet feet acres/hour	· 1.5
Total Are Sou HOURLY PRODUC Widt Net gradin Unadjust Job Condition Correction Altitude Adj Job Efficiency Net Correction	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <b>CTION</b> Average Grader Speed: <u>Selected Application:</u> Selected Blade Angle: <u>Selected Blade Angle:</u> Effective Blade Length: <u>Selected Blade Angle:</u> <u>Selected Blade Angle:</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u> <u>Sourd</u>	1.50 Finish 30 12.10 2.00 10.10 1.8364 S ce HB) fav.) er	grading (0-2.5 mph) degrees feet feet feet acres/hour	· 1.5
Total Are Sou HOURLY PRODUC Widt Net gradin Unadjust Job Condition Correction Altitude Adj Job Efficiency Net Correction	ea to be graded or ripped: <u>8.30</u> Irce of estimated acreage: <u>Map</u> CTION Average Grader Speed: <u>Selected Application</u> : <u>Selected Blade Angle</u> : <u>Effective Blade Length</u> : <u>Selected Blade Length</u> : <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u> <u>Source</u>	1.50 Finish 30 12.10 2.00 10.10 1.8364 S ce HB) fav.) er :1.6527	grading (0-2.5 mph) degrees feet feet feet acres/hour	· 1.5
Total Are Sou HOURLY PRODUC Widt Net gradin Unadjust Job Condition Correction Altitude Adj Job Efficiency Net Correction	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <b>CTION</b> Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Selected Blade Angle</u> : Effective Blade Length: <u>Selected Blade Length</u> : th of blade overlap per pass: <u>Selected Blade Angle</u> : <u>Source</u> <u>Source</u> : <u>1.00 (CAT Here Source</u> ) <u>Source</u> : <u>1.00 (CAT Here Source</u> ) <u>Source</u> : <u>0.900 (1sh/d, 1)</u> Adjusted Hourly Unit Production Adjusted Hourly Fleet Production	1.50 Finish 30 12.10 2.00 10.10 1.8364 S ce HB) fav.) er :1.6527	grading (0-2.5 mph) degrees feet feet feet acres/hour Site Altitude: <u>5000</u> feet acres/Hour	· 1.5
Total Are Sou HOURLY PRODUC Widt Net gradin Unadjust Job Condition Correction Altitude Adj Job Efficiency Net Correction	ea to be graded or ripped: <u>8.30</u> arce of estimated acreage: <u>Map</u> <b>CTION</b> Average Grader Speed: <u>Selected Application</u> : Selected Blade Angle: <u>Selected Blade Angle</u> : Effective Blade Length: <u>Selected Blade Length</u> : th of blade overlap per pass: <u>Selected Blade Angle</u> : <u>Source</u> <u>Source</u> : <u>1.00 (CAT Here Source</u> ) <u>Source</u> : <u>1.00 (CAT Here Source</u> ) <u>Source</u> : <u>0.900 (1sh/d, 1)</u> Adjusted Hourly Unit Production Adjusted Hourly Fleet Production	1.50 Finish 30 12.10 2.00 10.10 1.8364 S ce HB) fav.) er :1.6527	grading (0-2.5 mph) degrees feet feet feet acres/hour Site Altitude: 5000 feet acres/Hour acres/Hour	· 1.5

per acre

\$105.74

Total job cost:

\$878

Task description:	Regrade Por	nd NHN-001			
e: <u>New Horizon North</u>	Mine	Permit Action:	RN2	Permit/Jo	b#: C2010089
PROJECT IDENTIF	<b>ICATION</b>				
Task #: 040	Sta	te: Colorado		Abbreviation:	None
Date: 2/14/2022	2 Coun			Filename:	040-RN2
User: JHB		-			
Agency or orga	nization name:	DRMS			
HOURLY EQUIPMI	ENT COST				
Basic Machine: Ca	at D9T - 9SU				
Horsepower: 40	)5				
Blade Type: Se	emi-Universal				
Attachment: 3-	shank ripper				
	per day				
Data Source: (C	CRG)				
Cost Breakdown:		1			
		<b>010</b> - 01	<u>Utilization %</u>		
Ownership Cost/Hour:		\$126.01	NA		
Operating Cost/Hour:		\$141.41	100		
Ripper own. Cost/Hour:		\$19.26	NA		
Ripper op. Cost/Hour:		\$2.87	25		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT	TITIES				
Initial Volume: 15,	600				
Swell factor: 1.1					
	550 LCY				
Source of estimated vol	luma: Dond	NUN 001 Plan a	nd Profile; Figure 2		
Source of estimated sw		Iandbook	na Flome, Figure 2		
factor:					
HOURLY PRODUC	<u>FION</u>				
Average push distance:					
Unadjusted hourly production:	1,514.3	LCY/hr			
Materials consistency description:	Co	mpacted fill or er	nbankment 0.9		
Average push	0 %				
gradient:					
Average site altitude:	5,000 feet				
	5,000 feet 2,650 lbs/LC	 /			

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3890

Adjusted unit production:	589.06 LCY/hr
Adjusted fleet	<b>589.06</b> LCY/hr
production:	389.00 LC 1/III

Fleet size:	1 Dozer(s)
Unit cost:	\$0.562/LCY

Total job time:	<b>29.79</b> Hours
Total job cost:	\$9,857

Task description:	Regrade Pond NHN-002			
: New Horizon North	Mine Permit Action:	RN2	Permit/Jo	b#: <u>C2010089</u>
PROJECT IDENTIFI	CATION			
Task #: 041	State: Colorado		Abbreviation:	None
Date: 2/14/2022			Filename:	041-RN2
User: JHB				
Agency or organ	nization name: DRMS			
HOURLY EQUIPME	NT COST			
Basic Machine: Ca	t D9T - 9SU			
Horsepower: 40.				
	mi-Universal	_		
	hank ripper			
	er day	_		
Data Source: (Cl	RG)	_		
Cost Breakdown:				
		<u>Utilization %</u>		
Ownership Cost/Hour:	\$126.01	NA		
Operating Cost/Hour:	\$141.41	100		
Ripper own. Cost/Hour:	\$19.26	NA		
Ripper op. Cost/Hour:	\$2.87	25		
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANT	ITIES			
Initial Volume: 20,9				
Swell factor: 1.12				
	595 LCY			
Source of estimated volu	ume: Pond NHN-002 Plan	and Profile: Figure 3		
Source of estimated swe		., 8		
factor:				
HOURLY PRODUCT	<u>TION</u>			
Average push distance:	75 feet			
Unadjusted hourly	1,514.3 LCY/hr			
production:				
Motoriola	Common (* 1.611	mb onlym - ret 0.0		
Materials consistency	Compacted fill or e	empankment 0.9		
description:				
Average push	0 %			
gradient:	0.70			
Average site altitude:	5,000 feet			
<u> </u>				
Material weight:	2,650 lbs/LCY			
<b>XXX 1 1 1 1 1</b>				
Weight description:	Decomposed rock - 25% Rock	x, 75% Earth		

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3890

Adjusted unit production:	589.06 LCY/hr
Adjusted fleet	<b>589.06</b> LCY/hr
production:	389.00 LC 1/III

Fleet size:	1 Dozer(s)
Unit cost:	\$0.562/LCY

Total job time:	<b>40.05</b> Hours
Total job cost:	\$13,252

Task description:	Regrade Ditch	NHN-001 Eas	st		
New Horizon North	Mine Pe	rmit Action:	RN2	Permit/Jo	b#: <u>C2010089</u>
PROJECT IDENTIF	<b>ICATION</b>				
Task #: $043$ Date: $2/15/2022$ User:JHB	State: County:	Colorado Montrose		Abbreviation: Filename:	None 043-RN2
Agency or organ	nization name: DI	RMS			
HOURLY EQUIPME	<u>ENT COST</u>				
	t D9T - 9SU				
Horsepower: 40					
• •	mi-Universal				
	shank ripper				
	ber day				
Data Source: (C	RG)				
Cost Breakdown:		1			
Ownership Cost/Hours		\$126.01	<u>Utilization %</u> NA		
Ownership Cost/Hour: Operating Cost/Hour:		\$126.01 \$141.41	100		
Ripper own.					
Cost/Hour:		\$19.26	NA		
Ripper op. Cost/Hour:		\$2.87	25		
Operator Cost/Hour:		\$41.30	NA		
MATERIAL QUANT         Initial Volume:       4,00         Swell factor:       1.12	25				
Loose volume: 4,50	DO LCY	_			
Source of estimated vol Source of estimated swe factor:	<b>i</b>	5.3(4)-7 and 2 lbook	.053(4)-11		
HOURLY PRODUCT	<u>TION</u>				
Average push distance: Unadjusted hourly production:	50 feet 2,110.5 LC	Y/hr			
Materials consistency description:	Compa	icted fill or en	nbankment 0.9		
Average push gradient:	0 %				
Average site altitude:	5,000 feet				
Material weight:	2,650 lbs/LCY				
Weight description:	Decomposed rock	- 25% Rock,	75% Earth		

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3890

Adjusted unit production:	820.98 LCY/hr
Adjusted fleet	820.98 LCY/hr
production:	820.98 LC 1/III

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.403/LCY	

Total job time:	<b>5.48</b> Hours
Total job cost:	\$1,813

Task description:			NHN-001 We		D:4/1	h#. C2010090
New Horizon Nort	n Mine	Pe	rmit Action:	KINZ	Permit/Jo	b#: <u>C2010089</u>
<b>PROJECT IDENTI</b>	<b>FICATION</b>					
Task #: 044		State:	Colorado		Abbreviation:	None
Date: $\frac{0.11}{2/15/202}$	22	County:	Montrose		Filename:	044-RN2
User: JHB		•				
Agency or org	ganization nai	ne: DH	RMS			
HOURLY EQUIPM	IENT COST	[				
	Cat D9T - 9SI	_				
	405	-				
Blade Type:	Semi-Univers	al				
	3-shank ripper					
	per day					
Data Source: (	CRG)					
Cost Breakdown:			1	<b>TT</b> . 11 .1		
Ormershin Cest/Here			\$126.01	Utilization %		
Ownership Cost/Hou Operating Cost/Hou			\$126.01 \$141.41	<u>NA</u> 100		
Ripper own						
Cost/Hou			\$19.26	NA		
Ripper op. Cost/Hou	r:		\$2.87	25		
Operator Cost/Hou	r:		\$41.30	NA		
ATERIAL QUAN	TITIES					
Initial Volume: 1,	000					
	125					
Loose volume: 1,	125 LCY					
Source of estimated v	olume:	Map 2.05	3(4)-7			
Source of estimated s		Cat Hand				
factor:						
HOURLY PRODUC	<u>CTION</u>					
Average push distance		) feet				
Unadjusted hourly	2,	110.5 LC	Y/hr			
production:						
Materials consistency		Compa	cted fill or an	nbankment 0.9		
description:						
Average push gradient:	0 %					
Average site altitude:	5,000 fe	et				
Material weight:	2,650 lb	s/LCY				
Weight description	Deserve	orad most	250/ Doct-	750/ Earth		
Weight description:	Decomp	useu rock	- 25% Rock,	15% Earth		

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3890

Adjusted unit production:	820.98 LCY/hr		
Adjusted fleet	820.98 LCY/hr		
production:	820.98 LC 1/III		

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.403/LCY	-

Total job time:	<b>1.37</b> Hours
Total job cost:	\$453

Task description: <b>R</b>	egrade Ditch NHN-002			
e: New Horizon North Mine	Permit Action:	RN2	Permit/Jo	b#: <u>C2010089</u>
PROJECT IDENTIFICAT	TION			
Task #: 046	State: Colorado		Abbreviation:	None
Date: 2/15/2022 User: JHB	County: Montrose		Filename:	046-RN2
Agency or organization	n name: DRMS			
HOURLY EQUIPMENT (				
Basic Machine: Cat D9T	' - 9SU			
Horsepower: 405		-		
Blade Type: Semi-Un		_		
Attachment: 3-shank		_		
Shift Basis: <u>1 per day</u>	У	-		
Data Source: (CRG)		-		
Cost Breakdown:	1			
	A10-0-	<u>Utilization %</u>		
Ownership Cost/Hour:	\$126.01	NA 100		
Operating Cost/Hour: Ripper own.	\$141.41	100		
Cost/Hour:	\$19.26	NA		
Ripper op. Cost/Hour:	\$2.87	25		
Operator Cost/Hour:	\$41.30	NA		
MATERIAL QUANTITIE	<u>2S</u>			
Initial Volume: 2,000				
Swell factor: 1.125				
Loose volume: 2,250 LC	Y			
Source of estimated volume:	Map 2.05.3(4)-9			
Source of estimated swell	Cat Handbook			
factor:				
HOURLY PRODUCTION	[			
Average push distance:	50 feet			
Unadjusted hourly production:	2,110.5 LCY/hr			
Materials consistency description:	Compacted fill or er	nbankment 0.9		
•		nbankment 0.9		
description: Average push 0 % gradient:		nbankment 0.9		
description:Average push0 %gradient:Average site altitude:5,0	6	nbankment 0.9		

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing 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:	0.868	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3890

Adjusted unit production:	820.98 LCY/hr		
Adjusted fleet	820.98 LCY/hr		
production:	820.98 LC 1/III		

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.403/LCY	•

Total job time:	<b>2.74</b> Hours
Total job cost:	\$907

# TRUCK/LOADER TEAM WORK

Task description:   Replace Topsoil from Stockpile to 2013 Pit Area									
Site:       New Horizon North Mine       Permit Action:       RN2       Permit/Job#:       C2010089						: <u>C2010089</u>			
PROJECT IDENTIFICATION									
Task #: 055		State: Colora	ado	Abb	Abbreviation: None				
	/2022	County: Monti	rose		Filename: 065-RN2				
User: JHB	User: JHB								
Agency or	Agency or organization name: DRMS								
HOURLY EQUIPMENT COST Shift basis: <u>1 per day</u>									
			Equipment Descr	iption					
Т	ruck Loader Tear		777F						
			T 992K						
Supp	ort Equipment -L		D11T - 11U						
Road M	aintenance – Moto	r · · · ·	T 14M						
Roud M			ter Tanker, 10,00	0 Gal.					
		I.	, ,						
Cost Breakdown:	Truck/Loa	der Team	Support	Equipment	Maint	enance Equipment			
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck			
%Utilization-machine:	100	100	100	NA	3	5 35			
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85.8	0 \$84.03			
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21.1	4 \$38.03			
%Utilization-riper:	NA	0	NA	NA	N	A NA			
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	0 \$0.00			
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	0 \$0.00			
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.5	6 \$21.12			
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135.5	0 \$143.18			
Number of Units:	2	1	1	0		1 1			
Group Subtotals:	Work:	\$1,219.95	Support:	\$588.55	Main	t: \$278.68			

Total work team cost/hour: \$2,087.18

### **MATERIAL QUANTITIES**

Initial volume:	16,420	CCY	Swell factor:	1.115	
Loose volume:	18,308	LCY			
Source	e of estimated volume:	Map 2.05.2-1	1, Division Volur	ne Estimates	
Source of	estimated swell factor:	Cat Handboo	ok		
Ν	Aaterial Purchase Cost:	\$0.00			
	Total Cost:	\$0.00			

## **HOURLY PRODUCTION**

#### Truck Capacity:

Truck Pa	yload (	(weight)	Basis:

ayioau (weigiit) Dasi	<u>s.</u>	
Material weight:	2,100	Pounds/LCY
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

Payload Capacity:	95.24	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
J						
Final 7	ruck Volume I	Based on Number of I	Loader Passes:	67.20	LCY	
Loading Tool Capacity						
<u></u>			Buel	ket Size Class: N	VA	
Poted Conseitur	16 000	ICV (haanad)	Ducr			_
Rated Capacity: _ Bucket Fill Factor:	<u>16.000</u> 1.050	LCY (heaped) Moist loam or sa	ndy clay (1000	( 110%) 1.050		-
Adjusted Capacity:	16.800	LCY	indy ciay (1007	0 - 110/0) 1.050		-
Aujusicu Capacity.	10.000					
Job Condition Corrections:	-	Site	e Altitude (ft.):	<u>5000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Ν	Number of Loading To	ol Passes Requ	uired to Fill		passes
				Truck:	4	Passes
Excavators and Front Shovel	<u>s:</u>					
Machine Cycle Time vs						
Selected Value w	vithin this Basic	c Rating: NA				
Track Loaders –	Material Descri	ption:				
Cycle Time Elements (min.):						
Load: NA	М	aneuver: NA		Dump: 0.10	0	
	_					
Wheel and Track	Loaders - Una	djusted Basic Loader	Cycle Time (lo	oad, dump,	).625 min	utes
			r	naneuver):		
Cycle Time Factors				Factor (min.)	Source	
Material:		' to 3/4" diameter -0.0		-0.020	(Cat HB)	
Stockpile:	Conveyor or 0.00	dozer piled 10 ft. high	h and up	0.000	(Cat HB)	
Truck Ownership:	Common ow	mership of trucks and	loaders -	-0.040	(Cat HB)	
	0.04					_
Operation:		operation 0.04		0.040	(Cat HB)	
Dump Target:	Nominal targ	·	A	0.000	(Cat HB)	_
		Net Cycle Time		-0.020	minutes minutes	
		Adjusted Loader Net Load Tin		0.605 1.915	minutes	
			ie per riuek.	1,715		
Truck Cycle Time:						
Truck Exchange Time	: 0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
Truck Load Time	: 1.915	Minutes	Adjusted	for site altitude:	1.915	Minutes
Truck Maneuver and Dum	1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
Time			5	_		_

Truck Travel (Haul & Return) Time: maintained 3.0Haul Route:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

	maintained	<u>3.0</u> Haul	Route:							
	Seg #	Haul D (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)		
	1	1500.0	00	2.00	3.00	5.00	1550	1.175		
	Return Rou	ite.				Haul Time:	1.175	mir	nutes	
	Seg #	Haul D (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)		
	1	1500.0	00	-2.00	3.00	1.00	3503	0.621		
					Total True	Return Time: ck Cycle Time:			inutes	
		uction	1,485.08	LCY/Hour		Adjusted for jo	ob efficiency:	1,232.	62	LCY/Hour
Iruck	Unit Produ	iction _	706.01	LCY/Hour		Adjusted for jo	ob efficiency:	585.9	98	LCY/Hour
Optima	al No. of Ti	ucks:	2	Truck(s)		Selected Numb	er of Trucks:	2		Truck(s)
				Adjusted single	e truck/loader	team productio team productio team productio	on: 1,171	.97 L	CY/Ho CY/Ho CY/Ho	our
:	JOB TIM	IE AND	COST							
	Fleet	size:	1	Team(s)	Т	otal job time:	15.62	2	Hours	5
	Unit	cost:	\$1.781	/LCY	Т	otal job cost:	\$32,6	06		

### TRUCK/LOADER TEAM WORK

Task description:	Replace	e Topsoil from S	tockpile to 2014	Pit Area		
Site: New Horizon	North Mine	Permit Act	tion: <u>RN2</u>		Permit/Job#	: <u>C2010089</u>
PROJECT IDE	NTIFICATION					
Task #: 056	ō	State: Colora	ado	Abb	previation: 1	None
		County: Montr	ose		Filename: (	)56-RN2
User: JHI	3					
Agency	or organization nan	ne: DRMS				
HOURLY EQU	IPMENT COST	2		Shift ba	sis: <u>1 per day</u>	
		]	Equipment Descr	iption		
	Truck Loader Tea		777F	•		
			Т 992К			
Sup	port Equipment -L		D11T - 11U			
Dood N	-Du Maintenance –Moto	Imp Area: NA	Т 14М			
Koad N			ter Tanker, 10,00	0 Gal		
	••• a	ter fruek. Wa	ter Tanker, 10,00	o Gui.		
Cost Breakdown:	Truck/Loa	der Team	Support	Equipment	Maint	enance Equipment
<u></u>	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	3	5 35
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85.8	0 \$84.03
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21.1	4 \$38.03
%Utilization-riper:	NA	0	NA	NA	NA	A NA
Ripper own. cost/hour:		\$0.00	\$0.00	NA	\$0.0	0 \$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	0 \$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.5	6 \$21.12
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135.5	0 \$143.18
Number of Units:	3	1	1	0		1 1
Group Subtotals:	Work:	\$1,568.54	Support:	\$588.55	Main	t: \$278.68

Total work team cost/hour: <u>\$2,435.77</u>

### **MATERIAL QUANTITIES**

Initial volume:	21,030	CCY	Swell factor:	1.115	
Loose volume:	23,448	LCY			
Source	e of estimated volume:	Map 2.05.2-1,	, Division Volur	ne Estimates	
Source of	estimated swell factor:	Cat Handbook	κ.		
Ν	Aaterial Purchase Cost:	\$0.00			
	Total Cost:	\$0.00			

## **HOURLY PRODUCTION**

#### Truck Capacity: Truck Payload (weig

<u>s:</u>		
2,100		Pounds/LCY
Earth - Loam		
200,000		Pounds
	2,100 Earth - Loam	2,100 Earth - Loam

Payload Capacity:	95.24	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
Final	Fruck Volume 1	Based on Number of l	Loader Passes:	67.20	LCY	
Loading Tool Capacity						
<u> </u>			Buck	et Size Class: N	ΙA	
Rated Capacity:	16.000	LCY (heaped)	Duer		12 1	
Bucket Fill Factor:	1.050	Moist loam or sa	ndy clay (1000)	6 110%) 1.050		-
Adjusted Capacity:	16.800	LCY		0 - 110/0/ 1.050		-
Aujusicu Capacity.	10.000					
Job Condition Corrections:	_	Sit	e Altitude (ft.):	<u>5000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	١	Number of Loading To	ool Passes Requ	ired to Fill		passes
				Truck:	4	F
Excavators and Front Shove						
Machine Cycle Time v						
Selected Value v	vithin this Basic	c Rating: <u>NA</u>				
Track Loaders –	Material Descr	iption:				
Cycle Time Elements (min.):						
Load: NA	М	laneuver: NA		Dump: 0.100	)	
				·		
Wheel and Track	c Loaders - Una	adjusted Basic Loader	-	- 0	.625 min	utes
~	1		ľ	naneuver):		
Cycle Time Factors		<b>2</b> / 422 1: / 0.4	22	Factor (min.)	Source	
Material:		" to 3/4" diameter -0.		-0.020	(Cat HB)	_
Stockpile:	0.00	dozer piled 10 ft. hig	n and up	0.000	(Cat HB)	
Truck Ownership:	Common ow	nership of trucks and	loaders -	-0.040	(Cat HB)	
	0.04					
Operation:	Constant ope			-0.040	(Cat HB)	_
Dump Target:	Nominal targ		A 1'	0.000	(Cat HB)	_
		Net Cycle Time		-0.100	_ minutes minutes	
		Adjusted Loader	ne per Truck:	0.525	minutes	
		Net Load Th	ne per muer.	1.075		
<u> Truck Cycle Time:</u>						
Truck Exchange Time	: 0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
Truck Load Time	: 1.675	Minutes	Adjusted	for site altitude:	1.675	Minutes
Truck Maneuver and Dum	p 1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
Time	•		-			_

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

	Haul Route	:							
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	e	(Ft)			(%)	(%)	(fpm)	Time	
		(			(,,,,	(/)	(	(min)	
	1	3000	.00	2.00	3.00	5.00	1550	2.142	
						Haul Time:	2.142	minutes	
	Return Rou	tat				Haui Time.	2.142	minutes	
		T	D' /	$C = 1 \langle 0 \rangle$	D 11 D	T ( 1 D	X7.1 '	Travel	
	Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Time	
		(Ft)			(%)	(%)	(fpm)	(min)	
	1	3000	.00	-2.00	3.00	1.00	3503	1.049	
						Return Time:	1.049	minutes	5
					Total Tru	ck Cycle Time:	-	minutes	5
						5			
L	oading Too	ol unit							
	Produ	iction	1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck	Unit Produ	iction					-		
			587.24	LCY/Hour		Adjusted for jo	ob efficiency:	487.41	LCY/Hour
						5 5	2		
Optima	al No. of Tr	ucks:	3	Truck(s)		Selected Numb	er of Trucks:	3	Truck(s)
				Adjusted	hourly truck	team productio	on: 1,462	.23 LCY/H	Hour
				Adjusted single					
				ljusted multiple					
				ijusica manipic	index/10ader	team productio	II. <u>1,552</u>	<u>.13</u> LC 1/1	Ioui
	JOB TIM	IE AN	D COST						
	Fleet s	size:	1	Team(s)	Т	otal job time:	17.34	<b>i</b> Hou	rs
		_				-			
	Unit c	cost:	\$1.801	/LCY	Т	otal job cost:	\$42,24	40	

# TRUCK/LOADER TEAM WORK

Task description:	Replace	e Topsoil from S	tockpile to 2015	Pit Area		
Site: New Horizon N	North Mine	Permit Ac	tion: <u>RN2</u>		Permit/Job#	: C2010089
PROJECT IDEN	<b>NTIFICATION</b>					
Task #: 057		State: Color	ado	Abb	previation: 1	None
		County: Monti	rose		Filename: (	)57-RN2
User: JHB	<u> </u>					
Agency o	r organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST	-		Shift ba	sis: <u>1 per day</u>	
			Equipment Descr	iption		
r	Fruck Loader Tea		777F			
~			T 992K			
Supp	ort Equipment -L		D11T - 11U			
Road M	-Du Iaintenance –Moto	I · · · · ·	T 14M			
Road IV.			ter Tanker, 10,00	0 Gal.		
Cost Breakdown:	Truck/Loa	der Team	Support	Equipment	Mainte	enance Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	3	5 35
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85.8	0 \$84.03
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21.1	4 \$38.03
%Utilization-riper:	NA	0	NA	NA	NA	A NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	0 \$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	0 \$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.5	6 \$21.12
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135.5	0 \$143.18
Number of Units:	3	1	1	0		1 1
Group Subtotals:	Work:	\$1,568.54	Support:	\$588.55	Main	t: \$278.68

Total work team cost/hour: **<u>\$2,435.77</u>** 

### **MATERIAL QUANTITIES**

Initial volume:	21,030	CCY	Swell factor:	1.115	
Loose volume:	23,448	LCY			
Source	e of estimated volume:	Map 2.05.2-1,	Division Volur	ne Estimates	
Source of	estimated swell factor:	Cat Handbook			
Ν	Material Purchase Cost:	\$0.00			
	Total Cost:	\$0.00			

## **HOURLY PRODUCTION**

#### Truck Capacity:

Truck Par	yload (	(weight)	Basis:

2,100	Pounds/LCY
Earth - Loam	
200,000	Pounds
	Earth - Loam

	95.24	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
-		-				
Fina	l Truck Volume	e Based on Number of	f Loader Passes:	67.20	LCY	
Loading Tool Capacity						
			Buch	ket Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:	1.050		sandy clay (100%	<u>% - 110%) 1 050</u>		_
Adjusted Capacity:	16.800	LCY	sandy endy (1007	0 110/0/1.050		_
Rajusted Capacity.	10.000					
Job Condition Correction	<u>s:</u>	S	Site Altitude (ft.):	<u>5000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HI	3)		
Job Efficiency:	0.830	0.830	(CAT HI	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time	•	Number of Loading	Tool Passes Requ	uired to Fill		passes
		Trainoer of Loading		Truck:	4	pubbeb
Excavators and Front Show	<u>vels:</u>					
Machine Cycle Time						
Selected Value	e within this Bas	sic Rating: NA				
Track Loaders	– Material Desc	cription:				
Track Loaders Cycle Time Elements (min		cription:				
Cycle Time Elements (min	):			Dump: 0.10	0	
	):	cription: Maneuver:NA		Dump:0.10	0	
Cycle Time Elements (min Load: <u>NA</u>	):		er Cycle Time (le	pad dump	mi	nutes
Cycle Time Elements (min Load: <u>NA</u>	):	Maneuver: NA	-	pad dump		nutes
Cycle Time Elements (min Load: <u>NA</u>	):  .ck Loaders - Ui	Maneuver: NA	-	pad, dump,	mi	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia	): 	Maneuver: NA nadjusted Basic Load	0.02	pad, dump, (maneuver):	).625 min	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor	): 	Maneuver: NA nadjusted Basic Load	0.02	Dad, dump, naneuver): Factor (min.)	0.625 min Source	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia	): uck Loaders - Un s L: Material 1/ :: Conveyor o 0.00	Maneuver: NA nadjusted Basic Load	0.02 igh and up	Dad, dump, maneuver):( Factor (min.) -0.020 0.000	0.625 min Source (Cat HB) (Cat HB)	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership	): s Material 1/ Conveyor of 0.00 Common of 0.04	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter - or dozer piled 10 ft. h ownership of trucks ar	0.02 igh and up	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04	0.02 igh and up	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes 
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load '8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04 urget 0.00	D.02 igh and up nd loaders -	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load '8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04 irget 0.00 Net Cycle Tir	D.02 igh and up nd loaders - ne Adjustment:	Dad, dump, naneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	D.02 igh and up nd loaders - ne Adjustment: er Cycle Time:	Dad, dump, maneuver): Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100 0.525	0.625 minutes minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	D.02 igh and up nd loaders - ne Adjustment:	Dad, dump, naneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership <u>Operatior</u> Dump Targe	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	D.02 igh and up nd loaders - ne Adjustment: er Cycle Time:	Dad, dump, maneuver): Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100 0.525	0.625 minutes minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership <u>Operatior</u> Dump Targe	): ick Loaders - Un s : Material 1/ : Conveyor of 0.00 : Common of 0.04 : Constant of : Nominal ta	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	D.02 igh and up nd loaders - ne Adjustment: er Cycle Time: 'ime per Truck:	Dad, dump, maneuver): Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100 0.525	0.625 minutes minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia Stockpile Truck Ownership Operatior Dump Targe	): uck Loaders - Un s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of Nominal ta	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load Net Load T	D.02 igh and up nd loaders - me Adjustment: er Cycle Time: Time per Truck: Adjusted	raneuver):	0.625 minutes minutes	
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe Truck Exchange Tin	): 	Maneuver: NA nadjusted Basic Load '8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04 urget 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes	D.02 igh and up nd loaders - ne Adjustment: er Cycle Time: 'ime per Truck: Adjusted Adjusted	raneuver):	0.625 minutes Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.800	    Minutes

Truck Travel (Haul & Return) Time: maintained 3.0 Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

	Haul Route:								
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	U	(Ft)			(%)	(%)	(fpm)	Time	
					(/)	(//	(	(min)	
	1	3600	.00	2.00	3.00	5.00	1550	2.530	
						II 100'	<b>a 5</b> 30	• .	
						Haul Time:	2.530	minutes	
	Return Rou	te:		n					
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)			(%)	(%)	(fpm)	Time (min)	
	1	3600	.00	-2.00	3.00	1.00	3503	1.220	
						Return Time:	1.220	minutes	
					Total Tma				
					Total True	ck Cycle Time:	7.425	minutes	
L	oading Tool	l unit							
	Produ		1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck	Unit Produ					jj-			
	enivirouu	•••••	543.03	LCY/Hour		Adjusted for jo	ob efficiency:	450.72	LCY/Hour
						riajastea ioi j	or enterency.	100.72	
Optima	al No. of Tru	ucks:	3	Truck(s)		Selected Numb	per of Trucks:	3	Truck(s)
				Adjusted	hourly truck	team productio	on: 1,352	LCY/H	our
				Adjusted single					
				djusted multiple					
			11	ajustea manupie	di dell'i lodder	team productio	<b>1,502</b>		our
	JOB TIM	E AN	D COST						
	Fleet s	ize:	1	Team(s)	T	otal job time:	17.34	Hour	S
	Unit c	ost:	\$1.801	/LCY	Т	otal job cost:	\$42,24	40	

# TRUCK/LOADER TEAM WORK

Task description:	Replace	e Topsoil from St	tockpile to 2016	Pit Area		
Site:       New Horizon North Mine       Permit Action:       RN2       Permit/Job#:       C2010089						: C2010089
PROJECT IDEN	<b>TIFICATION</b>					
Task #: 058		State: Colora	ado	Abł		None
Date: 2/15/	2022	County: Montr	ose		Filename:	058-RN2
User: JHB						
Agency or	organization nan	ne: DRMS				
HOURLY EQUI	PMENT COST			Shift ba	sis: <u>1 per day</u>	
		]	Equipment Descr	iption		
Т	ruck Loader Tea		777F			
			Г 992К			
Suppo	ort Equipment -L		D11T - 11U			
Road Ma	-Du aintenance –Moto	r · · · ·	Г 14М			
Koad Wi			ter Tanker, 10,00	0 Gal.		
			,,,,,,,,, _			
Cost Breakdown:	Truck/Loa	der Team	Support	Equipment	Maint	enance Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	100	NA	3	35 35
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85.8	80 \$84.03
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21.1	4 \$38.03
%Utilization-riper:	NA	0	NA	NA	N	A NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.0	00 \$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.5	6 \$21.12
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135.5	50 \$143.18
Number of Units:	3	1	1	0		1 1
Group Subtotals:	Work:	\$1,568.54	Support:	\$588.55	Main	t: \$278.68

Total work team cost/hour: **<u>\$2,435.77</u>** 

### **MATERIAL QUANTITIES**

Initial volume:	28,040	CCY	Swell factor:	1.115	
Loose volume:	31,265	LCY			
Source of estimated volume:		Map 2.05.2-1	1, Division Volur	ne Estimates	
Source of	estimated swell factor:	Cat Handboo	ok		
Material Purchase Cost:		\$0.00			
	Total Cost:	\$0.00			

## **HOURLY PRODUCTION**

#### Truck Capacity:

Truck Par	yload (	(weight)	Basis:

ayioau (weigin) Dasi	5.	
Material weight:	2,100	Pounds/LCY
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

Payload Capacity:	95.24	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
J						
Final 7	ruck Volume I	Based on Number of I	Loader Passes:	67.20	LCY	
Loading Tool Capacity						
<u></u>			Buel	tet Size Class: N	IA	
Poted Conseitur	16 000	ICV (haanad)	Ducr			_
Rated Capacity: _ Bucket Fill Factor:	<u>16.000</u> 1.050	LCY (heaped) Moist loam or sa	ndy clay (1000	( 110%) 1.050		-
Adjusted Capacity:	16.800	LCY	iliuy ciay (100)	0 - 11070) 1.030		-
Aujusteu Capacity.	10.000					
Job Condition Corrections:		Site	e Altitude (ft.):	<u>5000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE	3)		
Job Efficiency:	0.830	0.830	(CAT HE	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	Ν	Number of Loading To	ol Passes Requ	uired to Fill		passes
		tunioer of Louding 10		Truck:	4	pubbeb
Excavators and Front Shovel	<u>s:</u>					
Machine Cycle Time vs						
Selected Value w	vithin this Basic	c Rating: NA				
Track Loaders –	Material Descri	ption:				
Cycle Time Elements (min.):						
Load: NA	М	aneuver: NA		Dump: 0.100	)	
				Dump. 0.100		
Wheel and Track	Loaders - Una	djusted Basic Loader	Cycle Time (lo	oad, dump,	.625 min	utes
			r	maneuver):		
Cycle Time Factors				Factor (min.)	Source	
Material:	Material 1/8'	" to 3/4" diameter -0.0	)2	-0.020	(Cat HB)	
Stockpile:	Conveyor or 0.00	dozer piled 10 ft. high	h and up	0.000	(Cat HB)	
Truck Ownership:	Common ow	mership of trucks and	loaders -	-0.040	(Cat HB)	_
	0.04					_
Operation:	Constant ope			-0.040	(Cat HB)	_
Dump Target:	Nominal targ		A	0.000	(Cat HB)	_
		Net Cycle Time	5	-0.100	_ minutes minutes	
		Adjusted Loader Net Load Tin		0.525	minutes	
		The Load Th	ie per fruek.	1.073		
<u>Truck Cycle Time:</u>						
Truck Exchange Time	: 0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
Truck Load Time	: 1.675	Minutes	Adjusted	for site altitude:	1.675	Minutes
Truck Maneuver and Dum	1.20	Minutes	Adjusted	for site altitude:	1.200	Minutes
Time			5	_		_

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

	Haul Route	:							
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	U	(Ft)		· /	(%)	(%)	(fpm)	Time	
		, í				· · ·	_	(min)	
	1	4200.	00	2.00	3.00	5.00	1550	2.917	
							2.015		
						Haul Time:	2.917	minutes	
	Return Rou	ite:					T		
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)			(%)	(%)	(fpm)	Time	
							-	(min)	
	1	4200.	00	-2.00	3.00	1.00	3503	1.392	
						Return Time:	1.392	minutes	
					Total Tm				
					Total In	ick Cycle Time:	7.984	minutes	
I	oading Too	l unit							
_	Produ		1,629.09	LCY/Hour		Adjusted for jo	ob efficiency.	1,352.15	LCY/Hour
Truck	Unit Produ	_	1,029.09			rujusteu tot je	bo enticiency.	1,552.15	
TTUCK		iction	505.01	LCY/Hour		A divisional form in	h officianov	410.16	LCY/Hour
		-	303.01			Adjusted for jo	bb efficiency.	419.16	
0	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1	2	$\mathbf{T}_{1}$ , $1$		C 1 1 N	ст. 1.	2	$\mathbf{T}_{1}$ , $1$
Optima	al No. of Tr	ucks:	3	Truck(s)		Selected Numb	er of Trucks:	3	Truck(s)
				Adjusted	hourly truck	team productio	n: 1,257	.47 LCY/H	lour
						team productio			
			A	ijusted multiple	truck/loader	r team productio	n: <b>1,257</b>	<b>.47</b> LCY/H	lour
	JOB TIM	E AN	D COST						
	Fleet		1	Team(s)	т	otal job time:	24.80	6 Hour	<b>*</b> C
	ricet	5120.	1	Team(s)	1	otar job time.	24.00		.0
	Unit	aost.	\$1.027	ЛСУ	-	Fotal ich acet	¢20 54	(1	
	Unit o		\$1.937	/LCY	l	Fotal job cost:	\$60,50	)1	

# TRUCK/LOADER TEAM WORK

Task description:       Replace Topsoil from Stockpile to Facilities Area							
Site: New Horizon No	Site:         New Horizon North Mine         Permit Action:         RN2				Permit/Jol	b#: <u>C</u>	2010089
PROJECT IDENT	<b>TIFICATION</b>						
Task #: 059		State: Colo	orado	Abł	previation:	None	
Date: 2/15/2	2022	County: Mor	trose		Filename:	059-R	N2
User: JHB							
Agency or o	organization nan	ne: DRMS					
HOURLY EQUIP	MENT COST	-		Shift ba	sis: <u>1 per da</u>	<u>iy</u>	
			Equipment Descr	iption			
Tr	uck Loader Tea		at 777F				
			AT 992K				
Suppor	rt Equipment -L		at D11T - 11U				
Pood Ma	-Du intenance –Moto	imp Area: N	A AT 14M				
Koau Ivia			ater Tanker, 10,00	0 Gal			
	,, , , , , , , , , , , , , , , , , , ,	ter fruek. W	ater Fanker, 10,00	0 0			
Cost Breakdown:	Truck/Loa	der Team	Support	Equipment	Mai	intenanc	e Equipment
	Truck	Loader	Load Area	Dump Area	Motor Grader		Vater Truck
%Utilization-machine:	100	100	100	NA		35	35
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85	5.80	\$84.03
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21	.14	\$38.03
%Utilization-riper:	NA	0	NA	NA		NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0	0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0	0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28	3.56	\$21.12
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135	5.50	\$143.18
Number of Units:	2	1	-	0		1	1
Group Subtotals:	Work:	\$1,219.95	Support:	\$588.55	Ma	int: §	5278.68

Total work team cost/hour: \$2,087.18

### **MATERIAL QUANTITIES**

Initial volume:	5,760	CCY Swell factor: 1.115
Loose volume:	6,422	LCY
Sourc	e of estimated volume:	Map 2.05.2-1, Division Volume Estimates
Source of	estimated swell factor:	Cat Handbook
Ν	Aaterial Purchase Cost:	\$0.00
	Total Cost:	\$0.00

## **HOURLY PRODUCTION**

#### Truck Capacity:

Truck Pa	yload (	(weight)	Basis:

ayload (weight) Dasi	3.	
Material weight:	2,100	Pounds/LCY
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

Payload Capacity:	95.24	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
	1 1 1 1 1					
	ruck Volume	Based on Number of L	oader Passes:	67.20	LCY	
Loading Tool Capacity						
			Buck	tet Size Class: N	IA	_
Rated Capacity:	16.000	LCY (heaped)				_
Bucket Fill Factor:	1.050	Moist loam or sa	ndy clay (100%	6 - 110%) 1.050		_
Adjusted Capacity:	16.800	LCY				
Job Condition Corrections:		Site	Altitude (ft.):	<u>5000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE			
	0.000	0.000	(011111			
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	1	Number of Loading To	ol Passes Requ	uired to Fill		passes
				Truck:	4	F
Excavators and Front Shovels	<u>s:</u>					
Machine Cycle Time vs. Selected Value w						
Track Loaders – M	Material Descr	iption:				
Cycle Time Elements (min.):		·				
Load: NA	N	Ianeuver: NA		Dump: 0.100	)	
Wheel and Track	Loaders - Una	adjusted Basic Loader	-	oad, dump, 0 naneuver):	.625 min	utes
Cuala Tima Eastara					Source	
Cycle Time Factors Material:	Matarial 1/8	" to 3/4" diameter -0.0	2	Factor (min.) -0.020	(Cat HB)	—
Stockpile:		dozer piled 10 ft. high				_
Stoenphe.	0.00	uozer pried to ta ingi	i unu up	0.000	(Cat HB)	
Truck Ownership:	Common ow	Common ownership of trucks and loaders -				_
Operation:	0.04 Constant ope	aration 0.04		-0.040	(Cat HB)	_
Dump Target:	Nominal tar			0.000	(Cat HB)	_
Dump Target.	Nominal tal	Net Cycle Time	Adjustment:	-0.100	minutes	_
		Adjusted Loader		0.525	minutes	
		Net Load Tim	•	1.675	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
•						_
Truck Load Time:	-	Minutes	e e	for site altitude:	1.675	Minutes
Truck Maneuver and Dump Time:		Minutes	Adjusted	for site altitude:	1.200	Minutes

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

	Haul Route	e:							
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	C	(Ft)			(%)	(%)	(fpm)	Time (min)	
	1	500.0	00	0.00	3.00	3.00	2409	0.644	
	Return Rou	ute:				Haul Time:	0.644	minutes	
	Seg #	1	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)			(%)	(%)	(fpm)	Time (min)	
	1	500.0	00	0.00	3.00	3.00	3503	0.414	
						Return Time:	0.414	minutes	5
					Total True	ck Cycle Time:	4.733	minutes	5
L	oading Too	ol unit							
-		uction	1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck	Unit Produ	uction				5 5	•	î	
			851.89	LCY/Hour		Adjusted for jo	ob efficiency:	707.07	LCY/Hour
Optima	al No. of Ti	rucks:	2	Truck(s)		Selected Numb	per of Trucks:	2	Truck(s)
				Adjusted	hourly truck	team productio	n: 1,414	.14 LCY/I	Hour
				Adjusted single	truck/loader	team productio	on: 1,352	LCY/I	Hour
			A	djusted multiple	truck/loader	team productio	n: <b>1,352</b>	LCY/I	Hour
:	JOB TIM	IE AN	<u>D COST</u>						
	Fleet	size:	1	Team(s)	Т	otal job time:	4.75	Hou	rs
	Unit	cost:	\$1.544	/LCY	Т	`otal job cost: _	\$9,91	4	

Basic Machine:       Cat D11T - 11U         Horsepower:       850         Blade Type:       Universal         Attachment:       NA         Shift Basis:       1 per day         Data Source:       (CGG)         'ord Breakdown:       \$274.04         Ownership Cost/Hour:       \$273.21         Ownership Cost/Hour:       \$273.21         Ripper own.       \$0.00         Cost/Hour:       \$0.00         Operator Cost/Hour:       \$2000         Operator Cost/Hour:       \$588.55         Total unit Cost/Hour:       \$588.55         Total veloct/Hour:       \$588.55         Total veloct/Hour:       \$588.55         Swell factor:       \$1,177.10         MATERIAL QUANTITIES       Swell factor:         Initial Volume:       \$6,210 LCY         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         factor:       100 feet         Unadjusted hourly       2.870.3 LCY/hr         production:       2.870.3 LCY/hr         Materials consistency       Consolidated stockpile 1.0         description:       0%         gradient:       0% <th>New Horizon North</th> <th>Mine</th> <th>Per</th> <th>mit Action:</th> <th>RN2</th> <th>Permit/Jo</th> <th>b#: <u>C2010089</u></th>	New Horizon North	Mine	Per	mit Action:	RN2	Permit/Jo	b#: <u>C2010089</u>
Date:       2/15/2022       County:       Montrose       Filename:       060-RN2         User:       JHB	PROJECT IDENTIF	<u>ICATIC</u>	<u>DN</u>				
User: IHB Agency or organization name: DRMS HOURLY EOUIPMENT COST Basic Machine: Cat D11T - 11U Horsepower: 850 Blade Type: Universal Attachment: NA Shift Basis: 1 per day Data Source: (CRG) Cost Breakdown: Ownership Cost/Hour: \$274.04 NA Operating Cost/Hour: \$2774.04 NA Operating Cost/Hour: \$2773.21 00 Ripper ovn. \$2000 NA Cost Houre: \$0.00 Operator Cost/Hour: \$41.30 NA Total unit Cost/Hour: \$588.55 Total Fleet Cost/Hour: \$588.55 Total Pleet Cost/Hour: \$588.55 Total Fleet Cost/Hour: \$588.55 Total Fleet Cost/Hour: \$588.55 Total Fleet Cost/Hour: \$1,177.10 MATERIAL OUANTITIES Initial Volume: \$.750 Swell factor: 1.115 Loose volume: 6.411 LCY Source of estimated swell Cat Handbook factor: HOURLY PRODUCTION Average push distance: 100 feet Unadjusted hourly 2,370.3 LCY/hr production: 100 Materials consistency Consolidated stockpile 1.0 description:	Task #: 060		State:	Colorado		Abbreviation:	None
Agency or organization name:       DRMS         HOURLY EQUIPMENT COST         Basic Machine:       Cat D11T - 11U         Horspowr:       850         Blade Type:       Universal         Attachnent:       NA         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       \$273.21         Ownership Cost/Hour:       \$273.21         Operating Cost/Hour:       \$273.21         Cost/Hour:       \$2000         Cost/Hour:       \$2000         Cost/Hour:       \$213.21         Operator Cost/Hour:       \$2000         Cost/Hour:       \$41.30         Total unit Cost/Hour:       \$588.55         Total unit Cost/Hour:       \$1,177.10         Materion:       6.111 LCY         Source of estimated swell       Cat Handbook         factor:       I.115         Lose volume:       6.411 LCY         Source of estimated swell       Cat Handbook         factor:       I.00 feet         Unadjusted hourly       2,870.3 LCY/hr         production:       Consolidated stockpile 1.0         description:       Consolidated stockpile 1.0		2	County:	Montrose		Filename:	060-RN2
HOURLY EQUIPMENT COST         Basic Machine: Cat D11T - 11U         Horsepower:       850         Blade Type:       Universal         Attachment:       NA         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown: <ul> <li>(CRG)</li> <li>Cost Breakdown:</li> <li>S273.21</li> <li>000</li> <li>NA</li> </ul> Operating Cost/Hour:       \$273.21       100         Ripper own.       \$0.00       NA         Cost/Hour:       \$50.00       0         Operator Cost/Hour:       \$50.00       0         Operator Cost/Hour:       \$588.55       0         Total unit Cost/Hour:       \$588.55       0         Total Fleet Cost/Hour:       \$1,177.10         MATERIAL QUANTITIES <ul> <li>Source of estimated volume:</li> <li>6.411 LCY</li> <li>Source of estimated swell</li> <li>Cat Handbook</li> <li>factor:</li> <li>IOD feet</li> <li>Unadjusted hourly</li> <li>2.870.3 LCY/hr</li> <li>production:</li> <li>Materials consistency</li> <li>Consolidated stockpile 1.0</li> <li>description:</li> <li>Materials consistency</li> <li>Consolidated stockpile 1.0</li> </ul>	User: JHB						
Basic Machine:       Cat D11T - 11U         Horsepower:       850         Blade Type:       Universal         Attachment:       NA         Attachment:       NA         Shift Basis:       1 per day         Data Source:       (CGG)         "Cost Breakdown:       \$273.21         Ownership Cost/Hour:       \$273.21         Operating Cost/Hour:       \$273.21         Cost/Hour:       \$200         Ripper own.       \$0.00         Cost/Hour:       \$0.00         Operator Cost/Hour:       \$588.55         Total unit Cost/Hour:       \$588.55         Total unit Cost/Hour:       \$588.55         Total unit Cost/Hour:       \$51.177.10         MATERIAL OUANTITIES       Source of estimated volume:         Source of estimated volume:       Map 2.05.3(3)-3         Cost of estimated swell       Cat Handbook         factor:	Agency or orga	anization	name: DR	MS			
Horsepower:       850         Blade Type:       Universal         Attachment:       NA         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:          Ownership Cost/Hour:       \$274.04       NA         Operating Cost/Hour:       \$273.21       100         Ripper own.       \$20.00       NA         Cost/Hour:       \$0.00       NA         Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$588.55       \$55         Total unit Cost/Hour:       \$588.55       \$57         Total Pleet Cost/Hour:       \$1,177.10         MATERIAL QUANTITIES       Swell factor:       \$1,177.10         Source of estimated volume:       Map 2.05.3(3)-3       \$50         Source of estimated volume:       Map 2.05.3(3)-3       \$50         Source of estimated swell       Cat Handbook       \$64         factor:	HOURLY EQUIPM	<u>ENT CO</u>	<u>DST</u>				
Horsepower:       850         Blade Type:       Universal         Attachment:       NA         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:          Ownership Cost/Hour:       \$274.04       NA         Operating Cost/Hour:       \$273.21       100         Ripper own.       \$20.00       NA         Cost/Hour:       \$0.00       NA         Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$588.55       \$55         Total unit Cost/Hour:       \$588.55       \$57         Total Pleet Cost/Hour:       \$1,177.10         MATERIAL QUANTITIES       Swell factor:       \$1,177.10         Source of estimated volume:       Map 2.05.3(3)-3       \$50         Source of estimated volume:       Map 2.05.3(3)-3       \$50         Source of estimated swell       Cat Handbook       \$64         factor:	Basic Machine: C	at D11T -	- 11U				
Blade Type:       Universal         Attachment:       NA         Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       (CRG)         Ownership Cost/Hour:       \$274.04       NA         Operating Cost/Hour:       \$273.21       100         Ripper own.       \$2000       NA         Cost/Hour:       \$273.21       100         Ripper op. Cost/Hour:       \$2000       NA         Ripper op. Cost/Hour:       \$30.00       0         Operator Cost/Hour:       \$588.55       NA         Total unit Cost/Hour:       \$588.55       NA         Total Pleet Cost/Hour:       \$1,177.10       NA         MATERIAL QUANTITIES       Initial Volume: $6,411$ LCY         Source of estimated volume:       Map 2.05.3(3)-3       Source of estimated swell         factor:			-				
Shift Basis:       1 per day         Data Source:       (CRG)         Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$274.04         Name       NA         Operating Cost/Hour:       \$273.21         Intication Cost/Hour:       \$0.00         Ripper own.       \$0.00         Cost/Hour:       \$0.00         Operator Cost/Hour:       \$0.00         Operator Cost/Hour:       \$588.55         Total unit Cost/Hour:       \$588.55         Total Unit Cost/Hour:       \$51,177.10         MATERIAL QUANTITIES		niversal					
Data Source:         (CRG)           Cost Breakdown:         Utilization %           Ownership Cost/Hour:         \$274.04         NA           Operating Cost/Hour:         \$273.21         100           Ripper own.         \$273.21         100           Ripper own.         \$200.00         NA           Cost/Hour:         \$0.00         NA           Operator Cost/Hour:         \$\$0.00         0           Operator Cost/Hour:         \$\$1.00         0           Operator Cost/Hour:         \$\$288.55         \$\$1.177.10           MATERIAL OUANTITIES         \$\$1.177.10         \$\$1.15           Initial Volume:         \$.750         \$\$1.15           Source of estimated volume:         Map 2.05.3(3)-3         \$\$200.00           Source of estimated swell         Cat Handbook         \$\$2.870.3 LCY/hr           factor:         2.870.3 LCY/hr         \$\$2.870.3 LCY/hr           production:         \$\$2.870.3 LCY/hr         \$\$\$2.870.3 LCY/hr           Materials consistency         Consolidated stockpile 1.0         \$	Attachment: N	A					
Cost Breakdown:       Utilization %         Ownership Cost/Hour:       \$274.04       NA         Operating Cost/Hour:       \$273.21       100         Ripper own.       \$0.00       NA         Cost/Hour:       \$0.00       NA         Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$588.55         Total unit Cost/Hour:       \$1,177.10         MATERIAL QUANTITIES         Initial Volume:       \$7,50         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         Materials consistency       Consolidated stockpile 1.0         description:       Consolidated stockpile 1.0         Average push       0 %         gradient:       0 %	Shift Basis: 1	per day					
Utilization %           Ownership Cost/Hour:         \$274.04         NA           Operating Cost/Hour:         \$273.21         100           Ripper own.         \$0.00         NA           Cost/Hour:         \$0.00         0           Ripper op. Cost/Hour:         \$0.00         0           Operator Cost/Hour:         \$\$0.00         0           Operator Cost/Hour:         \$\$1,177.10         NA           Total unit Cost/Hour:         \$\$258.55         \$\$1,177.10           MATERIAL OUANTITIES         \$\$1,115         \$\$1,115           Loose volume:         6,411 LCY         \$\$24.30-3           Source of estimated volume:         Map 2.05.3(3)-3         \$\$200000000000000000000000000000000000	Data Source: (C	CRG)					
Ownership Cost/Hour:         \$274.04         NA           Operating Cost/Hour:         \$273.21         100           Ripper own.         \$0.00         NA           Cost/Hour:         \$0.00         NA           Ripper op. Cost/Hour:         \$0.00         0           Operator Cost/Hour:         \$0.00         0           Operator Cost/Hour:         \$588.55         0           Total unit Cost/Hour:         \$588.55         0           Total Unit Cost/Hour:         \$588.55         0           MATERIAL QUANTITIES         \$1,177.10         0             Initial Volume:         \$.750           Swell factor:         1.115         0           Loose volume:         6.411 LCY           Source of estimated volume:         Map 2.05.3(3)-3           Source of estimated swell         Cat Handbook           factor:         0           HOURLY PRODUCTION         2,870.3 LCY/hr           Materials consistency         Consolidated stockpile 1.0           description:	Cost Breakdown:				Utilization %		
Operating Cost/Hour:         \$273.21         100           Ripper own. Cost/Hour:         \$0.00         NA           Ripper op. Cost/Hour:         \$0.00         0           Operator Cost/Hour:         \$\$0.00         0           Operator Cost/Hour:         \$\$588.55           Total unit Cost/Hour:         \$\$588.55           Total Fleet Cost/Hour:         \$\$1,177.10           MATERIAL QUANTITIES           Initial Volume:         \$,750           Swell factor:         1.115           Loose volume:         6,411 LCY           Source of estimated volume:         Map 2.05.3(3)-3           Source of estimated swell         Cat Handbook           factor:         100 feet           Unadjusted hourly production:         2,870.3 LCY/hr           Materials consistency description:         Consolidated stockpile 1.0           Average push distance:         Consolidated stockpile 1.0           Materials consistency description:         Consolidated stockpile 1.0	Ownership Cost/Hour	:		\$274.04			
Ripper own. Cost/Hour:       \$0.00       NA         Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$41.30       NA         Total unit Cost/Hour:       \$588.55         Total Unit Cost/Hour:       \$1,177.10         MATERIAL QUANTITIES         Initial Volume:       5,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         Materials consistency description:       Consolidated stockpile 1.0         Materials consistency description:       Consolidated stockpile 1.0         Average push gradient:       0 %							
Cost/Hour:       \$0.00       INA         Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$\$1,000       0         Total unit Cost/Hour:       \$\$588.55       Intial Cost/Hour:       \$\$1,177.10         MATERIAL QUANTITIES       Initial Volume:       \$5,750       Swell factor:       1.115         Loose volume:       6,411 LCY       Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook       Cat Handbook         factor:							
Ripper op. Cost/Hour:       \$0.00       0         Operator Cost/Hour:       \$\$41.30       NA         Total unit Cost/Hour:       \$\$588.55         Total Fleet Cost/Hour:       \$\$1,177.10         MATERIAL QUANTITIES         Initial Volume:       \$,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       100 feet         Unadjusted hourly       2,870.3 LCY/hr         production:       Consolidated stockpile 1.0         Materials consistency       Consolidated stockpile 1.0         Average push       0 %         gradient:       0 %				\$0.00	NA		
Operator Cost/Hour:       \$41.30       NA         Total unit Cost/Hour:       \$588.55         Total Fleet Cost/Hour:       \$1,177.10         MATERIAL QUANTITIES         Initial Volume:       5,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       100 feet         HOURLY PRODUCTION       2,870.3 LCY/hr         Average push distance:       100 feet         Unadjusted hourly       2,870.3 LCY/hr         production:       Consolidated stockpile 1.0         Average push       0 %         gradient:       0 %	Ripper op. Cost/Hour:	:		\$0.00	0		
Total unit Cost/Hour:       \$588.55         Total Fleet Cost/Hour:       \$1,177.10         MATERIAL QUANTITIES         Initial Volume:       5,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Materials consistency description:       Consolidated stockpile 1.0         Average push       0 %				\$41.30	NA		
Total Fleet Cost/Hour:       \$1,177.10         MATERIAL OUANTITIES         Initial Volume:       5,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Materials consistency       Consolidated stockpile 1.0         Materials consistency       Consolidated stockpile 1.0         Average push       0 %	Total unit Cost/Hour	\$588	55				
MATERIAL QUANTITIES         Initial Volume:       5,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Materials consistency       Consolidated stockpile 1.0         description:       0 %							
Initial Volume:       5,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION			7.10				
Initial Volume:       5,750         Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION	MATERIAL OUAN	FITIES					
Swell factor:       1.115         Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Unadjusted hourly       2,870.3 LCY/hr         production:       Consolidated stockpile 1.0         Average push       0 %         gradient:       0 %							
Loose volume:       6,411 LCY         Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION       Average push distance:         Unadjusted hourly       100 feet         production:       2,870.3 LCY/hr         Materials consistency       Consolidated stockpile 1.0         Average push       0 %	/			_			
Source of estimated volume:       Map 2.05.3(3)-3         Source of estimated swell       Cat Handbook         factor:       Cat Handbook         HOURLY PRODUCTION				_			
Source of estimated swell factor:       Cat Handbook         HOURLY PRODUCTION				_			
factor:	Source of estimated vo	lume:		- (- / -			
HOURLY PRODUCTION         Average push distance:       100 feet         Unadjusted hourly       2,870.3 LCY/hr         production:	Source of estimated sw	'ell	Cat Handb	ook			
Average push distance:       100 feet         Unadjusted hourly       2,870.3 LCY/hr         production:       2,870.3 LCY/hr         Materials consistency       Consolidated stockpile 1.0         Average push       0 %         gradient:       0 %	factor:						
Average push distance:       100 feet         Unadjusted hourly       2,870.3 LCY/hr         production:       2,870.3 LCY/hr         Materials consistency       Consolidated stockpile 1.0         Average push       0 %         gradient:       0 %							
Unadjusted hourly production:     2,870.3 LCY/hr       Materials consistency description:     Consolidated stockpile 1.0       Average push gradient:     0 %	HOURLY PRODUC	<u>TION</u>					
Unadjusted hourly production:     2,870.3 LCY/hr       Materials consistency description:     Consolidated stockpile 1.0       Average push gradient:     0 %	Average nush distance	:	100 feet				
production:		· _		/hr			
Materials consistency description:     Consolidated stockpile 1.0       Average push gradient:     0 %			_,070.5 LC I	. ,			
description:	DIOCHCHON	-					
description:	production:		Consoli	dated stockn	ile 1.0		
Average push     0 %       gradient:	-		Conson				
gradient:	Materials consistency						
gradient:	Materials consistency						
	Materials consistency description:	0 %					
	Materials consistency description: Average push	0 %					
	Materials consistency description: Average push		feet				
Material weight: 2,100 lbs/LCY	Materials consistency description: Average push gradient: Average site altitude:	5,000		_			

Weight description: Earth - Loam

Job Condition Correction Factor		Source
Operator Skill:	0.750	(AVG.)
Material consistency:	1.000	(CAT HB)
Dozing 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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.5453

Adjusted unit production:	1,565.17 LCY/hr
Adjusted fleet production:	<b>3130.34</b> LCY/hr

Fleet size:	2 Dozer(s)
Unit cost:	\$0.376/LCY

Total job time:	2.05 Hours
Total job cost:	\$2,411

# TRUCK/LOADER TEAM WORK

Task description:	Replace	Topsoil from S	Stockpile Overbu	rden Stockpile A	lre		
Site: New Horizon No.	orth Mine	Permit Ac	tion: RN2		Permit/Job	#: <u>C2010089</u>	
PROJECT IDEN	TIFICATION						
Task #: 061		State: Color	rado	Abł	previation:	None	
Date: 2/15/	2022	County: Mont	rose		Filename:	061-RN2	
User: JHB							
Agency or	organization nan	ne: DRMS					
HOURLY EQUI	PMENT COST	<u>.</u>		Shift ba	sis: <u>1 per day</u>	L	
			Equipment Descr	ription			
Т	ruck Loader Tea	m -Truck: Ca	t 777F	•			
			T 992K				
Suppo	ort Equipment -L		t D11T - 11U				
		mp Area: NA					
Road Ma	aintenance – Moto		T 14M	0.Cal			
	- w a	ter Truck: Wa	ater Tanker, 10,00	0 Gal.			
Cost Breakdown:	Truck/Loa	dor Toom	Support	Equipment	Mair	ntenance Equipm	ont
Cost Dieakuowii.	Truck	Loader	Load Area	Dump Area	Motor	Water True	
	TTUCK	Louder	Loud Thea	Dumpraea	Grader		
%Utilization-machine:	100	100	100	NA		35	35
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85.	80 \$84	.03
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21.	14 \$38	.03
%Utilization-riper:	NA	0	NA	NA	Ν	JA N	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.	00 \$0.	.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.	00 \$0.	.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.	56 \$21	.12
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135.	50 \$143	.18
Number of Units:	2	1	1	0		1	1
Group Subtotals:	Work:	\$1,219.95	Support:	\$588.55	Mai	nt: \$278.68	

Total work team cost/hour: \$2,087.18

## **MATERIAL QUANTITIES**

Initial volume:	9,830	CCY	Swell factor:	1.115	
Loose volume:	10,960	LCY			
Sourc	e of estimated volume:	Map 2.05.2-	-1, Division Volur	ne Estimates	
Source of	estimated swell factor:	Cat Handbo	ok		
Ν	Aterial Purchase Cost:	\$0.00			
	Total Cost:	\$0.00			

## **HOURLY PRODUCTION**

#### Truck Capacity:

Truck Pa	yload (	(weight)	Basis:

ayloau (weight) basi	<u>s.</u>	
Material weight:	2,100	Pounds/LCY
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

Truck Bed (volume) Basis:         Struck Volume:       60.60       LCY         Heaped Volume:       78.80       LCY         Average Volume:       69.70       LCY         Adjusted Volume:       78.80       LCY         Final Truck Volume Based on Number of Loader Passes:       67.20       LCY         Loading Tool Capacity       Eucket Size Class:       NA         Rated Capacity:       16.000       LCY (heaped)         Bucket Fill Factor:       1.050       Moist loam or sandy clay (100% - 110%) 1.050         Adjusted Capacity:       16.800       LCY	
Struck Volume:       60.60       LCY         Heaped Volume:       78.80       LCY         Average Volume:       69.70       LCY         Adjusted Volume:       78.80       LCY         Final Truck Volume Based on Number of Loader Passes:       67.20       LCY         Loading Tool Capacity       Intervention       Bucket Size Class:       NA         Rated Capacity:       16.000       LCY (heaped)       Intervention       Intervention         Bucket Fill Factor:       1.050       Moist loam or sandy clay (100% - 110%) 1.050       Intervention       Intervention         Adjusted Capacity:       16.800       LCY       Intervention       Intervention	
Struck Volume:       60.60       LCY         Heaped Volume:       78.80       LCY         Average Volume:       69.70       LCY         Adjusted Volume:       78.80       LCY         Final Truck Volume Based on Number of Loader Passes:       67.20       LCY         Loading Tool Capacity       Bucket Size Class:       NA         Rated Capacity:       16.000       LCY (heaped)         Bucket Fill Factor:       1.050       Moist loam or sandy clay (100% - 110%) 1.050         Adjusted Capacity:       16.800       LCY	
Heaped Volume:       78.80       LCY         Average Volume:       69.70       LCY         Adjusted Volume:       78.80       LCY         Final Truck Volume Based on Number of Loader Passes:       67.20       LCY         Loading Tool Capacity       LCY       Bucket Size Class:       NA         Rated Capacity:       16.000       LCY (heaped)       1.050       Moist loam or sandy clay (100% - 110%) 1.050         Adjusted Capacity:       16.800       LCY       LCY	
Average Volume:       69.70       LCY         Adjusted Volume:       78.80       LCY         Final Truck Volume Based on Number of Loader Passes:       67.20       LCY         Loading Tool Capacity       Bucket Size Class:       NA         Rated Capacity:       16.000       LCY (heaped)         Bucket Fill Factor:       1.050       Moist loam or sandy clay (100% - 110%) 1.050         Adjusted Capacity:       16.800       LCY	
Adjusted Volume:       78.80       LCY         Final Truck Volume Based on Number of Loader Passes:       67.20       LCY         Loading Tool Capacity         Bucket Size Class:       NA         Rated Capacity:         16.000       LCY (heaped)         Bucket Fill Factor:       1.050       Moist loam or sandy clay (100% - 110%) 1.050         Adjusted Capacity:       16.800       LCY	
Loading Tool Capacity       Bucket Size Class:       NA         Rated Capacity:       16.000       LCY (heaped)         Bucket Fill Factor:       1.050       Moist loam or sandy clay (100% - 110%) 1.050         Adjusted Capacity:       16.800       LCY	
Loading Tool Capacity       Bucket Size Class:       NA         Rated Capacity:       16.000       LCY (heaped)         Bucket Fill Factor:       1.050       Moist loam or sandy clay (100% - 110%) 1.050         Adjusted Capacity:       16.800       LCY	
Bucket Size Class:NARated Capacity:16.000LCY (heaped)Bucket Fill Factor:1.050Moist loam or sandy clay (100% - 110%) 1.050Adjusted Capacity:16.800LCY	
Bucket Size Class:NARated Capacity:16.000LCY (heaped)Bucket Fill Factor:1.050Moist loam or sandy clay (100% - 110%) 1.050Adjusted Capacity:16.800LCY	
Rated Capacity:16.000LCY (heaped)Bucket Fill Factor:1.050Moist loam or sandy clay (100% - 110%) 1.050Adjusted Capacity:16.800LCY	
Bucket Fill Factor:1.050Moist loam or sandy clay (100% - 110%) 1.050Adjusted Capacity:16.800LCY	
Adjusted Capacity: 16.800 LCY	
Job Condition Corrections: Site Altitude (ft.): 5000 feet	
Truck Loader Source	
Altitude Adj: 1.000 1.000 (CAT HB)	
Job Efficiency:         0.830         0.830         (CAT HB)	
Net Correction:         0.830         0.830	
Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill pas	sses
Truck:	3303
Excavators and Front Shovels:	
Machine Cycle Time vs. Job Condition Rating: NA	
Selected Value within this Basic Rating: NA	
Track Loaders – Material Description:	
Cycle Time Elements (min.):	
Load:   NA   Maneuver:   NA   Dump:   0.100	
Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, 0,625, minutes	es
0.625	
maneuver):	
maneuver):	
Cycle Time Factors Factor (min.) Source	
Cycle Time Factors     Factor (min.)     Source       Material:     Material 1/8" to 3/4" diameter -0.02     -0.020     (Cat HB)	
Cycle Time Factors       Factor (min.)       Source         Material:       Material 1/8" to 3/4" diameter -0.02       -0.020       (Cat HB)         Stockpile:       Conveyor or dozer piled 10 ft. high and up 0.00       0.000       (Cat HB)	
Cycle Time Factors       Factor (min.)       Source         Material:       Material 1/8" to 3/4" diameter -0.02       -0.020       (Cat HB)         Stockpile:       Conveyor or dozer piled 10 ft. high and up 0.00       0.000       (Cat HB)         Truck Ownership:       Common ownership of trucks and loaders -       -0.040       (Cat HB)	
Cycle Time FactorsFactor (min.)SourceMaterial:Material 1/8" to 3/4" diameter -0.02-0.020(Cat HB)Stockpile:Conveyor or dozer piled 10 ft. high and up 0.000.000(Cat HB)Truck Ownership:Common ownership of trucks and loaders - 0.04-0.040(Cat HB)	
Cycle Time FactorsFactor (min.)SourceMaterial:Material 1/8" to 3/4" diameter -0.02-0.020(Cat HB)Stockpile:Conveyor or dozer piled 10 ft. high and up 0.000.000(Cat HB)Truck Ownership:Common ownership of trucks and loaders - 0.04-0.040(Cat HB)Operation:Constant operation -0.04-0.040(Cat HB)	
Cycle Time FactorsFactor (min.)SourceMaterial:Material 1/8" to 3/4" diameter -0.02-0.020(Cat HB)Stockpile:Conveyor or dozer piled 10 ft. high and up 0.000.000(Cat HB)Truck Ownership:Common ownership of trucks and loaders - 0.04-0.040(Cat HB)Operation:Constant operation -0.04-0.040(Cat HB)Dump Target:Nominal target 0.000.000(Cat HB)	
Cycle Time FactorsFactor (min.)SourceMaterial:Material 1/8" to 3/4" diameter -0.02-0.020(Cat HB)Stockpile:Conveyor or dozer piled 10 ft. high and up 0.000.000(Cat HB)Truck Ownership:Common ownership of trucks and loaders - 0.04-0.040(Cat HB)Operation:Constant operation -0.04-0.040(Cat HB)Dump Target:Nominal target 0.000.000(Cat HB)Net Cycle Time Adjustment:-0.100	
maneuver):Cycle Time FactorsFactor (min.)SourceMaterial:Material 1/8" to 3/4" diameter -0.02-0.020(Cat HB)Stockpile:Conveyor or dozer piled 10 ft. high and up 0.000.000(Cat HB)Truck Ownership:Common ownership of trucks and loaders - 0.04-0.040(Cat HB)Operation:Constant operation -0.04-0.040(Cat HB)Dump Target:Nominal target 0.000.000(Cat HB)Net Cycle Time Adjustment: Adjusted Loader Cycle Time:-0.100minutesMinutesMaterial to adder Cycle Time:0.525minutes	
Cycle Time FactorsFactor (min.)SourceMaterial:Material 1/8" to 3/4" diameter -0.02-0.020(Cat HB)Stockpile:Conveyor or dozer piled 10 ft. high and up 0.000.000(Cat HB)Truck Ownership:Common ownership of trucks and loaders - 0.04-0.040(Cat HB)Operation:Constant operation -0.04-0.040(Cat HB)Dump Target:Nominal target 0.000.000(Cat HB)Net Cycle Time Adjustment:-0.100	
Cycle Time FactorsFactor (min.)SourceMaterial:Material 1/8" to 3/4" diameter -0.02-0.020(Cat HB)Stockpile:Conveyor or dozer piled 10 ft. high and up 0.000.000(Cat HB)Truck Ownership:Common ownership of trucks and loaders - 0.04-0.040(Cat HB)Operation:Constant operation -0.04-0.040(Cat HB)Dump Target:Nominal target 0.000.000(Cat HB)Net Cycle Time Adjustment: Adjusted Loader Cycle Time: Net Load Time per Truck:-0.100minutesMaterial:Net Load Time per Truck:1.675minutes	
Cycle Time Factors       Factor (min.)       Source         Material:       Material 1/8" to 3/4" diameter -0.02       -0.020       (Cat HB)         Stockpile:       Conveyor or dozer piled 10 ft. high and up 0.00       0.000       (Cat HB)         Truck Ownership:       Common ownership of trucks and loaders - 0.04       -0.040       (Cat HB)         Operation:       Constant operation -0.04       -0.040       (Cat HB)         Dump Target:       Nominal target 0.00       0.000       (Cat HB)         Net Cycle Time Adjustment:       -0.100       minutes         Adjusted Loader Cycle Time:       0.525       minutes         Net Load Time per Truck:       1.675       minutes	Minutes
Cycle Time Factors       Factor (min.)       Source         Material:       Material 1/8" to 3/4" diameter -0.02       -0.020       (Cat HB)         Stockpile:       Conveyor or dozer piled 10 ft. high and up       0.000       (Cat HB)         Truck Ownership:       Common ownership of trucks and loaders -       -0.040       (Cat HB)         Operation:       Constant operation -0.04       -0.040       (Cat HB)         Dump Target:       Nominal target 0.00       0.000       (Cat HB)         Net Cycle Time Adjustment:       -0.100       minutes         Adjusted Loader Cycle Time:       0.525       minutes         Net Load Time per Truck:       1.675       minutes         Truck Exchange Time:       0.80       Minutes       Adjusted for site altitude:       0.800       N	Minutes Minutes
Cycle Time Factors       Factor (min.)       Source         Material:       Material 1/8" to 3/4" diameter -0.02       -0.020       (Cat HB)         Stockpile:       Conveyor or dozer piled 10 ft. high and up 0.00       0.000       (Cat HB)         Truck Ownership:       Common ownership of trucks and loaders - 0.04       -0.040       (Cat HB)         Operation:       Constant operation -0.04       -0.040       (Cat HB)         Dump Target:       Nominal target 0.00       0.000       (Cat HB)         Net Cycle Time Adjustment:       -0.100       minutes         Adjusted Loader Cycle Time:       0.525       minutes         Net Load Time per Truck:       1.675       minutes         Truck Exchange Time:       0.80       Minutes       Adjusted for site altitude:       0.800       M         Truck Load Time:       1.675       Minutes       Adjusted for site altitude:       1.675       M	

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

	Haul Route	e:							
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	U	(Ft)			(%)	(%)	(fpm)	Time	
		· · /						(min)	
	1	1400.	00	0.00	3.00	3.00	2409	1.017	
						<b>TT</b> 100	4.04	•	
						Haul Time:	1.017	minute	S
	Return Rou	1		1					
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)			(%)	(%)	(fpm)	Time	
	-	1.400	0.0	0.00	2 0 0	2.00	2502	(min)	
	1	1400.	00	0.00	3.00	3.00	3503	0.671	
						Return Time:	0.671	minut	20
					Total Tm	ck Cycle Time:			
					Total IIu	ick Cycle Time.	5.303		28
L	oading Too	olunit							
2		uction	1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck	Unit Produ		1,029.09			rajusted for j	ob efficiency.	1,352.15	
TTUCK		letion	751.82	LCY/Hour		Adjusted for jo	oh officianaw	624.01	LCY/Hour
		-	731.82			Aujusteu tot jo	bb efficiency.	024.01	
	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	1	2			C 1 / 1NL 1	6 77 1	2	<b>T</b> 1()
Optima	al No. of Tr	rucks:	2	Truck(s)		Selected Numb	ber of Trucks:	2	Truck(s)
				Adjusted	hourly truck	team productio	on: 1,248	102 LCV	/Hour
				•	•	-			/Hour
				Adjusted single					
			A	djusted multiple	truck/loader	team productio	on: <b>1,248</b>	5.02 LCY	/Hour
	JOB TIM	IE AN	D COST						
	Fleet	size:	1	Team(s)	Т	otal job time:	8.78	Но	ours
						-			
	Unit	cost:	\$1.672	/LCY	Т	Total job cost:	\$18,33	30	
		_					,		

#### TRUCK/LOADER TEAM WORK

Task description:   Replace Topsoil from Stockpile to West Haul Road										
Site: New Horizon No	orth Mine	Permit Act	tion: <u>RN2</u>		Permit/Job	#: <u>C2010089</u>				
PROJECT IDENTIFICATION										
Task #: 062		State: Colora	ado	Abb	previation:	None				
Date: 2/15/2	2022	County: Monti	ose		Filename:	062-RN2				
User: JHB										
Agency or organization name: DRMS										
HOURLY EQUIPMENT COST Shift basis: <u>1 per day</u>										
			Equipment Descr	iption						
Т	ruck Loader Tear		777F							
			T 992K							
Suppo	ort Equipment -L		D11T - 11U							
Road Ma	intenance – Moto	r	T 14M							
Road Ma			ter Tanker, 10,00	0 Gal.						
Cost Breakdown:	Truck/Loa	der Team	Support	Equipment	Mair	ntenance Equipment				
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck				
%Utilization-machine:	100	100	100	NA		35 35				
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85.	80 \$84.03				
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21.	14 \$38.03				
%Utilization-riper:	NA	0	NA	NA	Ν	NA NA				
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.	00 \$0.00				
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.	00 \$0.00				
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.	56 \$21.12				
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135.	50 \$143.18				
Number of Units:	3	1	1	0		1 1				
Group Subtotals:	Work:	\$1,568.54	Support:	\$588.55	Mai	nt: \$278.68				

Total work team cost/hour: \$2,435.77

#### **MATERIAL QUANTITIES**

7,684	CCY Swell fac	tor: 1.115
8,568	LCY	
e of estimated volume:	Map 2.05.2-1, Division	Volume Estimates
estimated swell factor:	Cat Handbook	
Aaterial Purchase Cost:	\$0.00	
Total Cost:	\$0.00	
	8,568 e of estimated volume: estimated swell factor: Material Purchase Cost:	8,568LCYwe of estimated volume: estimated swell factor: Material Purchase Cost:Map 2.05.2-1, Division V Cat Handbook \$0.00

## **HOURLY PRODUCTION**

#### Truck Capacity: <u>Truck Payload (weight) Basis:</u> Material weight: 2,100

Material weight:	2,100	Pounds/LCY
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

	95.24	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
-		-				
Fina	l Truck Volume	e Based on Number of	f Loader Passes:	67.20	LCY	
Loading Tool Capacity						
			Buch	ket Size Class: N	JA	
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:	1.050		sandy clay (100%	<u>% - 110%) 1 050</u>		_
Adjusted Capacity:	16.800	LCY	sandy endy (1007	0 110/0/1.050		_
Rajusted Capacity.	10.000					
Job Condition Correction	<u>s:</u>	S	Site Altitude (ft.):	<u>5000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HI	3)		
Job Efficiency:	0.830	0.830	(CAT HI	3)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time	•	Number of Loading	Tool Passes Regi	uired to Fill		passes
		Trainoer of Loading		Truck:	4	pubbeb
Excavators and Front Show	<u>vels:</u>					
Machine Cycle Time						
Selected Value	e within this Bas	sic Rating: NA				
Track Loaders	– Material Desc	cription:				
Track Loaders Cycle Time Elements (min		cription:				
Cycle Time Elements (min	):			Dump: 0.10	0	
	):	cription: Maneuver:NA		Dump:0.10	0	
Cycle Time Elements (min Load: <u>NA</u>	):		er Cycle Time (le	pad dump	mi	nutes
Cycle Time Elements (min Load: <u>NA</u>	):	Maneuver: NA	-	pad dump		nutes
Cycle Time Elements (min Load: <u>NA</u>	):  .ck Loaders - Ui	Maneuver: NA	-	pad, dump,	mi	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia	): 	Maneuver: NA nadjusted Basic Load	0.02	pad, dump, (maneuver):	).625 min	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor	): 	Maneuver: NA nadjusted Basic Load	0.02	Dad, dump, naneuver): Factor (min.)	0.625 min Source	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia	): uck Loaders - Un s L: Material 1/ :: Conveyor o 0.00	Maneuver: NA nadjusted Basic Load	0.02 igh and up	Dad, dump, maneuver):( Factor (min.) -0.020 0.000	0.625 min Source (Cat HB) (Cat HB)	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership	): s Material 1/ Conveyor of 0.00 Common of 0.04	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter - or dozer piled 10 ft. h ownership of trucks ar	0.02 igh and up	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB)	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04	0.02 igh and up	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes 
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load '8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04 urget 0.00	D.02 igh and up nd loaders -	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load '8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04 irget 0.00 Net Cycle Tir	D.02 igh and up nd loaders - ne Adjustment:	Dad, dump, naneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	D.02 igh and up nd loaders - ne Adjustment: er Cycle Time:	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100 0.525	0.625 minutes minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership Operatior	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	D.02 igh and up nd loaders - ne Adjustment:	Dad, dump, naneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100	0.625 min Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership <u>Operatior</u> Dump Targe	): s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	D.02 igh and up nd loaders - ne Adjustment: er Cycle Time:	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100 0.525	0.625 minutes minutes	nutes
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra <u>Cycle Time Factor</u> <u>Materia</u> Stockpile Truck Ownership <u>Operatior</u> Dump Targe	): ick Loaders - Un s : Material 1/ : Conveyor of 0.00 : Common of 0.04 : Constant of : Nominal ta	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load	0.02 igh and up nd loaders - ne Adjustment: er Cycle Time: 'ime per Truck:	Dad, dump, maneuver):( Factor (min.) -0.020 0.000 -0.040 -0.040 0.000 -0.100 0.525	0.625 minutes minutes	nutes 
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia Stockpile Truck Ownership Operatior Dump Targe	): uck Loaders - Un s Material 1/ Conveyor of 0.00 Common of 0.04 Constant of Nominal ta	Maneuver: NA nadjusted Basic Load /8" to 3/4" diameter -0 or dozer piled 10 ft. h ownership of trucks ar peration -0.04 rget 0.00 Net Cycle Tir Adjusted Load Net Load T	D.02 igh and up nd loaders - me Adjustment: er Cycle Time: Time per Truck: Adjusted	raneuver):	0.625 minutes minutes	
Cycle Time Elements (min Load: <u>NA</u> Wheel and Tra Cycle Time Factor Materia Stockpile Truck Ownership Operation Dump Targe Truck Exchange Tin	): 	Maneuver: NA nadjusted Basic Load '8" to 3/4" diameter -( or dozer piled 10 ft. h ownership of trucks ar peration -0.04 urget 0.00 Net Cycle Tir Adjusted Load Net Load T Minutes	D.02 igh and up nd loaders - ne Adjustment: er Cycle Time: 'ime per Truck: Adjusted Adjusted	raneuver):	0.625 minutes Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) 0.800	    Minutes

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

Ha	aul Route:								
S	Seg #	Haul l	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	C	(Ft)			(%)	(%)	(fpm)	Time	
		` ´				(/-//	(	(min)	
1	1	3000.	00	2.00	3.00	5.00	1550	2.142	
						Haul Time:	2.142	minutes	2
Re	eturn Rout	e:							
	Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	6	(Ft)			(%)	(%)	(fpm)	Time	
		2000			2.00	1.00	_	(min)	
1		3000.	00	-2.00	3.00	1.00	3503	1.049	
						Return Time:	1.049	minute	s
					Total Tru	ick Cycle Time:			s
						·			
Loa	ding Tool								
	Produc	_	1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck U	nit Produc	ction							
		-	587.24	LCY/Hour		Adjusted for jo	ob efficiency:	487.41	LCY/Hour
Ontimal	No. of Tru	aka	3	Truck(s)		Selected Numb	or of Trucker	3	Truck(a)
Optimar	NO. OF TTU	icks:	3			Selected Nullid	er of Trucks:	3	Truck(s)
				Adjusted	hourly truck	team productio	n: 1,462	.23 LCY/	Hour
				Adjusted single	truck/loade	r team productio	n: 1,352	.15 LCY/	Hour
						r team productio		.15 LCY/	Hour
				5 1		1			
<u>J(</u>	OB TIMI	E ANI	D COST						
	Fleet si	ze:	1	Team(s)	Т	Total job time:	6.34	Ho	urs
	Unit co	ost:	\$1.801	/LCY	r	Fotal job cost:	\$15,43	34	

#### TRUCK/LOADER TEAM WORK

Task description:	Replace	e Topsoil	from S	tockpile to Soutl	n Acces Road				
Site: New Horizon	North Mine	Per	mit Act	tion: RN2		Permit/Jo	b#:	C2010089	
PROJECT IDE	NTIFICATION								
Task #: 064	1	State:	Colora	ado	Abb	Abbreviation: None			
Date: 2/1	5/2022	County:	Montr	ose		Filename:	ne: 064-RN2		
User: JH	В								
Agency	or organization nar	ne: DR	MS						
HOURLY EQU	IPMENT COST	2			Shift ba	sis: <u>1 per da</u>	<u>ıy</u>		
			]	Equipment Descr	iption				
	Truck Loader Tea	m -Truck:		777F	1				
		-Loader:		Т 992К					
Sup	port Equipment -L			D11T - 11U					
		imp Area:							
Road N	Maintenance – Moto			T 14M	0.0.1				
	-wa	ter Truck:	wa	ter Tanker, 10,00	0 Gal.				
Cost Breakdown:	Truck/Loa	dor Toom		Support	Equipment	Mai	ntono	nce Equipment	
COSt DI Cakuowii.	Truck	Loader		Load Area	Dump Area	Motor	шепа	Water Truck	
	THUCK	Louder		Loud Micu	Dump Theu	Grader			
%Utilization-machine:	100		100	100	NA		35	35	
Ownership cost/hour:	\$175.01	\$2	90.33	\$274.04	NA	\$85	5.80	\$84.03	
Operating cost/hour:	\$139.87	\$1	91.73	\$273.21	NA	\$21	.14	\$38.03	
%Utilization-riper:	NA		0	NA	NA		NA	NA	
Ripper own. cost/hour:	NA		\$0.00	\$0.00	NA	\$C	0.00	\$0.00	
Ripper op. cost/hour:	NA		\$0.00	\$0.00	NA	\$0	0.00	\$0.00	
Operator cost/hour:	\$33.71	\$	40.71	\$41.30	NA	\$28	3.56	\$21.12	
Unit Subtotals:	\$348.59	\$5	22.77	\$588.55	NA	\$135	5.50	\$143.18	
Number of Units:			1	1	0		1	1	
Group Subtotals:		\$1,568.		Support:	\$588.55	Ma		\$278.68	

Total work team cost/hour: **<u>\$2,435.77</u>** 

#### **MATERIAL QUANTITIES**

CCY Swell factor: 1.115
LCY
PR-1, Map 2.05.3(3)-3
Cat Handbook
\$0.00
\$0.00
]

## **HOURLY PRODUCTION**

Truck Capacity: Truck Payload (weight) Basis:

Material weight:	2,100	Pounds/LCY
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

	city:	95.24		LCY						
Truck Bed (volume) Ba	acie.									
Struck Volur		60.60	LCY							
Heaped Volur		78.80	LCY							
Average Volur		69.70	LCY							
Adjusted Volur		78.80	LCY							
-										
	Final Tr	ruck Volume	Based on I	Number of L	Loader Passes:	67.	20	LCY		
Loading Tool Capacity										
					Buc	ket Size Cla	ss: NA	<b>`</b>		
Rated Capac	vity.	16.000		(heaped)	Due		55. <u>11</u>	1		
Bucket Fill Fac		1.050			ndy clay (100	% - 110%) 1	050			
Adjusted Capa		16.800	LCY		indy endy (100	/0 110/0/1	.050			
Augusted Cupu		10.000								
Job Condition Correc	tions:			Site	e Altitude (ft.)	5000 feet				
		Truck	Lo	ader	Source					
Altitude Adj	:	1.000	1.	.000	(CAT H	B)				
Job Efficiency	:	0.830	0.	.830	(CAT H	B)				
		0.020								
Net Correction:		0.830	0.	.830						
Loading Tool Cycle	Time:		Number of	Loading To	ol Passes Req	uired to Fill			n	asses
								4	г	
Encountere and Encot	71 1	_				Truck:				
Excavators and Front S		_				Truck:			<u> </u>	
Machine Cycle T	ime vs.	Job Conditio	-	NA		Truck:				
Machine Cycle T	ime vs.	_	-	NA NA		Truck:				
Machine Cycle T Selected V	ime vs. alue wi	Job Conditio	c Rating:			Truck:				
Machine Cycle T Selected V	ime vs. Talue wi lers – M	Job Conditio thin this Basi	c Rating:			Truck:				
Machine Cycle T Selected V Track Load Cycle Time Elements (	ime vs. Talue wi lers – M	Job Conditio thin this Basi laterial Descr	c Rating:	NA			0.100			
Machine Cycle T Selected V Track Load	ime vs. Talue wi lers – M	Job Conditio thin this Basi laterial Descr	c Rating:			Truck:	0.100		 	
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u>	ime vs. Talue wi lers – M min.):	Job Conditio thin this Basi laterial Descr	c Rating: iption: Ianeuver:	NA	Cycle Time (1	Dump:		525	minu	tes
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u>	ime vs. Talue wi lers – M min.):	Job Conditio thin this Basi laterial Descr	c Rating: iption: Ianeuver:	NA	-	Dump:		525	minu	tes
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u>	ime vs. 'alue wi lers – M min.):	Job Conditio thin this Basi laterial Descr	c Rating: iption: Ianeuver:	NA	-	Dump: oad, dump,	0.6	525 Sour		tes
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and Cycle Time Fa	ime vs. 'alue wi lers – M min.):	Job Conditio thin this Basi laterial Descr	c Rating: iption: Ianeuver: adjusted B	NA NA asic Loader		Dump: oad, dump, maneuver):	0.6 		ce	tes
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> Mat	ime vs. 'alue wi lers – M min.): Track l	Job Conditio thin this Basi faterial Descr Loaders - Un <u>Material 1/8</u> Conveyor o	c Rating: iption: Ianeuver: adjusted B " to 3/4" c	NA NA asic Loader liameter -0.0	)2	Dump: oad, dump, maneuver):	0.6 nin.) 0	Sour	ce IB)	tes -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> Mat	ime vs. 'alue wi lers – M min.): Track 1 ctors erial: spile:	Job Conditio thin this Basi faterial Descr 	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pilo	NA NA asic Loader liameter -0.0 ed 10 ft. higl	)2 h and up	Dump: oad, dump, maneuver): Factor (n -0.02 0.00	0.6 nin.) 0	Sour (Cat H (Cat H	ce IB) IB)	tes - -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl	ime vs. 'alue wi lers – M min.): 'Track ' ctors erial: cpile: ship:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o	NA NA asic Loader liameter -0.0 ed 10 ft. higl f trucks and	)2 h and up	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04	0.6 nin.) 0 0	Sour (Cat H (Cat H (Cat H	ce IB) IB) IB)	tes 
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl Truck Owner	ime vs. 'alue wi lers – M min.): 'Track ' ctors erial: cpile: ship: ttion:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04 Constant op	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o eration -0.	NA NA asic Loader liameter -0.0 ed 10 ft. higl f trucks and	)2 h and up	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04 -0.04	0.6 nin.) 0 0 0	Sour (Cat H (Cat H (Cat H (Cat H	ce IB) IB) IB) IB)	tes - -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl	ime vs. 'alue wi lers – M min.): 'Track ' ctors erial: cpile: ship: ttion:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o <u>eration -0.</u> get 0.00	NA NA asic Loader liameter -0.0 ed 10 ft. high f trucks and 04	)2 h and up loaders -	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04 -0.04 0.00	0.6 nin.) 0 0 0 0 0	Sour (Cat H (Cat H (Cat H (Cat H (Cat H	ce IB) IB) IB) IB) IB)	tes - - -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl Truck Owner	ime vs. 'alue wi lers – M min.): 'Track ' ctors erial: cpile: ship: ttion:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04 Constant op	c Rating: iption: Ianeuver: adjusted B " to 3/4" c r dozer pile vnership o eration -0. get 0.00 Net	NA NA asic Loader liameter -0.0 ed 10 ft. high f trucks and 04 Cycle Time	)2 h and up loaders - Adjustment:	Dump: oad, dump, maneuver): Factor (n -0.02 0.00 -0.04 -0.04 0.00 -0.10	0.6 min.) 0 0 0 0 0 0 0 0 0 0	Sour (Cat F (Cat F (Cat F (Cat F (Cat F (Cat F	ce IB) IB) IB) IB) IB) tes	tes - - -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl Truck Owner	ime vs. 'alue wi lers – M min.): 'Track ' ctors erial: cpile: ship: ttion:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04 Constant op	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o eration -0. get 0.00 Net Adju	NA NA asic Loader liameter -0.0 ed 10 ft. high f trucks and 04 Cycle Time sted Loader	)2 h and up loaders - Adjustment: Cycle Time:	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04 -0.04 0.00 -0.10 0.52	0.6 min.) 0 0 0 0 0 0 5	Sour (Cat F (Cat F (Cat F (Cat F (Cat F minut minut	ce IB) IB) IB) IB) IB) tes tes	tes - - -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl Truck Owner	ime vs. 'alue wi lers – M min.): 'Track ' ctors erial: cpile: ship: ttion:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04 Constant op	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o eration -0. get 0.00 Net Adju	NA NA asic Loader liameter -0.0 ed 10 ft. high f trucks and 04 Cycle Time sted Loader	)2 h and up loaders - Adjustment:	Dump: oad, dump, maneuver): Factor (n -0.02 0.00 -0.04 -0.04 0.00 -0.10	0.6 min.) 0 0 0 0 0 0 5	Sour (Cat F (Cat F (Cat F (Cat F (Cat F (Cat F	ce IB) IB) IB) IB) IB) tes tes	tes - - -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl Truck Owner <u>Opera</u> Dump Ta	ime vs. 'alue wi lers – M min.): 'Track ' ctors erial: cpile: ship: ttion:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04 Constant op	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o eration -0. get 0.00 Net Adju	NA NA asic Loader liameter -0.0 ed 10 ft. high f trucks and 04 Cycle Time sted Loader	)2 h and up loaders - Adjustment: Cycle Time:	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04 -0.04 0.00 -0.10 0.52	0.6 min.) 0 0 0 0 0 0 5	Sour (Cat F (Cat F (Cat F (Cat F (Cat F minut minut	ce IB) IB) IB) IB) IB) tes tes	tes - - -
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl Truck Owner	ime vs. 'alue wi lers – N min.): Track ctors erial: cpile: ship: ttion: urget:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04 Constant op	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o eration -0. get 0.00 Net Adju	NA NA asic Loader liameter -0.0 ed 10 ft. high f trucks and 04 Cycle Time sted Loader let Load Tin	)2 h and up loaders - Adjustment: Cycle Time: he per Truck:	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04 -0.04 0.00 -0.10 0.52	0.6 min.) 0 0 0 0 0 0 5 5 5	Sour (Cat F (Cat F (Cat F (Cat F (Cat F minut minut	ce IB) IB) IB) IB) IB) tes tes	tes 
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and Cycle Time Fa Mat Stocl Truck Owner Opera Dump Ta	ime vs. alue wi lers – M min.): Track ctors erial: cpile: ship: tion: urget: e Time:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor or 0.00 Common ov 0.04 Constant op Nominal tar	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o eration -0. get 0.00 Net Adju N	NA NA asic Loader liameter -0.0 ed 10 ft. high f trucks and 04 Cycle Time sted Loader let Load Tin es	)2 h and up loaders - Adjustment: Cycle Time: ne per Truck: Adjusted	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04 -0.04 0.00 -0.10 0.52 1.67	0.6 nin.) 0 0 0 0 0 0 5 5 ude:	Sour (Cat F (Cat F (Cat F (Cat F (Cat F minut minut minut	ce IB) IB) IB) IB) IB) tes tes	-
Machine Cycle T Selected V Track Load Cycle Time Elements ( Load: <u>NA</u> Wheel and <u>Cycle Time Fa</u> <u>Mat</u> Stocl Truck Owner <u>Opera</u> <u>Dump Ta</u>	ime vs. 'alue wi lers – N min.): Track l ctors erial: cpile: ship: tion: urget: Time: Time:	Job Conditio thin this Basi faterial Descr Loaders - Un Material 1/8 Conveyor o 0.00 Common ov 0.04 Constant op Nominal tar	c Rating: iption: Ianeuver: adjusted B <u>" to 3/4" c</u> r dozer pile vnership o <u>eration -0.</u> <u>get 0.00</u> Net Adju N	NA NA asic Loader liameter -0.0 ed 10 ft. higl f trucks and 04 Cycle Time sted Loader let Load Tin es es	)2 h and up loaders - Adjustment: Cycle Time: ne per Truck: Adjusted Adjusted	Dump: oad, dump, maneuver): Factor (1 -0.02 0.00 -0.04 -0.04 0.00 -0.10 0.52 1.67 for site altit	0.6 nin.) 0 0 0 0 0 5 5 5 ude:	Sour (Cat F (Cat F (Cat F (Cat F (Cat F minut minut 0.800	ce IB) IB) IB) IB) IB) tes tes	Minutes

Truck Travel (Haul & Return) Time: maintained 3.0

Haul Route:

	Seg #	Haul (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
	1	1000.	.00	2.00	3.00	5.00	1550	0.852	
	Return Rou	ite:				Haul Time:	0.852	minutes	
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)			(%)	(%)	(fpm)	Time (min)	
	1	1000.	.00	-2.00	3.00	1.00	3503	0.478	
						Return Time:	0.478	minutes	
					Total Tru	ick Cycle Time:	5.005	minutes	
L	oading Too	l unit							
	Produ	iction	1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck	Unit Produ	iction	805.59	LCY/Hour		Adjusted for jo	ob efficiency:	668.64	LCY/Hour
Optima	al No. of Tr	ucks:	2	Truck(s)		Selected Numb	er of Trucks:	3	Truck(s)
	Adjusted hourly truck team production:       2,005.93       LCY/Hour         Adjusted single truck/loader team production:       1,352.15       LCY/Hour         Adjusted multiple truck/loader team production:       1,352.15       LCY/Hour								
:	JOB TIM	E AN	D COST						
	Fleet	size:	1	Team(s)	Т	otal job time:	1.76	Hour	S
	Unit o	cost:	\$1.801	/LCY	r.	Fotal job cost:	\$4,27	7	

#### TRUCK/LOADER TEAM WORK

Task description:	Replace	Topsoil fro	om Stoc	kpile to Pond	NHN-001 and I	Ditches				
Site: New Horizon N	orth Mine	Permi	it Action	: RN2		Permit/Job	#: _	C2010089		
PROJECT IDEN	TIFICATION									
Task #: 066	2022		Colorado	Abbreviation: None						
	Date:2/15/2022County:MontroseFilename:User:JHB						066	-RN2		
User. JHD										
Agency or organization name: DRMS										
HOURLY EQUIPMENT COST Shift basis: <u>1 per day</u>										
				ipment Descri	iption					
Т	ruck Loader Tear	-	Cat 777							
	(F) (T	-Loader:	CAT 9							
Suppo	ort Equipment -Le	mp Area:	NA	1T - 11U						
Road Ma	aintenance – Moto		CAT 1	4M						
Roud IVI		er Truck:		Tanker, 10,00	0 Gal.					
Cost Breakdown:	Truck/Loa	der Team			Equipment		ntena	nce Equipment		
	Truck	Loader	L	oad Area	Dump Area	Motor Grader		Water Truck		
%Utilization-machine:	100		100	100	NA		35	35		
Ownership cost/hour:	\$175.01	\$290	).33	\$274.04	NA	\$85.	.80	\$84.03		
Operating cost/hour:	\$139.87	\$191	1.73	\$273.21	NA	\$21.	14	\$38.03		
%Utilization-riper:	NA		0	NA	NA	Ν	NA	NA		
Ripper own. cost/hour:	NA	\$0	0.00	\$0.00	NA	\$0.	00	\$0.00		
Ripper op. cost/hour:	NA	\$0	0.00	\$0.00	NA	\$0.	00	\$0.00		
Operator cost/hour:	\$33.71	\$40	).71	\$41.30	NA	\$28.	56	\$21.12		
Unit Subtotals:	\$348.59	\$522	2.77	\$588.55	NA	\$135.	.50	\$143.18		
Number of Units:	2		1	1	0		1	1		
Group Subtotals:	Work:	\$1,219.95		Support:	\$588.55	Mai	nt:	\$278.68		

Total work team cost/hour: \$2,087.18

#### **MATERIAL QUANTITIES**

Initial volume:	5,210	CCY Swell factor: 1.115	
Loose volume:	5,809	LCY	
Sourc	e of estimated volume:	Map 2.05.2-1, Division Volume Estimates	
Source of	estimated swell factor:	Cat Handbook	
Ν	Aaterial Purchase Cost:	\$0.00	
	Total Cost:	\$0.00	

## **HOURLY PRODUCTION**

#### Truck Capacity: Truck Payload (weigh

uck Payload (weight) Basi	<u>s:</u>	
Material weight:	2,100	Pounds/LCY
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

Payload Capacity:	95.24	LCY				
Truck Bed (volume) Basis:						
Struck Volume:	60.60	LCY				
Heaped Volume:	78.80	LCY				
Average Volume:	69.70	LCY				
Adjusted Volume:	78.80	LCY				
	1 77 1					
	ruck Volume	Based on Number of L	oader Passes:	67.20	LCY	
Loading Tool Capacity						
			Buck	tet Size Class: N	IA	_
Rated Capacity:	16.000	LCY (heaped)				_
Bucket Fill Factor:	1.050	Moist loam or sa	ndy clay (100%	6 - 110%) 1.050		_
Adjusted Capacity:	16.800	LCY				
Job Condition Corrections:		Site	Altitude (ft.):	<u>5000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE			
	0.000	0.000	(011111			
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	1	Number of Loading To	ol Passes Requ	uired to Fill		passes
				Truck:	4	F
Excavators and Front Shovels	<u>s:</u>					
Machine Cycle Time vs. Selected Value w						
Track Loaders – M	Material Descr	iption:				
Cycle Time Elements (min.):		·				
Load: NA	N	Ianeuver: NA		Dump: 0.100	)	
Wheel and Track	Loaders - Una	adjusted Basic Loader	-	oad, dump, 0 naneuver):	.625 min	utes
Cuala Tima Eastara					Source	
Cycle Time Factors Material:	Matarial 1/8	" to 3/4" diameter -0.0	2	Factor (min.) -0.020	(Cat HB)	—
Stockpile:		dozer piled 10 ft. high				_
Stoenphe.	0.00	uozer pried to ta ingi	i unu up	0.000	(Cat HB)	
Truck Ownership:	Common ow	vnership of trucks and	loaders -	-0.040	(Cat HB)	_
Operation:	0.04 Constant ope	aration 0.04		-0.040	(Cat HB)	_
Dump Target:	Nominal tar			0.000	(Cat HB)	_
Dump Target.	Nominal tal	Net Cycle Time	Adjustment:	-0.100	minutes	_
		Adjusted Loader		0.525	minutes	
		Net Load Tim	•	1.675	minutes	
Truck Cycle Time:						
Truck Exchange Time:	0.80	Minutes	Adjusted	for site altitude:	0.800	Minutes
•						_
Truck Load Time:	-	Minutes	e e	for site altitude:	1.675	Minutes
Truck Maneuver and Dump Time:		Minutes	Adjusted	for site altitude:	1.200	Minutes

Truck Travel (Haul & Return) Time: maintained 3.0

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered,

Haul Route:

	Haul Koute	5:							
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	U	(Ft)			(%)	(%)	(fpm)	Time	
		, ,					-	(min)	
	1	2200	.00	2.00	3.00	5.00	1550	1.626	
						TT 1 m	1 (2)	• ,	
	<b>D D</b>					Haul Time:	1.626	minutes	
	Return Rou	ite:							
	Seg #	Haul	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
		(Ft)			(%)	(%)	(fpm)	Time (min)	
	1	2200	.00	-2.00	3.00	1.00	3503	0.821	
				11		-1			
						Return Time:			
					Total Tru	ck Cycle Time:	6.122	minute	S
т	a a dia a Ta a	1							
L	oading Too		1 (20 00			A 1° + 1.C *	1 60 1	1 252 15	
-		uction	1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck	Unit Produ	iction							
			658.61	LCY/Hour		Adjusted for jo	ob efficiency:	546.64	LCY/Hour
Optima	al No. of Ti	rucks:	2	Truck(s)		Selected Numb	per of Trucks:	2	Truck(s)
				Adjusted	hourly truck	team productio	on: 1,093	.29 LCY/	Hour
				Adjusted single				3.29 LCY/	Hour
				djusted multiple					
				J		1			
	JOB TIM	IE AN	D COST						
	Fleet	size:	1	Team(s)	Т	otal job time:	5.31	Hou	irs
	Unit	cost:	\$1.909	/LCY	Т	otal job cost:	\$11,0	90	

#### TRUCK/LOADER TEAM WORK

Task description:	Replace	Topsoil from S	Stockpile to Pond	NHN-002 and I	Ditches	
Site: New Horizon N	orth Mine	Permit Ac	ction: RN2		Permit/Job#:	C2010089
PROJECT IDEN	<b>TIFICATION</b>					
Task #: 067		State: Color			previation: No	
	2022	County: Mont	trose		Filename: 06	7-RN2
User: JHB						
Agency or	organization nam	ne: DRMS				
HOURLY EQUI	PMENT COST			Shift ba	sis: <u>1 per day</u>	
			Equipment Descr	iption		
Т	ruck Loader Tear		t 777F	-		
			AT 992K			
Suppo	ort Equipment -Lo		t D11T - 11U			
		mp Area: NA				
Road Ma	aintenance – Moto		AT 14M ater Tanker, 10,00	0.0 -1		
	- vv al	er Truck: wa	ater Tanker, 10,00	0 Gal.		
Cost Breakdown:	Truck/Loa	dor Toom	Support	Equipment	Mainton	ance Equipment
Cost Dieakuowii.	Truck	Loader	Load Area	Dump Area	Motor	Water Truck
	THUCK	Louder	Loud Theu	Dumprieu	Grader	
%Utilization-machine:	100	100	100	NA	35	35
Ownership cost/hour:	\$175.01	\$290.33	\$274.04	NA	\$85.80	\$84.03
Operating cost/hour:	\$139.87	\$191.73	\$273.21	NA	\$21.14	\$38.03
%Utilization-riper:	NA	0	NA	NA	NA	NA
Ripper own. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Ripper op. cost/hour:	NA	\$0.00	\$0.00	NA	\$0.00	\$0.00
Operator cost/hour:	\$33.71	\$40.71	\$41.30	NA	\$28.56	\$21.12
Unit Subtotals:	\$348.59	\$522.77	\$588.55	NA	\$135.50	\$143.18
Number of Units:	3	1	1	0	1	1
Group Subtotals:	Work:	\$1,568.54	Support:	\$588.55	Maint:	\$278.68

Total work team cost/hour: <u>\$2,435.77</u>

#### **MATERIAL QUANTITIES**

3,095	CCY Swell factor:	1.115
3,451	LCY	
e of estimated volume:	Map 2.05.2-1, Division Volu	ime Estimates
estimated swell factor:	Cat Handbook	
Material Purchase Cost:	\$0.00	
Total Cost:	\$0.00	
	e of estimated volume: estimated swell factor: Material Purchase Cost:	3,451LCYce of estimated volume: estimated swell factor:Map 2.05.2-1, Division Volu Cat HandbookMaterial Purchase Cost:\$0.00

#### **HOURLY PRODUCTION**

#### Truck Capacity: Truck Payload (weight) Basis

Truck Payload (weight) Basis:	
Material weight: 2,100	)

Pounds/LCY

viateriai weigint.	2,100	I Oulius/ LC I
Description:	Earth - Loam	
Rated Payload:	200,000	Pounds

Payload Capacity:	95.24	LCY				
Truck Pad (volume) Pasie						
<u>Truck Bed (volume) Basis:</u> Struck Volume:	60.60	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
		201				
Final	Гruck Volume F	Based on Number of L	oader Passes:	67.20	LCY	
Loading Tool Capacity						
			Bucke	et Size Class: N	А	_
Rated Capacity:	16.000	LCY (heaped)				
Bucket Fill Factor:	1.050	Moist loam or sa	ndy clay (100%	- 110%) 1.050		-
Adjusted Capacity:	16.800	LCY				
Job Condition Corrections:	<u>.</u>	Site	Altitude (ft.):	5 <u>000</u> feet		
	Truck	Loader	Source			
Altitude Adj:	1.000	1.000	(CAT HB)	)		
Job Efficiency:	0.830	0.830	(CAT HB)	)		
Net Correction:	0.830	0.830				
Loading Tool Cycle Time:	N	umber of Loading To	ol Passes Requi	red to Fill		passes
		fumber of Louding 10	of I asses Requi	Truck:	4	pusses
Excavators and Front Shove						
Machine Cycle Time vs Selected Value v						
Track Loaders –	Material Descri	ption:				
Cycle Time Elements (min.):						
Load: NA	M	aneuver: NA		Dump: 0.100		
Wheel and Tracl	k Loaders - Una	djusted Basic Loader	•	ad, dump, aneuver):0.	625 min	utes
Cycle Time Factors				Factor (min.)	Source	
Material:		' to 3/4" diameter -0.0		-0.020	(Cat HB)	_
Stockpile:	Conveyor or 0.00	dozer piled 10 ft. high	and up	0.000	(Cat HB)	
Truck Ownership:	Common ow	nership of trucks and	loaders -	-0.040	(Cat HB)	_
Operation:	0.04 Constant ope	ration -0.04		-0.040	(Cat HB)	_
Dump Target:	Nominal targ			0.000	(Cat HB)	_
	C	Net Cycle Time	Adjustment:	-0.100	minutes	_
		Adjusted Loader	Cycle Time:	0.525	minutes	
		Net Load Tim	e per Truck:	1.675	minutes	
<u>Truck Cycle Time:</u>						
Truck Exchange Time	·· 0.80	Minutes	Adjusted f	or site altitude	0.800	Minute

Truck Exchange Time:	0.80	Minutes	Adjusted for site altitude:	0.800	Minutes
Truck Load Time:	1.675	Minutes	Adjusted for site altitude:	1.675	Minutes
Truck Maneuver and Dump Time:	1.20	Minutes	Adjusted for site altitude:	1.200	Minutes
I IIIIe.					

#### Truck Travel (Haul & Return) Time: maintained 3.0

Haul Route:

Haul Route	e:							
Seg #	Haul I	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time	
	~ /			· · /			(min)	
1	4800.	00	2.00	3.00	5.00	1550	3.304	
						2 20 4	• ,	
					Haul Time:	3.304	minutes	
Return Ro	1						<b>m</b> 1	
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time	
1	4000	20	2.00	2.00	1.00	2502	(min)	
1	4800.	00	-2.00	3.00	1.00	3503	1.563	
					Return Time:	1.563	minutes	2
				Total Tri	ick Cycle Time:			
				Total III	iek cycle Thile.	0.042		2
Loading Too	ol unit							
Prod	uction	1,629.09	LCY/Hour		Adjusted for jo	ob efficiency:	1,352.15	LCY/Hour
Truck Unit Produ	uction –	,			5 5		· · · ·	_
		472.02	LCY/Hour		Adjusted for jo	ob efficiency.	391.78	LCY/Hour
	-	.,			110/00/00/101			
Optimal No. of Ta	rucks:	3	Truck(s)		Selected Numb	er of Trucks:	3	Truck(s)
•	_							- ``
					team productio			
					r team productio			
		A	djusted multiple	truck/loader	team productio	n: <b>1,175</b>	LCY/H	Hour
JOB TIM	1E ANI	D COST						
Fleet	size	1	Team(s)	г	otal job time:	2.94	Hou	rs
11000	5120.	1		1	our job unic.	2.74	1100	10
Unit	cost:	\$2.072	/LCY	-	Fotal job cost:	\$7,15	2	
					5			

#### **REVEGETATION WORK**

: New Horizon North Mine		Permit Action:	RN2	Permit/Job#:	#: <u>C2010089</u>
PROJE	CT IDENTIFICA	TION			
Task	#: 075	State: Colorado		Abbreviation: N	one
Dat	e: 2/17/2022	County: Montrose		Filename: 0	75-RN2
2	er: JHB				

# FERTILIZING

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

#### Application

Description	Cost /Acre
	\$
Total Fertilizer Application Cost/Acre	\$0.00

#### **TILLING**

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$114.56
Total Tilling Cost/Acre	\$114.56

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Russian Wildrye - Bozoisky	1.30	5.22	\$8.42
Alfalfa - NK Spredor 3 (creeping)	0.60	2.89	\$1.53
Thickspike Wheatgrass - Critana	1.40	4.95	\$9.63
Western Wheatgrass - Arriba	1.90	4.80	\$12.35
Saltbush, Four Wing	0.30	0.41	\$3.75
Kochia, Forage (Prostrate)	0.30	42.13	\$2.69
Totals Seed Mix	5.80	60.41	\$38.37

#### Application

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

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

# Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

#### **NURSERY STOCK PLANTING**

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

#### JOB TIME AND COST

	No. of Acres:	32.5	Cost /Acre:	\$384.93
Estimate	ed Failure Rate:	20%	Cost /Acre*:	\$0.00
*Selected Replanti	ng Work Items:	NONE		
Initial Job Cost	\$12 510 22			
Initial Job Cost:	\$12,510.25		_	
Reseeding Job Cost:	\$0.00			
Total Job Cost:	\$12,510			

Job Hours:	75.26

#### **REVEGETATION WORK**

	·		* <u> </u>		<b>#5</b> Permit/Jol	o#: C2010089	
PR	OJECT	IDENTIFIC	ATION				
	Task #: Date: User:	076 2/17/2022 JHB	State: County:	Colorado Montrose		Abbreviation: Filename:	None 076-RN2
		JHB ncy or organiz	zation name:	RMS			

# **FERTILIZING**

#### Materials Units / Cost / Unit Cost /Acre Description Unit Acre Mono-Ammonium Phosphate, 11-50-0 76.00 pound \$0.30 \$22.80 **Total Fertilizer** Materials \$22.80 Cost/Acre

#### **Application**

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$38.77
	Total Fertilizer Application Cost/Acre	\$38.77

#### TILLING

Description Chisel plowing {DMG}	Cost /Acre \$96.50
	\$90.30
Total Tilling Cost/Acre	\$96.50

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alfalfa - Ranger (inoculated)	18.00	86.78	\$45.90
Totals Seed Mix	18.00	86.78	\$45.90

#### Application

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

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Ac	ere \$0.00

## NURSERY STOCK PLANTING

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

#### JOB TIME AND COST

	No. of Acres:	88.3	Cost /A	cre:	\$435.97
Estimate	ed Failure Rate:	20%	Cost /Ac	re*:	\$277.90
*Selected Replanti	ng Work Items:	SEEDING			
Initial Job Cost:	\$38,496.15			_	
Reseeding Job Cost:	\$4,907.71				
Total Job Cost:	\$43,404		_		
Job Hours:	36.40		_		

#### **REVEGETATION WORK**

Task descr e: <u>New Ho</u>	rizon North M	Seed areas in long term factors for the set of the set	•	Permit/Jo	b#: <u>C2010089</u>
<b>PROJECT</b>	<u>IDENTIFIC</u>	CATION			
Task #:	077	State: Colorado		Abbreviation:	None
rusk n.				E'1	C000 077
Date:	2/18/2022	County: Montrose		Filename:	C089-077

#### **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	45.00	pound	\$0.36	\$16.20
			Total Fertilizer Materials Cost/Acre	\$16.20

## Application

Description		Cost /Acre
Tractor towed spreader (MEANS 32 01 90.13 0120)		\$38.77
	Total Fertilizer Application Cost/Acre	\$38.77

#### TILLING

Description	Cost /Acre
Chisel plowing {DMG}	\$96.50
Total Tilling Cost/Acre	\$96.50

## **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Russian Wildrye - Bozoisky	1.30	5.22	\$8.42
Alfalfa - NK Spredor 3 (creeping)	0.60	2.89	\$1.53
Thickspike Wheatgrass - Critana	1.40	4.95	\$9.63
Western Wheatgrass - Arriba	1.90	4.80	\$12.35
Saltbush, Four Wing	0.30	0.41	\$3.75
Kochia, Forage (Prostrate)	0.30	42.13	\$2.69
Totals Seed Mix	5.80	60.41	\$38.37

#### Application

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

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

#### Application

Description	Cost /Acre
	\$
Total Mulch Application Cost/Acre	\$0.00

#### **NURSERY STOCK PLANTING**

Common Name	No / Common NameNo / AcreType and SizePlanting CostFertilizer Pellet Cost					
	\$					
Totals Nursery Stock Cost / Acre					\$0.00	

## JOB TIME AND COST

	No. of Acres:	32.5	Cost /Acre:	\$421.84
Estimate	ed Failure Rate:	20%	Cost /Acre*:	\$270.37
*Selected Replanti	ng Work Items:	SEEDING		
	41 <b>3 5</b> 00 00			
Initial Job Cost:	\$13,709.80			
Reseeding Job Cost:	\$1,757.41			
Total Job Cost:	\$15,467			
Job Hours:	18.80			

#### **REVEGETATION WORK**

]	Fask descrij	otion:	Drill Seed Cover	Crop on IP	•			
Site:	New Hor	izon North M	ine Pe	rmit Action:	RN2	Permit/Jo	b#: C2010089	
<u>P</u> ]	ROJECT	IDENTIFIC	CATION					
	Task #: Date: User:	088 3/9/2022 JHB	State: County:	Colorado Montrose		Abbreviation: Filename:	None C089-88	
	Age	ency or organiz	zation name: DR	RMS				
$\mathbf{F}$	ERTILIZ	ING						

# Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer Materials Cost/Acre	\$0.00

#### Application

\$	Description		Cost /Acre
			\$
Total Fertilizer Application Cost/Acre \$0.00	,	Total Fartilizar Application Cost/Acra	<b>40.00</b>

#### **TILLING**

Description		Cost /Acre
		\$
	Total Tilling Cost/Acre	\$0.00

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Oats - Ajay	40.00	11.94	\$13.20
Totals Seed Mix	40.00	11.94	\$13.20

#### Application

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

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
Total Mulch Materials Cost/Acre				\$0.00

#### Application

Description		Cost /Acre
		\$
	Total Mulch Application Cost/Acre	\$0.00

#### **NURSERY STOCK PLANTING**

Common Name	No / Acre	Type and Size	Planting Cost	Fertilizer Pellet Cost	Cost /Acre
					\$
		Totals 2	Nursery Stoc	ck Cost / Acre	\$0.00

#### JOB TIME AND COST

	No. of Acres:	88.3	Cost /Acre:	\$245.20
Estimate	ed Failure Rate:	0%	Cost /Acre*:	\$0.00
*Selected Replanti	ng Work Items:	NONE		·
Initial Job Cost:	\$21,651.16			
Reseeding Job Cost:	\$0.00			
Total Job Cost:	\$21,651			
Job Hours:	55.20			

## **REVEGETATION WORK**

_	New Hor	izon North Mine	Permit Action:	RN2	Permit/Jo	b#: <u>C2010089</u>
PR	OJECT	IDENTIFICA	ΓΙΟΝ			
	Task #:	89	State: Colorado		Abbreviation:	None
	Date:	3/9/2022	County: Montrose		Filename:	C089-89
		JHB				

#### **FERTILIZING**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			Total Fertilizer	
			Materials Cost/Acre	\$0.00

#### Application

Description		Cost /Acre
		\$
	Total Fertilizer Application Cost/Acre	\$0.00

# TILLING

Description	Cost /Acre
	\$
Total Tilling Cost/Acre	\$0.00

#### **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
			\$
Totals Seed Mix	0.00	0.00	\$0.00

#### Application

Description	Cost/Acre
Description	Cost /Acre

	\$
Total Seed Application Cost/Acre	\$0.00

#### **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
	2.00		\$0.00	\$0.00
Herbicide - Escort @ 1.0 pt/ac	1.00	ACRE	\$194.52	\$194.52
Total Mulch Materials Cost/Acre				\$194.52

#### Application

Description		Cost /Acre
Weed spray, truck, non-aquatic area, nox. [DMG]		\$62.72
	Total Mulch Application Cost/Acre	\$62.72

#### **NURSERY STOCK PLANTING**

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

## JOB TIME AND COST

No. of Acres:	25	Cost /Acre:	\$257.24
Estimated Failure Rate:	0%	Cost /Acre*:	\$0.00
*Selected Replanting Work Items:	NONE		

Initial Job Cost:	\$6,431.00
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$6,431
Job Hours:	25.00

#### **DEMOLITION WORK**

Tas	sk description:	Demolish an	d Remove All	Structures		
Site: N	ew Horizon North Min	e	Permit Action:	RN2	Permit	/Job#: <u>C2010089</u>
PROJECT	<b>IDENTIFICATION</b>	<u>1</u>				
Task #:	095	State:	Colorado		Abbreviation:	None
Date:	3/30/2022	County:	Montrose		Filename:	C089-095
User:	JHB	•				

Agency or organization name: DRMS

#### UNIT COSTS

#### Location adjustment: 96.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Foreman's Office	20'x60'x12'	Bldg. (MN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	14,400.00	CF	\$0.22	\$3,153.60
- Pad	20'x60'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	1,200.00	SF	\$1.00	\$1,201.20
Cargo Container #1	8'x20'x8'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,280.00	CF	\$0.22	\$275.20
Cargo Container #2	8'x20'x8'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,280.00	CF	\$0.22	\$275.20
Cargo Container #3	8'x20'x8'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,280.00	CF	\$0.22	\$275.20
Cargo Container #4	8'x20'x8'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	1,280.00	CF	\$0.22	\$275.20
Storage Yard Fence	630 LF	Fencing, chain link, including posts and fabric - to 6 ft. high	630.00	LF	\$2.68	\$1,688.40
12,000 Gallon Fuel Tanks	2@12,000 Gal	Comprehensive storage tank removal, non- leaking - 9,000 to 12,000 gal. tank	2.00	EA	\$7,335.93	\$14,671.86
1,000 Gallon Fuel Tank	1@1,000 Gal	Comprehensive storage tank removal, non- leaking - 3,000 to 5,000 gal. tank	1.00	EA	\$3,455.40	\$3,455.40

PCS Clean-Up at Fuel Island	Assume 100 CY	Dispose of contaminated soil at approved landfill - Average	100.00	CY	\$272.50	\$27,250.00
Culvert C-1	18"x40 LF	Pipe, corrugated metal (CMP) - 18 in. diameter pipe	40.00	LF	\$5.57	\$222.96
Culvert C-13	36"x40 LF	Pipe, corrugated metal (CMP) - 36 in. diameter pipe	40.00	LF	\$11.32	\$452.72
Water Stand	10'x50'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	500.00	SF	\$1.00	\$500.50
Tire Change Pad	50'x50'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	2,500.00	SF	\$1.00	\$2,502.50
Equipment Wash Pad	30'x64'x6"	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	1,920.00	SF	\$1.00	\$1,921.92

				<b>Total Cost</b>	
		Subtotal		(adjusted for	
Job Hours:	80.00	(unadjusted):	\$58,121.86	location):	\$56,320.08

## BOREHOLE SEALING WORK

Task	description:	Plug and Seal	l All Monitor	ing Wells			
ite: New	Horizon North Mir	ne Pe	ermit Action:	RN2	P	ermit/Job#:	C2010089
PRO.	IECT IDENTIFI	CATION					
Τa	ask 100 #:	State:	Colorado		Abbreviation:	None	
Da	· · · · · · · · · · · · · · · · · · ·	County:	Montrose		Filename:	C089-100	

#### UNIT COSTS

Borehole Description	Sealing/Item Method	Diameter	Length	Quantity	Unit	Unit Cost	Total Cost
Bottom Plug	PVC plug - 4 in. diameter borehole	4"	514'	9.00	EA	\$33.98	\$305.82
- Fill Holes with Cement	Portland cement grout ( Bag, material cost only94 lb. bag)	4"	514'	45.00	bag	\$19.95	\$897.75
- Cut Casing at Surface	Exposed casing removal - Calculate Circumference in Linear Feet	4"	514'	1.00	LF	\$3.26	\$3.26
- Borehole Marker	Borehole location/identification marker (EA, material cost only)	NA	NA	9.00	EA	\$37.50	\$337.50
- Drill Rig Time	Truck Mounted - 3.0in 500 ft capy.	NA	NA	36.00	EA	\$31.56	\$1,136.16
- Water Truck Time	Water Tanker, 2,500 Gal.	NA	NA	36.00	EA	\$29.70	\$1,069.20

Job Hours: 36.00

Total Cost: \$3,750.00

#### TRUCK/LOADER TEAM WORK

Task description:	Clean S	ediment Po	onds					
Site: New Horizon Nor	rth Mine	Perm	it Act	ion: <u>RN2</u>		Permit/Jo	b#: _	C2010089
PROJECT IDENT	IFICATION							
Task #: 105		State: 0	Colora	ado	Abl	previation:	Noi	ne
Date: 3/10/20	022 0		Montr			Filename:	C08	89-105
User: JHB								
Agency or o	rganization nam	ne: DRM	S					
HOURLY EQUIP	MENT COST	-			Shift ba	usis: <u>1 per da</u>	<u>ay</u>	
			]	Equipment Descr	iption			
Tru	ick Loader Tear	m -Truck:		eric 8-10 cy, 6x4				
		-Loader:		336D L 10'-6" S	Stick			
Suppor	t Equipment -Lo		NA					
Bood Mai	-Du ntenance –Moto	mp Area:	NA NA					
Koau Man		ter Truck:	NA					
Cost Breakdown:	Truck/Loa	der Team		Support	Equipment	Ma	intena	ance Equipment
	Truck	Excavator	ſ	Load Area	Dump Area	Motor Grader		Water Truck
%Utilization-machine:	100		100	NA	NA		NA	NA
Ownership cost/hour:	\$18.14	\$83	3.42	NA	NA		NA	NA
Operating cost/hour:	\$35.95	\$74	4.14	NA	NA		NA	NA
%Utilization-riper:	NA		0	NA	NA		NA	NA
Ripper own. cost/hour:	NA	\$0	0.00	NA	NA		NA	NA
Ripper op. cost/hour:	NA	\$0	0.00	NA	NA		NA	NA
Operator cost/hour:	\$0.00	\$37	7.32	NA	NA		NA	NA
Unit Subtotals:	\$54.09	\$194	4.88	NA	NA		NA	NA

Total work team cost/hour: \$357.15

Work:

3

\$357.15

#### **MATERIAL QUANTITIES**

Number of Units:

Group Subtotals:

Initial volume: Loose volume:	15,000 <b>15,000</b>	CCY LCY	Swell factor:	1.000	
Sourc	e of estimated volume:	Division Es	timate		
Source of	estimated swell factor:	Cat Handbo	ook		
N	Aaterial Purchase Cost	\$0.00			

1

Support:

0

\$0.00

0

Maint:

0

\$0.00

0

## **HOURLY PRODUCTION**

<u>Truck Capacity:</u>			
Truck Payload (weight) Basis:			
Material weight:	2,700	Pounds/LCY	
Description:	Earth - Wet excavated		
Rated Payload:	27,280	Pounds	

Total Cost: \$0.00

Payload Capacity: 10.10 LCY

Truck Bed (volume) Basis: Struck Volume: 8.00 LCY Heaped Volume: 10.00 LCY Average Volume: 9.00 LCY Adjusted Volume: 10.00 LCY Final Truck Volume Based on Number of Loader Passes: 9.28 LCY Loading Tool Capacity Bucket Size Class: Small Rated Capacity: 1.560 LCY (heaped) Bucket Fill Factor: Hard, tough clay (80% - 90%) 0.850 0.850 Adjusted Capacity: 1.326 LCY **Job Condition Corrections:** Site Altitude (ft.): 5000 feet Loader Truck Source Altitude Adj: 1.000 1.000 (CAT HB) Job Efficiency: 0.830 0.830 (CAT HB) 0.830 0.830 Net Correction: Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 7 passes Excavators and Front Shovels: Machine Cycle Time vs. Job Condition Rating: BELOW AVERAGE Selected Value within this Basic Rating: SEVERE Track Loaders – Material Description: Cycle Time Elements (min.): Load: NA Maneuver: NA Dump: 0.100 Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): NA minutes **Cycle Time Factors** Factor (min.) Source Material: NA NA (Cat HB) Stockpile: NA NA (Cat HB) Truck Ownership: NA NA (Cat HB) Operation: (Cat HB) NA NA Dump Target: (Cat HB) NA NA Net Cycle Time Adjustment: NA minutes Adjusted Loader Cycle Time: 0.390 minutes Net Load Time per Truck: 2.440 minutes **Truck Cycle Time:** 

Truck Exchange Time: 0.50 Minutes Adjusted for site altitude: 0.500 Minute Truck Load Time: 2.440 Minutes Adjusted for site altitude: 2.440 Minutes 0.80 Adjusted for site altitude: 0.800 Truck Maneuver and Dump Time: Minutes Minutes

Truck Travel (Haul & Return) Time:

Road Condition: Firm, smooth, rolling, dirt/lt. surfaced, watered, maintained 3.0

Haul Route:								
Seg #	Haul Dis	stance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time	
				(%)	(%)	(fpm)	(min)	
1	5000.00		0.00	3.00	3.00	2824	1.874	
Return Route				Н	Iaul Time:	1.874	minutes	
Seg #		stance (Ft)	Grade (%)	Roll. Res	Total Res	Velocity	Travel Time	
				(%)	(%)	(fpm)	(min)	
1	5000.00		0.00	3.00	3.00	2874	1.768	
					Return Time:	1.768	minutes	
				Total Truc	ck Cycle Time:	7.382	minutes	
Loading To								
Proc ruck Unit Proc	luction	189.43	LCY/Hour		Adjusted 1	for job efficiency:	157.23	LCY/Hour
		75.44	LCY/Hour		Adjusted t	for job efficiency:	62.62	LCY/Hour
timal No. of T	Trucks:	3	Truck(s)		Selected N	umber of Trucks:	3	Truck(s)
			Adj	usted hourly to	ruck team produc	tion: 187.	85 LC	Y/Hour
			Adjusted s	single truck/loa	ader team produc	tion: 157.	23 LC	Y/Hour
			Adjusted mu	ltiple truck/loa	ader team produc	tion: <b>157.</b>	23 LC	Y/Hour
JOB TIME	E AND CO	<u>DST</u>						
Fleet	size:	1	Team(s)		Total job time:	95.4	0]	Hours
Unit	cost:	\$2.272	/LCY		Total job cost:	\$34,0	74	

#### SITE MAINTENANCE

ite:	New Horizon North Mine	Permit Action:	RN2	Permit	/Job#:	C2010089
<u>OJEC</u>	T IDENTIFICATION					
Task #:	106	State: Colorado		Abbreviation:	None	
Date:	3/10/2022	County: Montrose		Filename:	C089-	106
Date.						

#### UNIT COSTS

Maintenance Item	Hours per Year	Menu Selection	Quantity	Unit	Unit Cost	Total Cost
D-6T Dozer for	20.00	Cat D6T LGP	120.00	EA	\$173.91	\$20,869.20
Minor						
Maintenance						
14M Grader for	20.00	CAT 14M	120.00	EA	\$174.76	\$20,971.20
Minor Site						
Maintenance						

Job Hours: 120.00

Total Cost: \$41,840.40

#### EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description:	Mobilize/Demobiliz	ze/Demobilize Equipment for Initial Reclamation				
Site: New Horizon North Min	e Permi	t Action: <u>RN2</u>	Permit/	Job#: <u>C2010089</u>		
PROJECT IDENTIFICA	TION					
Task #: 110	State: C	Colorado	Abbreviation	: None		
Date: 3/10/2022 User: JHB	County: N	Iontrose	Filename	: C089-110		
Agency or organiza	tion name: DRM	S				
EQUIPMENT TRANSPO	ORT RIG COST					
			Shift basis:	1 per day		
			Cost Data Source:	CRG Data		
Truck Tractor D	escription: GEN		AY TRUCK TRACTOR, 6X4 400 HP (2ND HALF, 2006)	4, DIESEL POWERED,		
Truck Trailer D	escription: (	GENERIC FOLDIN	G GOOSENECK, DROP DE	ECK EQUIPMENT		
	_	TR	AILER (25T, 50T, AND 100'	Т)		
Cost Breakdown:						
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons			
Ownership Cost/Hou		\$37.94	\$47.67			
Operating Cost/Hou		\$50.48	\$56.21			
Operator Cost/Hou	:: \$20.54	\$20.54	\$20.54			
Helper Cost/Hou	: \$0.00	\$23.53	\$23.53			

#### **NON ROADABLE EQUIPMENT:**

Total Unit Cost/Hour:

Machine	Weight/	Owner ship	Haul Rig	Fleet	Haul Trip	Return Trip	DOT Permit
Description	Unit	Cost/hr/ unit	Cost/hr/unit	Size	Cost/hr/	Cost/hr/ fleet	Cost/ fleet
	(TONS)				fleet		
Cat D11T - 11U	134.12	\$274.04	\$147.95	2	\$843.98	\$295.90	\$500.00
CAT 992K	107.88	\$290.33	\$147.95	1	\$438.28	\$147.95	\$250.00
CAT 14M	23.57	\$85.80	\$68.37	1	\$154.17	\$68.37	\$250.00
Cat 777F	80.18	\$175.01	\$147.95	3	\$968.88	\$443.85	\$750.00
Drill/Broadcast	25.00	\$7.98	\$68.37	1	\$76.35	\$68.37	\$250.00
Seeder with							
Tractor							
Truck Mounted -	0.00	\$16.97	\$68.37	1	\$85.34	\$68.37	\$250.00
3.0in 500 ft							
capy.							

\$132.49

\$68.37

Subtotals: **\$2,567.00 \$1,092.81** 

\$2,250.00

\$147.95

#### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Fuel Tanker, 6x4, 210 HP	\$46.35	1	\$46.35	\$46.35
Lube Truck, 6x4, 250 HP	\$46.35	1	\$46.35	\$46.35
Flatbed Truck, 6x4, 45K GVW	\$49.15	1	\$49.15	\$49.15
		Subtotals:	\$141.85	\$141.85

#### **QUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<b>GRAND JUNCTION</b>	
Total one-way travel distance:	110.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$27,526.40 \$693.49	_

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	2.44	2.44
Return Time (Hours):	2.44	2.44
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	5.89	4.89

## JOB TIME AND COST

Total job time: 11.78 Hours

Total job cost: \$28,220

Task description: Mobiliz	ze/Demobilize Equipment for Pond	Cleaning
Site: New Horizon North Mine	Permit Action: RN2	Permit/Job#: C2010089
PROJECT IDENTIFICATION		
Task #:111	State: Colorado	Abbreviation: None
Date: <u>3/10/2022</u>	County: Montrose	Filename: 111
User: JHB		
Agency or organization nar		
		Shift basis: <u>1 per day</u>
		Cost Data Source: CRG Data
Truck Tractor Description		RUCK TRACTOR, 6X4, DIESEL POWERED, IP (2ND HALF, 2006)
Truck Trailer Description	on: GENERIC FOLDING GC	OSENECK, DROP DECK EQUIPMENT
	TRAILE	R (25T, 50T, AND 100T)
Cost Breakdown:		

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$21.28	\$37.94	\$47.67
Operating Cost/Hour:	\$26.55	\$50.48	\$56.21
Operator Cost/Hour:	\$20.54	\$20.54	\$20.54
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$68.37	\$132.49	\$147.95

#### **NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat 336D L 10'- 6" Stick	32.23	\$83.42	\$132.49	1	\$215.91	\$132.49	\$250.00
				Subtotals:	\$215.91	\$132.49	\$250.00

#### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Generic 8-10 cy, 6x4	\$86.00	3	\$258.00	\$258.00
Flatbed Truck, 6x4, 45K GVW	\$49.15	1	\$49.15	\$49.15
Flatbed Truck, 6x4, 45K GVW	\$49.15	1	\$49.15	\$49.1

Subtotals: \$307.15 \$307.15

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

Nearest Major City or Town within project area region:	MONTROSE	
Total one-way travel distance:	70.00	miles
Average Travel Speed:	45.00	mph
Total Non-Roadable Mob/Demob Cost *	\$2,015.73 \$955.58	

Transportation Cycle Time:

Non- Roadable Equipment	Roadable Equipment
1.56	1.56
1.56	1.56
0.50	NA
0.50	NA
4.11	3.11
	Roadable           Equipment           1.56           0.50           0.50

#### JOB TIME AND COST

Total job time: **8.22** Hours

Total job cost: **\$2,971** 

#### EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task description: M	obilize/Demobiliz	e Equipment for S	Site Maintenance	
Site: New Horizon North Mine	Permi	t Action: <u>RN2</u>		Permit/Job#: <u>C2010089</u>
PROJECT IDENTIFICAT	<u>'ION</u>			
Task #:       112         Date:       3/10/2022         User:       JHB		Colorado Aontrose	At	breviation: None Filename: 112
Agency or organization	on name: DRM	S		
EQUIPMENT TRANSPO	<u>RT RIG COST</u>		Shift Cost Data S	basis: <u>1 per day</u> CRG Data
Truck Tractor Des	cription: GENI			CTOR, 6X4, DIESEL POWERED,
Truck Trailer Des	cription: C		G GOOSENECK, AILER (25T, 50T,	DROP DECK EQUIPMENT AND 100T)
Cost Breakdown:				
Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons	-
Ownership Cost/Hour:	\$21.28	\$37.94	\$47.67	-
Operating Cost/Hour:	\$26.55	\$50.48	\$56.21	
Operator Cost/Hour:	\$20.54	\$20.54	\$20.54	-
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53	-
Total Unit Cost/Hour:	\$68.37	\$132.49	\$147.95	_

#### **NON ROADABLE EQUIPMENT:**

Machine Description	Weight/ Unit	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
-	(TONS)				fleet		
Cat D6T LGP	26.87	\$66.27	\$132.49	10	\$1,987.60	\$1,324.90	\$2,500.00
CAT 14M	23.57	\$85.80	\$68.37	10	\$1,541.70	\$683.70	\$2,500.00
				Subtotals:	\$3.529.30	\$2.008.60	\$5,000,00

Subtotals: \$3,529.30 \$2,008.60 \$5,000.00

#### **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
		Subtotals:	\$0.00	\$0.00

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

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	MONTROSE 70.00 45.00	miles mph
Total Non-Roadable Mob/Demob Cost *	\$34,287.62	

\*\* one round trip, no haul rig:

Transportation Cycle Time:

	Non-	
	Roadable	Roadable
	Equipment	Equipment
Haul Time (Hours):	1.56	1.56
Return Time (Hours):	1.56	1.56
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	4.11	3.11

#### JOB TIME AND COST

Total job time: **8.22** Hours

Total job cost: \$34,288

#### EQUIPMENT MOBILIZATION/DEMOBILIZATION

: New Horizon	North Mine	Permit	Action: RN2			Permit/Job#: <u>C</u>	2010089
PROJECT IDE	NTIFICATI	<u>ON</u>					
Task #: 113		State: Co	lorado		Abbre	eviation: None	
Date: 3/1 User: JH	0/2022 B	County: Mo	ontrose		Fi	lename: 113	
Agency	or organization	name: DRMS					
EQUIPMENT 1	<b>FRANSPOR</b>	T RIG COST					
				(	Shift ba Cost Data Sour	- P - P -	
Tranal	k Tractor Desci	ription: GENE	RIC ON-HIGHV	WAY TRU	JCK TRACTO	DR, 6X4, DIESEI	POWERED.
Truci	Tractor Desci						<u> </u>
	k Trailer Desci	-		400 HP	(2ND HALF,		-
		-	ENERIC FOLD	400 HP ING GOO	(2ND HALF,	2006) ROP DECK EQU	
Truc		-	ENERIC FOLD	400 HP ING GOO	(2ND HALF, SENECK, DF	2006) ROP DECK EQU	
Truc <u>Cost Breakdown:</u>	k Trailer Desci	-	ENERIC FOLD	400 HP ING GOC TRAILER	(2ND HALF, SENECK, DF	2006) ROP DECK EQU	-
Truc Cost Breakdown: Available Rig C	k Trailer Desci	ription: Gl	ENERIC FOLD T	400 HP ING GOO TRAILER 51-	(2ND HALF, SENECK, DF (25T, 50T, AN	2006) ROP DECK EQU	-
Truc <u>Cost Breakdown:</u> <u>Available Rig C</u> Ownership	k Trailer Descr C <b>apacities</b> o Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons	400 HP ING GOC TRAILER 51- \$4	(2ND HALF, OSENECK, DF (25T, 50T, AN + Tons	2006) ROP DECK EQU	-
Truc <u>Cost Breakdown:</u> Available Rig C Ownership Operating	k Trailer Descr <b>Capacities</b> Cost/Hour: g Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$37.94	400 HP ING GOC RAILER 51- \$: \$:	(2ND HALF, DSENECK, DF (25T, 50T, AN <b>Tons</b> 47.67	2006) ROP DECK EQU	-
Truc <u>Cost Breakdown:</u> <u>Available Rig C</u> Ownership Operating Operator	k Trailer Descr <b>Capacities</b> o Cost/Hour: g Cost/Hour: r Cost/Hour:	o-25 Tons           \$21.28           \$26.55           \$20.54	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54	400 HP ING GOC TRAILER 51- \$; \$; \$;	(2ND HALF, SENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21 20.54	2006) ROP DECK EQU	-
Truc <u>Cost Breakdown:</u> <u>Available Rig C</u> Ownership Operating Operator Helper	k Trailer Descr <b>Capacities</b> Cost/Hour: g Cost/Hour:	ription: Gl	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48	400 HP ING GOC TRAILER 51- \$ \$ \$ \$ \$ \$ \$	(2ND HALF, DSENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21	2006) ROP DECK EQU	
Truc <u>Cost Breakdown:</u> <u>Available Rig C</u> Ownership Operating Operator Helper	k Trailer Descr <b>Capacities</b> 0 Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour:	0-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53	400 HP ING GOC TRAILER 51- \$ \$ \$ \$ \$ \$ \$	(2ND HALF, OSENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21 20.54 23.53	2006) ROP DECK EQU	
Truc <u>Cost Breakdown:</u> Available Rig C Ownership Operating Operator Helper Total Uni	k Trailer Descr <b>apacities</b> Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour: <b>BLE EQUIPN</b>	0-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49	400 HP ING GOC TRAILER 51- \$ \$ \$ \$ \$ \$ \$	(2ND HALF, DSENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21 20.54 23.53 47.95	2006) ROP DECK EQU ND 100T) Return Trip	IPMENT DOT Permit
Truc Cost Breakdown: Available Rig C Ownership Operating Operator Helper Total Uni NON ROADAB Machine	k Trailer Descr <b>Capacities</b> 0 Cost/Hour: g Cost/Hour: r Cost/Hour: r Cost/Hour: t Cost/Hour:	0-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53	400 HP ING GOC TRAILER 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	(2ND HALF, OSENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21 20.54 23.53	2006) ROP DECK EQU ND 100T)	IPMENT
Truc <u>Cost Breakdown:</u> <u>Available Rig C</u> Ownership Operating Operator Helper Total Uni NON ROADAB	k Trailer Descr <b>Capacities</b> 0 Cost/Hour: g Cost/Hour: r Cost/Hour: t Cost/Hour: t Cost/Hour: <b>SLE EQUIPN</b> Weight/ Unit	0-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37           MENT:           Owner ship	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49 Haul Rig	400 HP ING GOC TRAILER 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	(2ND HALF, DSENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21 20.54 23.53 47.95 Haul Trip	2006) ROP DECK EQU ND 100T) Return Trip	IPMENT DOT Permit
Truc <u>Cost Breakdown:</u> <u>Available Rig C</u> Ownership Operating Operator Helper Total Uni <u>NON ROADAB</u> Machine	k Trailer Descr <b>Capacities</b> Cost/Hour: Cost/Hour: r Cost/Hour: t Cost/Hour: t Cost/Hour: <b>SLE EQUIPN</b> Weight/	0-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37           MENT:           Owner ship	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49 Haul Rig	400 HP ING GOC TRAILER 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	(2ND HALF, SENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21 20.54 23.53 47.95 Haul Trip Cost/hr/	2006) ROP DECK EQU ND 100T) Return Trip	IPMENT DOT Permit
Truc Cost Breakdown: Available Rig C Ownership Operating Operation Helper Total Uni NON ROADAB Machine Description	k Trailer Descr <b>Capacities</b> 2 Cost/Hour: 3 Cost/Hour: 4 Cost/Hour: 5 Cost/Hour: 5 Cost/Hour: 5 Cost/Hour: 5 Cost/Hour: 6 Cost/Hour: 5 Cost/Hour: 6 Cost/Hour: 7 Cost/Hour: 7 Cost/Hour: 8 Cost/Hour: 7 Cost/Hour: 8 Cost/Hour: 9 Cost/Hour:	0-25 Tons           \$21.28           \$26.55           \$20.54           \$0.00           \$68.37           MENT:           Owner ship           Cost/hr/ unit	ENERIC FOLD T 26-50 Tons \$37.94 \$50.48 \$20.54 \$23.53 \$132.49 Haul Rig Cost/hr/unit	400 HP ING GOC TRAILER 51- \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	(2ND HALF, SENECK, DF (25T, 50T, AN <b>Tons</b> 47.67 56.21 20.54 23.53 47.95 Haul Trip Cost/hr/ fleet	2006) ROP DECK EQU ND 100T) Return Trip Cost/hr/ fleet	IPMENT DOT Permit Cost/ fleet

## **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Flatbed Truck, 6x4, 45K GVW	\$49.15	1	\$49.15	\$49.15
		Subtotals:	\$49.15	\$49.15

# **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	MONTROSE 70.00 45.00	miles mph
Total Non-Roadable Mob/Demob Cost *	\$3,533.29	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$152.91	_

Transportation Cycle Time:

	Non- Roadable Equipment	Roadable Equipment
Haul Time (Hours):	1.56	1.56
Return Time (Hours):	1.56	1.56
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	4.11	3.11

#### JOB TIME AND COST

Total job time: 8.22 Hours

Total job cost: \$3,686