## COST SUMMARY WORK

Task description:		Cost Sum	mary						
Site:	5J Pit			Per	mit Action:	New Permit	Permit/Jol	o#: <u>M2024032</u>	
<u>P</u> ]	Task #:	10/15/2024		State: ounty:	Colorado Larimer		_ Abbreviation: _ Filename:	None M032-000	

Agency or organization name: DRMS

## TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Aspect A - Doze active mine face to 3H:1V	DOZER	2	5.91	\$3,820
001	Aspect A - Backfill pit side sloped to 3H:1V	DOZER	2	11.83	\$7,641
002	Aspect A - Rough grade	DOZER	2	7.31	\$4,722
004	Aspect A - Place growth medium	SCRAPER1	1	12.42	\$22,710
005	Aspect A - Final grade	DOZER	2	7.31	\$4,722
006	Aspect B - Scarify Pit floor	RIPPER	2	6.02	\$4,166
007	Aspect B - Rough grade	DOZER	2	6.64	\$4,292
008	Aspect B - Place growth medium	SCRAPER1	1	13.69	\$25,033
009	Aspect B - Final grade	DOZER	2	8.06	\$5,205
010	Aspect C - Place growth medium	SCRAPER1	1	10.02	\$18,324
010	Aspect C - Final grade	DOZER	2	5.90	\$3,809
012	Aspect D - Scarify employee areas	RIPPER	2	1.50	\$1,041
013	Aspect D - Rough grade	DOZER	2	1.66	\$1,073
014	Aspect D - Place growth medium	SCRAPER1	1	1.41	\$2,580
015	Aspect D - Final grade	DOZER	2	1.66	\$1,073
016	Seed all disturbed areas	REVEGE	1	48.30	\$22,808
017	Re-seed 20% of disturbed areas	REVEGE	1	9.70	\$4,545
018	Mob/Demob	MOBILIZE	1	5.60	\$12,942
		<u>SUBTO</u>	DTALS:	164.94	\$150,506

#### **INDIRECT COSTS**

#### **OVERHEAD AND PROFIT:**

Liability insurance:	2.02	Total =	\$3,040
Performance bond:	1.05	Total =	\$1,580
Job superintendent:	82.47	Total =	\$6,537
Profit:	10.00	Total =	\$15,051
		TOTAL O & P =	\$26,209
		CONTRACT AMOUNT (direct + $O \& P$ ) =	\$176,715

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$500	Total =	\$500
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0
Reclamation management and/or administration:	5.00		\$8,836
CONTINGENCY:	0.00	Total =	\$0

TOTAL BOND AMOUNT (direct + indirect) = \_\_\_\_\_\$186,050

	Aspect II - Doze	active infine	face to 3H:1V		
5J Pit	Per	mit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTIF	ICATION				
Task #:         001           Date:         10/15/2024           User:         JR2	State: 4 County:	Colorado Larimer		Abbreviation: Filename:	None 001
Agency or orga	nization name: DF	RMS			
HOURLY EQUIPME	ENT COST				
	t D8T - 8SU				
Horsepower: 310					
	mi-Universal				
Attachment: NA					
	ber day				
Data Source: (CI	RG)		_		
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$173.32	NA		
Operating Cost/Hour:		\$109.71	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.04	NA		
Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>6,25</u> Swell factor: 1.12	<b><u>FITIES</u></b> 50				
MATERIAL QUANT Initial Volume: 6,25 Swell factor: 1.12	<b><u>FITIES</u></b> 50				
MATERIAL QUANTInitial Volume:6,25Swell factor:1.12Loose volume:7,03	<b>FITIES</b> 50 25 51 LCY				
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu	TITIES 50 25 51 LCY me:Operator				
MATERIAL QUANT Initial Volume: 6,25 Swell factor: 1.12	TITIES 50 25 51 LCY me:Operator				
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated swel	FITIES         50         25         31 LCY         me:       Operator         I factor:       Cat Hand				
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu         Source of estimated swel         HOURLY PRODUCT	EITIES         50         25         31 LCY         me:       Operator         I factor:       Cat Hand         TION				
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu         Source of estimated swel         HOURLY PRODUCT         Average push distance:	CITIES         50         25         31 LCY         me:       Operator         1 factor:       Cat Hand         TION        50 feet	book			
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated swel	CITIES         50         25         31 LCY         me:       Operator         1 factor:       Cat Hand         TION        50 feet	book			
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT       Average push distance:	CITIES         50         25         51 LCY         me:       Operator         I factor:       Cat Hand         TION         50 feet         ction:       1,400.0 LC	book	  bile 1.0		
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT       Average push distance:         Unadjusted hourly product	CITIES         50         25         51 LCY         me:       Operator         I factor:       Cat Hand         TION         50 feet         ction:       1,400.0 LC	book Y/hr	  pile 1.0		
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu         Source of estimated swel         HOURLY PRODUC?         Average push distance:         Unadjusted hourly produced         Materials consistency dest         Average push gradient:	Signal         Signal<	book Y/hr	  bile 1.0		
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT       Average push distance:         Unadjusted hourly produ       Materials consistency des         Average push gradient:       Average site altitude:	EITIES           50           50           25           31 LCY           me:         Operator           1 factor:         Cat Hand           TION           ction:         50 feet           ction:         1,400.0 LC           scription:         Consol           10 %         5,410 feet	book Y/hr idated stockp			
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT       Average push distance:         Unadjusted hourly produ       Materials consistency des         Average push gradient:       Average site altitude:         Material weight:       Weight description:	EITIES           50           25           31 LCY           me:         Operator           1 factor:         Cat Hand           TION           ction:         1,400.0 LC           scription:         Consol           10 %         5,410 feet           2,650 lbs/LCY         Decomposed rock	book Y/hr idated stockp	. 75% Earth		
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT       Average push distance:         Unadjusted hourly produ       Materials consistency des         Average push gradient:       Average site altitude:         Material weight:       Weight description:	EITIES         50         25         31 LCY         me:       Operator         1 factor:       Cat Hand         TION         ction:       50 feet         ction:       1,400.0 LC         scription:       Consol         10 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         n Factor       Factor	book Y/hr idated stockp			
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated volu         Source of estimated swel       HOURLY PRODUCT         Average push distance:       Unadjusted hourly produced         Materials consistency dest       Average push gradient:         Average site altitude:       Material weight:         Weight description:       Job Condition Correction	EITIES           50           25           31 LCY           me:         Operator           1 factor:         Cat Hand           TION           ction:         50 feet           ction:         1,400.0 LC           scription:         Consol           10 %         5,410 feet           2,650 lbs/LCY         Decomposed rock           n Factor         0.	book Y/hr idated stockp - 25% Rock,	75% Earth		
MATERIAL QUANT         Initial Volume:       6,25         Swell factor:       1.12         Loose volume:       7,03         Source of estimated volu       Source of estimated volu         Source of estimated volu       Source of estimated volu         Source of estimated volu       Material sconsistency         Materials consistency des       Average push gradient:         Average site altitude:       Material weight:         Weight description:       Job Condition Correction         Operator       Operator	ETTIES         50         25         31 LCY         me:       Operator         1 factor:       Cat Hand         TION         ction:       50 feet         1,400.0 LC         scription:       Consol         10 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         h Factor       Skill:       0.         tency:       1.	book Y/hr idated stockp - 25% Rock, 750	75% Earth Source (AVG.)		

Task # 001

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4247	
Adjusted unit production: 59	4.58 LCY/hr	
Adjusted fleet production: 11	89.16 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.543/LCY

Total job time:	<b>5.91</b> Hours
Total job cost:	\$3,820

Task description:	P	I	loped to 3H:1V		
5J Pit	Peri	mit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTIF	FICATION				
Task #: 002	State:	Colorado		Abbreviation:	None
Date: $10/15/202^2$		Larimer		Filename:	M032-002
User: $\frac{10/10/202}{\text{JR2}}$	County:	Durinter		<u> </u>	11032 002
Agency or orga	anization name: DR	RMS			
HOURLY EQUIPMI	ENT COST				
	ut D8T - 8SU				
Horsepower: 31					
•	mi-Universal				
Attachment: NA					
	per day				
	RG)				
Cost Breakdown:					
		<b>*</b> 4 <b>-</b> -	Utilization %		
Ownership Cost/Hour:		\$173.32	NA		
Operating Cost/Hour:	. <u></u>	\$109.71	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.04	NA		
Total unit Cost/Hour: Fotal Fleet Cost/Hour:	\$323.07 \$646.13				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>12,5</u>	<b>\$646.13</b> <b><u>FITIES</u></b> 500				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>12,5</u> Swell factor: <u>1.12</u>	<b>\$646.13</b> <b><u>FITIES</u></b> 500				
Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0	\$646.13 FITIES 500 25 063 LCY	  Estimate			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu	\$646.13 FITIES 500 25 063 LCY Ime:Operator				
Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0	\$646.13 FITIES 500 25 063 LCY Ime:Operator				
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu         Source of estimated swel	\$646.13           FITIES           500           25           063 LCY           ume:         Operator           Il factor:         Cat Hand				
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swel         HOURLY PRODUCC       14,0	\$646.13 FITIES 500 25 063 LCY Ime: Operator Il factor: Cat Hand TION				
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swel         HOURLY PRODUC       Average push distance:	\$646.13 <b>TITIES</b> 500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand <b>TION</b> 50 feet	book			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swel         HOURLY PRODUCC       14,0	\$646.13 FITIES 500 25 063 LCY Ime: Operator Il factor: Cat Hand TION 50 feet	book			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swel         HOURLY PRODUC       Average push distance:	\$646.13         FITIES         500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand         TION         action:       50 feet         1,400.0 LCY	book	   bile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated sweld         HOURLY PRODUCC       Average push distance:         Unadjusted hourly product       Materials consistency de	\$646.13         FITIES         500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand         TION         action:       50 feet         1,400.0 LCY         escription:       Consoli	book Y/hr	  bile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated sweld         HOURLY PRODUC       Average push distance:         Unadjusted hourly produ       Materials consistency de         Average push gradient:       Statistical statistatistical statistical statistical statistical statisti	\$646.13         FITIES         500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand         TION         action:       50 feet         1,400.0 LC         escription:       Consoli         10 %	book Y/hr	  bile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated sweld         HOURLY PRODUCC       Average push distance:         Unadjusted hourly product       Materials consistency de	\$646.13         FITIES         500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand         TION         action:       50 feet         1,400.0 LCY         escription:       Consoli	book Y/hr	   pile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated sweld         HOURLY PRODUC       Average push distance:         Unadjusted hourly produ       Materials consistency de         Average push gradient:       Statistical statistatistical statistical statistical statistical statisti	\$646.13         FITIES         500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand         TION         action:       50 feet         1,400.0 LC         escription:       Consoli         10 %	book Y/hr	  bile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swell         HOURLY PRODUCC         Average push distance:         Unadjusted hourly product         Materials consistency de         Average push gradient:         Average site altitude:	\$646.13 <b>FITIES</b> 500         25         063 LCY         ime:       Operator         Il factor:       Cat Hand <b>TION</b> action:       50 feet         action:       1,400.0 LCY         escription:       Consolid         10 %       5,410 feet	book Y/hr idated stockp			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swell         HOURLY PRODUCC       Average push distance:         Unadjusted hourly product       Materials consistency de         Average push gradient:       Average site altitude:         Material weight:       Material weight:	\$646.13 <b>FITIES</b> 500         25         063 LCY         ime:       Operator         Il factor:       Cat Hand <b>TION</b> action:       50 feet         action:       1,400.0 LCY         escription:       Consolition:         10 %       5,410 feet         2,650 lbs/LCY       Decomposed rock	book Y/hr idated stockp			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swell         HOURLY PRODUC         Average push distance:         Unadjusted hourly produ         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Iob Condition Correction         Operator	\$646.13 <b>FITIES</b> 500         25         063 LCY         ume:       Operator         If factor:       Cat Hand <b>TION</b> action:       50 feet         action:       50 feet         action:       Consoli         scription:       Consoli         10 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         n Factor       0.	book Y/hr idated stockp - 25% Rock, 750	, 75% Earth Source (AVG.)		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated swell         HOURLY PRODUC       Average push distance:         Unadjusted hourly product       Materials consistency de         Average push gradient:       Average site altitude:         Material weight:       Weight description:         Iob Condition Correction       Operator         Material consist       Operator	\$646.13         FITTES         500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand         TION         action:       50 feet         1,400.0 LCY         escription:       Consoli         10 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         n Factor       0.         Skill:       0.         tency:       1.	book Y/hr idated stockp - 25% Rock, 750 000	, 75% Earth <u>Source</u> (AVG.) (CAT HB)		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       12,5         Swell factor:       1.12         Loose volume:       14,0         Source of estimated volu       Source of estimated sweld         HOURLY PRODUCC         Average push distance:         Unadjusted hourly product         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Iob Condition Correction         Operator         Material consist         Dozing material	\$646.13 <b>FITTLES</b> 500         25         063 LCY         ume:       Operator         Il factor:       Cat Hand <b>TION</b> action: $50$ feet         action: $50$ feet         action: $1,400.0$ LC?         escription:       Consoli $10 \%$ $5,410$ feet $2,650$ lbs/LCY       Decomposed rock         n Factor $\circ$ Skill: $0.$ tency: $1.$	book Y/hr idated stockp - 25% Rock, 750	, 75% Earth Source (AVG.)		

Task # 002

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	1.000	(DOZ-OC)
Push gradient:	0.786	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.4247	
Adjusted unit production: 59	4.58 LCY/hr	
Adjusted fleet production: 11	89.16 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.543/LCY

Total job time:	<b>11.83</b> Hours
Total job cost:	\$7,641

	Aspect A - Rou	igii gi aue			
5J Pit	Pe	ermit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTI	<b>IFICATION</b>				
Task #: 003	State	: Colorado		Abbreviation:	None
Date: $10/15/20$				Filename:	003
User: JR2					
Agency or or	ganization name: <u>I</u>	ORMS			
HOURLY EQUIPM	MENT COST				
	Cat D8T - 8SU				
1	310				
<b>7</b> 1	Semi-Universal				
	NA				
	l per day (CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour		\$173.32	NA		
Operating Cost/Hour		\$109.71	100		
Ripper own. Cost/Hour		\$0.00	NA		
Ripper op. Cost/Hour		\$0.00	0		
Operator Cost/Hour	r:	\$40.04	NA		
Total Fleet Cost/Hour: MATERIAL OUAN					
MATERIAL QUAN	<b>NTITIES</b> 099				
MATERIAL QUAN Initial Volume: <u>7,</u> Swell factor: <u>1</u> .	NTITIES				
MATERIAL QUAN         Initial Volume:       7,         Swell factor:       1.         Loose volume:       7,         Source of estimated vo	NTITIES           099           125           986 LCY           olume:         Operato	br Estimate (8.	8ac x 6in)		
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated sw	NTITIES         099         125         986 LCY         olume:       Operator         vell factor:       Cat Har	,	8ac x 6in)		
MATERIAL QUAN Initial Volume:7, Swell factor:1. Loose volume:7, Source of estimated vo Source of estimated sw HOURLY PRODUC	NTITIES 099 125 986 LCY olume: Operato vell factor: Cat Har CTION	,	8ac x 6in)		
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated sw HOURLY PRODUC Average push distance:	NTITIES 099 125 986 LCY olume: Operato vell factor: Cat Har CTION : 50 feet	ıdbook	8ac x 6in)		
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated sw HOURLY PRODUC	NTITIES         099         125         986 LCY         olume:       Operator         vell factor:       Cat Har         CTION         :       50 feet         duction:       1,400.0 L	ıdbook			
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated sw HOURLY PRODUC Average push distance: Unadjusted hourly proc Materials consistency of	NTITIES         099         125         986 LCY         olume:       Operato         vell factor:       Cat Har         CTION         :       50 feet         duction:       1,400.0 L         description:       Cons	ndbook CY/hr			
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated sw HOURLY PRODUC Average push distance: Unadjusted hourly proc	NTITIES         099         125         986 LCY         olume:       Operato         vell factor:       Cat Har         CTION         :       50 feet         duction:       1,400.0 L         description:       Cons	ndbook CY/hr			
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated sw HOURLY PRODUC Average push distance: Unadjusted hourly proc Materials consistency of Average push gradient:	NTITIES           099           125           986 LCY           olume:         Operato           vell factor:         Cat Har           CTION           :         50 feet           duction:         1,400.0 L           description:         Cons           :         5 %	ndbook CY/hr			
MATERIAL QUAN Initial Volume:	NTITIES           099           125           986 LCY           olume:         Operato           vell factor:         Cat Har           CTION           :         50 feet           duction:         1,400.0 L           description:         Cons           :         5 %	ndbook CY/hr olidated stockj			
MATERIAL QUAN         Initial Volume:       7,4         Swell factor:       1.         Loose volume:       7,5         Source of estimated vo       Source of estimated sw         HOURLY PRODUC         Average push distance:         Unadjusted hourly proc         Materials consistency of         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	NTITIES         099         125         986 LCY         olume:       Operator         vell factor:       Cat Har         CTION         :       50 feet         duction:       1,400.0 L         description:       Cons         :       5 %	ndbook CY/hr olidated stockp	 bile 1.0 , 75% Earth <u>Source</u>		
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7; Source of estimated vo Source of estimated vo Source of estimated sw HOURLY PRODUC Average push distance: Unadjusted hourly proc Materials consistency of Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correctin Operate	NTITIES         099         125         986 LCY         olume:       Operato         vell factor:       Cat Har         CTION         :       50 feet         duction:       1,400.0 L         description:       Cons         :       5 %	ndbook CY/hr olidated stockj kk - 25% Rock 0.750	 bile 1.0 , 75% Earth <u>Source</u> (AVG.)		
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated vo Source of estimated sw HOURLY PRODUC Average push distance: Unadjusted hourly proc Materials consistency of Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	NTITIES         099         125         986 LCY         olume:       Operator         vell factor:       Cat Har         CTION         :       50 feet         duction:       1,400.0 L         description:       Cons         :       5 %	ndbook CY/hr olidated stockj k - 25% Rock 0.750 1.000	, 75% Earth , 75% Earth (AVG.) (CAT HB)		
MATERIAL QUAN Initial Volume: 7, Swell factor: 1. Loose volume: 7, Source of estimated vo Source of estimated sw HOURLY PRODUC Average push distance: Unadjusted hourly proc Materials consistency of Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correctin Operato Material consi Dozing r	NTITIES         099         125         986 LCY         olume:       Operator         vell factor:       Cat Har         CTION         :       50 feet         duction:       1,400.0 L         description:       Cons         :       5 %	ndbook CY/hr olidated stockj kk - 25% Rock 0.750	 bile 1.0 , 75% Earth <u>Source</u> (AVG.)		

Task # 003

Job efficient	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 0.903	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 0.868	(CAT HB)
Blade typ	pe: 1.000	(PAT)
Net correction	on: 0.3903	
Adjusted unit production:	546.42 LCY/hr	
Adjusted fleet production:	1092.84 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.591/LCY

Total job time:	<b>7.31</b> Hours
Total job cost:	\$4,722

# SCRAPER TEAM WORK

Site: 5J Pit			Permi	t Action:	New Permit	Pern	nit/Job#: <u>N</u>	12024032	
<b>PROJEC</b>	T IDEN	TIFICATION							
Task #:	004	S	State:	Colorado		Abbrev	viation No	one	
Date:				Larimer				032-004	
User:	JR2								
А	gency or o	organization name:	DRM	15					_
HOURLY	Y EQUIP	<u>MENT</u>			COSTSh	ift basis: <u>1 per da</u>	<u>iy</u>		
					ent Description				
			Scraper:	Cat 631	G				_
	Suppo	rt Equipment -Loa	-Dozer: d Area:	NA NA					_
	Buppo		p Area:	Cat D8	Γ - 8SU				-
	Road Ma	intenance – Motor		NA					_
		-Water	Truck:	NA					_
Cost Brea	kdown:	Scraper Wo	rk Team		Support Equip	ment	Mainten	ance Equi	pmen
		Scraper		zer	Load Area	Dump Area	Motor Gra		ater T
%Utilization-1	machine:	100		NA	NA	100	]	NA	
Ownership co	ost/hour:	\$442.19		NA	NA	\$173.32	]	NA	
Operating c	ost/hour:	\$252.89		NA	NA	\$109.71	]	NA	
%Utilizatio	n-ripper:	NA		NA	NA	NA	]	NA	
Ripper own. c	ost/hour:	NA		NA	NA	\$0.00	]	NA	
Ripper op. co	ost/hour:	NA		NA	NA	\$0.00	]	NA	
Operator co	ost/hour:	\$57.52		NA	NA	\$40.04	]	NA	
Unit S	ubtotals:	\$752.60		NA	NA	\$323.07	]	NA	
Number	of Units:	2		0	0	1		0	
Group S	ubtotals:	Work:	\$1,50	05.20	Support:	\$323.07	Ma	int:	\$0.0
Total work	team cost	/hour: <u><b>\$1,828.27</b></u>							
MATER	IAL QUA	NTITIES							
Initia	l volume:	14,197		CCY	Swell facto	or: 1.215			
	e volume:	17,249		LCY					
		rce of estimated vo of estimated swell		Operator Cat Hand	Estimate (8.8ac x book	1ft)			_
попр									-
HOURLY	<u>i prod</u>	JUIIUN			Scraper Bo	wl (volume) Basi	ç.		
		1 (00 11 7 07)					<u>ə.</u>		
	l weight:	1,600 lbs/LCY			Struck V			- LCY	
Material des Rated	Payload:	Top Soil 81,600 pounds			Heaped V Average V			LCY LCY	
Raidu	1 ay 10au.	or,000 pounds			AVELAGE V	June, 27.00			

<u>0.80</u> Minutes

0.70 Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5410 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 1" tire penetration 4.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	5.00	4.00	9.00	733	0.43

Haul Time: **0.43** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	-5.00	4.00	-1.00	2920	0.15
				Return Time:	0.15	ninutes
			Total Scrape	team cycle time:	2.08	minutes
			Adjusted f	or job conditions:	694.33	LCY/Hour
			Selected Nu	mber of Scrapers:	2	Scraper(s)
	Adjusted	d single scrap	er team (unit) h	ourly production:	1,388.65	LCY/Hour
	Adjusted m	ultiple scrape	er team (fleet) h	ourly production:	1,388.65	LCY/Hour
	Unadjusted unit pro-	duction/hour:	836.54	LCY/Hour		

Fleet size:	1	Team(s)	Total job time:	12.42	Hours
Unit cost:	\$1.317	/LCY	Total job cost:	\$22,710	-

Task description:	Aspect A - Final	graue			
5J Pit	Per	mit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTIF	FICATION				
Task #:     005       Date:     10/15/2024       User:     JR2	4 State: County:	Colorado Larimer		Abbreviation: Filename:	None M032-005
Agency or orga	anization name: DI	RMS			
HOURLY EQUIPM	ENT COST				
	at D8T - 8SU				
Horsepower: 31					
Blade Type: Se Attachment: NA	mi-Universal				
	per day RG)				
	1.U)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$173.32	NA		
Operating Cost/Hour:		\$109.71	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$323.07 <b>\$646.13</b>				
Total Fleet Cost/Hour: MATERIAL QUAN	\$646.13 <u>FITIES</u>				
Total Fleet Cost/Hour:	<b>\$646.13</b> <b><u>FITIES</u> 99</b>				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 7,09 Swell factor: 1.12	<b>\$646.13</b> <b><u>FITIES</u> 99</b>				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 7,09 Swell factor: 1.12 Loose volume: 7,98 Source of estimated volu Source of estimated swe HOURLY PRODUC	\$646.13 FITIES 99 25 86 LCY Ime: Operator Il factor: Cat Hance TION	Estimate (8. Ibook	8ac x 6in)		
Total Fleet Cost/Hour:         MATERIAL QUAN'         Initial Volume:       7,09         Swell factor:       1.12         Loose volume:       7,98         Source of estimated volu       Source of estimated swell	\$646.13 <b>FITIES</b> 99 25 86 LCY Ime: Operator Il factor: Cat Hance TION 50 feet	lbook	8ac x 6in)		
Total Fleet Cost/Hour: MATERIAL QUAN <sup>7</sup> Initial Volume: 7,09 Swell factor: 1.12 Loose volume: 7,98 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance:	\$646.13         FITIES         99         25         86 LCY         Ime:       Operator         Il factor:       Cat Hance         TION         action:       50 feet         1,400.0 LC	lbook			
Total Fleet Cost/Hour:         MATERIAL QUAN?         Initial Volume:       7,09         Swell factor:       1.12         Loose volume:       7,98         Source of estimated volu       Source of estimated swell         HOURLY PRODUC       Average push distance:         Unadjusted hourly produce       Total	\$646.13         FITIES         99         25         86 LCY         Ime:       Operator         Il factor:       Cat Hance         TION         action:       50 feet         1,400.0 LC	lbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUAN? Initial Volume: 7,09 Swell factor: 1.12 Loose volume: 7,98 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient:	\$646.13         FITIES         99         25         86 LCY         Ime:       Operator         11 factor:       Cat Hand         TION         action:       50 feet         inction:       1,400.0 LC         escription:       Consol         5 %	lbook Y/hr			
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,09         Swell factor:       1.12         Loose volume:       7,98         Source of estimated volu       7,98         Source of estimated volu       Source of estimated swell         HOURLY PRODUC       Average push distance:         Unadjusted hourly produ       Materials consistency de         Average push gradient:       Average site altitude:	\$646.13 <b>FITIES</b> 99         25         86 LCY         nme:       Operator         11 factor:       Cat Hand <b>TION</b> action:       50 feet         inction:       1,400.0 LC         escription:       Consol         5 %       5,410 feet	lbook Y/hr lidated stockj	 bile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUAN?         Initial Volume:       7,09         Swell factor:       1.12         Loose volume:       7,98         Source of estimated volu       Source of estimated swell         Source of estimated swell       Source of estimated swell         HOURLY PRODUC       Average push distance:         Unadjusted hourly produce       Materials consistency de         Average push gradient:       Average site altitude:         Material weight:       Material weight:	\$646.13         FITIES         99         25         86 LCY         Ime:       Operator         11 factor:       Cat Hand         TION         action:       50 feet         interm       Consol         5 %       Consol         becomposed rock	lbook Y/hr lidated stockj	 bile 1.0		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,09         Swell factor:       1.12         Loose volume:       7,98         Source of estimated volu       500         Source of estimated volu       500         Source of estimated swell       600         HOURLY PRODUC       798         Average push distance:       100         Unadjusted hourly produce       700         Materials consistency de       700         Average push gradient:       700         Average site altitude:       700         Material weight:       700         Weight description:       700	\$646.13         FITIES         99         25         86 LCY         nme:       Operator         11 factor:       Cat Hand         TION         action:       50 feet         action:       1,400.0 LC         escription:       Consol         5 %          5,410 feet          2,650 lbs/LCY       Decomposed rock         n Factor	lbook Y/hr lidated stockj	 bile 1.0		
Total Fleet Cost/Hour: MATERIAL QUAN? Initial Volume: 7,09 Swell factor: 1.12 Loose volume: 7,98 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$646.13         ITTIES         99         25         86 LCY         Ime:       Operator         11 factor:       Cat Hand         TION         action:       50 feet         inction:       50 feet         action:       Consol         5 %       Consol         5,410 feet       Operator         Decomposed rock       N         Skill:       0         tency:       1	Ibook Y/hr lidated stockj 	 bile 1.0 , 75% Earth <u>Source</u>		
Total Fleet Cost/Hour: MATERIAL QUANY Initial Volume: 7,09 Swell factor: 1.12 Loose volume: 7,98 Source of estimated volu Source of estimated swell HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consis Dozing mage	\$646.13         ITTIES         99         25         86 LCY         Ime:       Operator         11 factor:       Cat Hand         TION         action: $50$ feet         action: $1,400.0$ LC         escription:       Consol $5\%$ $5,410$ feet $2,650$ lbs/LCY       Decomposed rock         n Factor $\%$ Skill: $0$ tency:       1         ethod:       1	Ibook Y/hr lidated stockp	 pile 1.0 , 75% Earth <u>Source</u> (AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3903	
Adjusted unit production: 54	6.42 LCY/hr	
Adjusted fleet production: 10	92.84 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.591/LCY

Total job time:	<b>7.31</b> Hours
Total job cost:	\$4,722

## BULLDOZER RIPPING WORK

T	ask description:	Aspec	t B - Scarify Pit floor				
Site:	5J Pit		Permit Action:	New Permit	Perm	it/Job#: <u>M2</u>	2024032
<u>P</u>	ROJECT IDI	ENTIFICATIO	<u>N</u>				
	Task #:     006       Date:     10/       User:     JR2	15/2024	State:ColoradoCounty:Larimer		Abbrevi		ne 32-006
	Agency	or organization n	ame: DRMS				
Н	IOURLY EQ	UIPMENT CO	ST				
_		Machine: Cat I	D8T - 8SU ank Ripper		Horsepower: Shift Basis: Data Source:	310 1 per day (CRG)	
C	ost Breakdown:					(6110)	
_	Rippe	Ownership Cos Operating Cos er Ownership Cos per Operating Cos	t/Hour: t/Hour:	\$109.71 \$14.53 \$7.95	Utilization % NA 100 NA 100		
		Operator Cos Total Unit Cos		\$40.04 \$345.55	NA		
		Total Fleet Cos	t/Hour: \$691	.09			
$\mathbf{N}$	<u>IATERIAL Q</u>	<u>UANTITIES</u>	Sele	cted estimating	method: Area		
<u>A</u>	lternate Method	<u>ls:</u>					
eismic: Area:	NA 8.00	acres	Bank Volume:	NA 2.00	BCY Volume: 25,8	NA NA	BCY or C
Alea.	0.00					115	DC101C
T			ated quantity: Operate				
	IOURLY PRO	DUCTION					
<u>Se</u>	eismic:	Se	eismic Velocity:	NA	feet/second		
				11/1			
<u>A</u>	<u>rea:</u>	Average	Ripping Depth:	2.56	feet/pass		
		0	Ripping Width:	7.08	feet/pass		
			Ripping Length:	300.00	feet/pass		
			ge Dozer Speed:	88.00	feet/minute		
			Maneuver Time:	0.25	minutes/pas	SS	
			on per unit area:	0.800	acres/hour		
Jo	b Condition Co	prrection Factors					
	Un	adjusted Hourly U	Unit Production:	0.800	Acres/hr		
			Site Altitude:	5,410	feet		
			Altitude Adj:	1.00	(CAT HB)		
			Job Efficiency:	0.83	(1 shift/day	r)	
			Net Correction:	0.83	multiplier		
			Iourly Unit Production: ourly Fleet Production:	0.66 <b>1.33</b>	Acres/hr Acres/hr		
J	OB TIME AN	ND COST					
	Fleet size:	2	Grader(s)	Total job time	e:6.03	3	Hours
	Unit cost:	\$520.701	Per acre	Total job cos	st: <b>\$4,1</b> 0	56	

Task description:	Aspect B - Roug	n graue			
5J Pit	Per	mit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTI	FICATION				
Task #: 007	State:	Colorado		Abbreviation:	None
Date: $10/15/202$		Larimer		Filename:	M032-007
User: $JR2$	<u>county</u> .	Luminor		T fieldanie.	11032 007
Agency or org	anization name: D	RMS			
HOURLY EQUIPM					
	at D8T - 8SU				
Horsepower: 31					
1	emi-Universal				
Attachment: N	A				
	per day				
	CRG)				
Cost Breakdown:					
			Utilization %		
Ownership Cost/Hour:		\$173.32	NA		
Operating Cost/Hour:		\$109.71	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUAN	\$323.07 \$646.13 TITIES				
Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume: <u>6,4</u> Swell factor: <u>1.1</u>	\$646.13 TITIES 53 25				
Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume: <u>6,4</u> Swell factor: <u>1.1</u>	\$646.13 TITIES 53				
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,4 Swell factor: 1.1 Loose volume: 7,2 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance:	\$646.13         TITIES         53         25         60 LCY         ume:       Operator         ell factor:       Cat Hance         CTION       50 feet		 ас х біп) 		
Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,4         Swell factor:       1.1         Loose volume:       7,2         Source of estimated volu       Source of estimated sweet         HOURLY PRODUCC	\$646.13         TITIES         53         25         60 LCY         ume:       Operator         cat Hance         CTION         uction:       50 feet         1,400.0 LC	lbook			
Total Fleet Cost/Hour:         MATERIAL QUAN         Initial Volume:       6,4         Swell factor:       1.1         Loose volume:       7,2         Source of estimated volu       Source of estimated sweet         HOURLY PRODUC       Average push distance:         Unadjusted hourly product	\$646.13         TITIES         53         25         60 LCY         ume:       Operator         cat Hance         CTION         uction:       50 feet         1,400.0 LC	lbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,4 Swell factor: 1.1 Loose volume: 7,2 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly production Materials consistency destinations	\$646.13         TITIES         53         25         60 LCY         ume:       Operator         ell factor:       Cat Hand         CTION         uction:       50 feet         1,400.0 LC         escription:       Conso         5 %	lbook Y/hr			
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,4 Swell factor: 1.1 Loose volume: 7,2 Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$646.13         TITIES         53         25         60 LCY         ume:       Operator         ell factor:       Cat Hance         CTION         uction:       1,400.0 LC         escription:       Conso         5 %         5,410 feet	lbook Y/hr lidated stockj	pile 1.0		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>6,4</u> Swell factor: <u>1.1</u> Loose volume: <u>7,2</u> Source of estimated volu Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight:	\$646.13         TITIES         53         25         60 LCY         ume:       Operator         ell factor:       Cat Hance         CTION         uction:       1,400.0 LC         escription:       Conso         5 %         5,410 feet         2,650 lbs/LCY         Decomposed rock	lbook Y/hr lidated stockj	pile 1.0		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: 6,4 Swell factor: 1.1 Loose volume: 7,2 Source of estimated volu Source of estimated volu Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description:	\$646.13         TITIES         53         25         60 LCY         ume:       Operator         ell factor:       Cat Hand         CTION         uction:       50 feet         1,400.0 LC         escription:       Consol         5 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         on Factor       Eactor	lbook Y/hr lidated stockj	 pile 1.0 , 75% Earth		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>6,4</u> Swell factor: <u>1.1</u> Loose volume: <u>7,2</u> Source of estimated volue Source of estimated swee HOURLY PRODUC Average push distance: Unadjusted hourly produc Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$646.13TITIES532560 LCYume:Operatorcat Handcat Han	Ibook Y/hr lidated stockj 	 pile 1.0 , 75% Earth		
Total Fleet Cost/Hour: MATERIAL QUAN Initial Volume: <u>6,4</u> Swell factor: <u>1.1</u> Loose volume: <u>7,2</u> Source of estimated volt Source of estimated swe HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consis Dozing m	\$ 646.13         TITIES         53         25 $60$ LCY         ume:       Operator         cat Hand         25 $60$ LCY         ume:       Operator         cat Hand         25         60 LCY         ume:       Operator         cat Hand         250 feet         uction:       1,400.0 LC         escription:       Consol         5 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         on Factor       r         r Skill:       0         stency:       1         nethod:       1	Ibook Y/hr lidated stock 	pile 1.0		

Task # 007

Job efficient	cy:	0.830	(1 SHIFT/DAY)
Spoil pi	le:	0.800	(FND-RF)
Push gradie	nt:	0.903	(CAT HB)
Altitud	le:	1.000	(CAT HB)
Material Weig	ht:	0.868	(CAT HB)
Blade typ	be:	1.000	(PAT)
Net correction	on: 0.390	)3	
Adjusted unit production:	546.42 L	CY/hr	
Adjusted fleet production:	1092.84 I	LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.591/LCY

Total job time:	<b>6.64</b> Hours
Total job cost:	\$4,292

# SCRAPER TEAM WORK

Site: 5J Pit		Permit Action:	New Permit	Perm	it/Job#: <u>M202</u> 4	4032
PROJECT IDENT	TIFICATION					
Task #: 008	S	State: Colorado		Abbrev	iation: None	
Date: 10/15/2	024 Cou	unty: Larimer		File	name: M032-0	008
User: JR2	·	DDMC				
Agency or o	rganization name:	DKMS				
HOURLY EQUIP	MENT		COSTS	hift basis: <u>1 per da</u>	<u>y</u>	
			ent Description			
		craper: Cat 631 Dozer: NA	G			
Suppor	t Equipment -Load	d Area: NA				
Road Mai	-Dumj ntenance –Motor (	p Area: Cat D8 Grader: NA	Γ - 8SU			
	-Water					
Cost Breakdown:	Scraper Wor	rk Team	Support Equi	nment	Maintenance	Fauinme
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water
%Utilization-machine:	100	NA	NA	100	NA	
Ownership cost/hour:	\$442.19	NA	NA	\$173.32	NA	
Operating cost/hour:	\$252.89	NA	NA	\$109.71	NA	
%Utilization-ripper:	NA	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	NA	NA	\$0.00	NA	
Ripper op. cost/hour:	NA	NA	NA	\$0.00	NA	
Operator cost/hour:	\$57.52	NA	NA	\$40.04	NA	
Unit Subtotals:	\$752.60	NA	NA	\$323.07	NA	
Number of Units:	2	0	0	1	0	
Group Subtotals:	Work:	\$1,505.20	Support:	\$323.07	Maint:	\$0
Total work team cost	hour: <u><b>\$1,828.27</b></u>					
MATERIAL QUA	<b>NTITIES</b>					
Initial volume:	15,649	CCY	Swell fact	tor: 1.215		
Loose volume:	19,014	LCY				
	ce of estimated vo f estimated swell f		Estimate (9.7ac z lbook	x 1ft)		
HOURLY PRODU	ICTION					
HOURITIKOD			Scraper B	owl (volume) Basis	3:	
Material weight:	1,600 lbs/LCY			Volume: 24.00		CY
Material description:	Top Soil			Volume: <u>24.00</u> Volume: <u>34.00</u>		CY
Rated Payload:	81,600 pounds		-	Volume: 29.00		CY

<u>0.80</u> Minutes

0.70 Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5410 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 1" tire penetration 4.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	5.00	4.00	9.00	733	0.43

Haul Time: **0.43** minutes

#### **Return Route:**

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	-5.00	4.00	-1.00	2920	0.15
				Return Time:	0.15	minutes
			Total Scrape	er team cycle time:	2.08	minutes
			Adjusted	for job conditions:	694.33	LCY/Hour
			Selected N	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scrap	ber team (unit)	hourly production:	1,388.65	LCY/Hour
	Adjusted m	ultiple scrap	er team (fleet)	hourly production:	1,388.65	LCY/Hour
	Unadjusted unit pro-	duction/hour: r push dozer:		_ LCY/Hour		

Fleet size:	1	Team(s)	Total job time:	13.69	Hours
Unit cost:	\$1.317	/LCY	Total job cost:	\$25,033	

Task description:	Aspect B - Final	graue			
5J Pit	Peri	mit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTIF	<b>ICATION</b>				
Task #: 009	State:	Colorado		Abbreviation:	None
Date: $10/15/2024$		Larimer		Filename:	M032-009
User: JR2					
Agency or organ	nization name: <u>DR</u>	RMS			
HOURLY EQUIPME	ENT COST				
	t D8T - 8SU				
Horsepower: 310					
Blade Type: Ser Attachment: NA	mi-Universal				
	er day				
	RG)				
Cost Breakdown:		i			
		¢172.22	<u>Utilization %</u>		
Ownership Cost/Hour:		\$173.32	NA		
Operating Cost/Hour: Ripper own. Cost/Hour:		\$109.71	100		
Rinner own Cost/Hour		\$0.00	NA		
		\$0.00	0		
Ripper op. Cost/Hour:					
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour:	\$323.07 \$646.13	\$40.04	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume:7,82	\$646.13 <u>FITIES</u> 15	\$40.04	NA		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,82 Swell factor: 1.12	\$646.13 <u>FITIES</u> 15	\$40.04 	NA		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80	\$646.13 <u>FITIES</u> 25 25 25 23 LCY				
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu	\$646.13 <b>TITIES</b> 55 53 ICY me:Operator	 Estimate (9.1			
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80	\$646.13 <b>TITIES</b> 55 53 ICY me:Operator	 Estimate (9.1			
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu	\$646.13 CITIES 5 3 LCY me: Operator 1 factor: Cat Hand	 Estimate (9.1			
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated swel	\$646.13 TITIES 5 5 3 LCY me: Operator 1 factor: Cat Hand TION	 Estimate (9.1			
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated swel	\$646.13         CITIES         25         25         23 LCY         me:       Operator         1 factor:       Cat Hand         FION         50 feet	Estimate (9.7			
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated swel         HOURLY PRODUCT         Average push distance:	\$646.13         CITIES         25         25         23 LCY         me:       Operator         1 factor:       Cat Hand <b>TION</b> ction:       50 feet         1,400.0 LCY	Estimate (9.7	7ac x 6in)		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency destance:         Average push gradient:	\$646.13         CITIES         25         25         25         25         26         27         3 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       50 feet         1,400.0 LC         scription:       Consoli         5 %	Estimate (9.7 book	7ac x 6in)		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency destance	\$646.13         CITIES         25         25         25         23 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       50 feet         1,400.0 LC         scription:       Consoli	Estimate (9.7 book	7ac x 6in)		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency destance:         Average push gradient:	\$646.13         CITIES         25         25         25         25         26         27         3 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       50 feet         1,400.0 LC         scription:       Consoli         5 %	Estimate (9.7 book	7ac x 6in)		
Ripper op. Cost/Hour: Operator Cost/Hour: Total unit Cost/Hour: Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 7,82 Swell factor: 1.12 Loose volume: 8,80 Source of estimated volu: Source of estimated volu: Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly product Materials consistency des Average push gradient: Average site altitude:	\$646.13         CITIES         25         25         23 LCY         me:       Operator         1 factor:       Cat Hand         Cat Hand         FION         ction:       50 feet         ction:       1,400.0 LCY         scription:       Consoli         5 %       5,410 feet	 Estimate (9.7 book Y/hr idated stockp	7ac x 6in)		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated volu:         Source of estimated swel         HOURLY PRODUC?         Average push distance:         Unadjusted hourly product         Materials consistency destinated         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	\$646.13         CITIES         25         25         23 LCY         me:       Operator         1 factor:       Cat Hand         TION         ction:       50 feet         ction:       1,400.0 LCY         scription:       Consolid         5 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         Teactor       Factor	 Estimate (9.7 book Y/hr idated stockp  - 25% Rock,	7ac x 6in) 7ac x 6in) 5000000000000000000000000000000000000		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu         Source of estimated volu         Source of estimated swel         HOURLY PRODUCY         Average push distance:         Unadjusted hourly produce         Materials consistency des         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator	\$646.13         CITIES         25         3 LCY         me:       Operator         1 factor:       Cat Hand         TION         ction:       50 feet         ction:       50 feet         ction:       Consolid         5 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         Factor       0.	 Estimate (9.7 book Y/hr idated stockp  - 25% Rock. 750	7ac x 6in) 7ac x 6in) 5010 1.0 75% Earth Source (AVG.)		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu         Source of estimated swel         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ         Materials consistency des         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator         Material consist	\$646.13         CITIES         25         25         25         23 LCY         me:       Operator         1 factor:       Cat Hand         FION         ction:       50 feet         ction:       1,400.0 LC         scription:       Consoli         5 %       5,410 feet         2,650 lbs/LCY       Decomposed rock         Factor       Skill:       0.         ency:       1.		7ac x 6in) 7ac x 6in) 5010 1.0 5010 1.0 5010 1.0 5000 1.0 50		
Ripper op. Cost/Hour:         Operator Cost/Hour:         Total unit Cost/Hour:         Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       7,82         Swell factor:       1.12         Loose volume:       8,80         Source of estimated volu:         Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly product         Materials consistency des         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator         Material consist         Dozing me	\$ 646.13         CITIES         25         25         25         26         27         me:       Operator         1 factor:       Cat Hand <b>FION</b> 50 feet         ction: $50$ feet         ction: $1,400.0$ LC'         scription:       Consolid $5 %$ $5,410$ feet $2,650$ lbs/LCY       Decomposed rock         Factor       Skill:       0.         ency:       1.       1.	 Estimate (9.7 book Y/hr idated stockp  - 25% Rock. 750	7ac x 6in) 7ac x 6in) 5010 1.0 75% Earth Source (AVG.)		

Task # 009

Job efficient	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 0.903	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 0.868	(CAT HB)
Blade typ	pe: 1.000	(PAT)
Net correction	on: 0.3903	
Adjusted unit production:	546.42 LCY/hr	
Adjusted fleet production:	1092.84 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.591/LCY

Total job time:	8.06 Hours
Total job cost:	\$5,205

Page 1 of 2

# SCRAPER TEAM WORK

Site: 5J Pit		Permit Action:	New Permit	Perr	mit/Job#: <u>M202</u> 4	4032
PROJECT IDENI	<b>IFICATION</b>					
Task #: 010 Date: 10/15/2		tate: <u>Colorado</u> nty: Larimer			viation: <u>None</u> ename: M032-0	010
User: JR2						010
Agency or o	rganization name:	DRMS				
HOURLY EQUIP	MENT		COSTS	hift basis: 1 per da	av	
				<u>i per u</u>	<u></u>	
	-Sc	craper: Cat 631	ent Description			
	-]	Dozer: NA				
Suppor	t Equipment -Load -Dump		Г - 8SU			
Road Mai	ntenance – Motor C	Brader: NA				
	-Water	Truck: NA				
Cost Breakdown:	Scraper Worl	k Team	Support Equi	pment	Maintenance	Equipme
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water
%Utilization-machine:	100	NA	NA	100	NA	
Ownership cost/hour:	\$442.19	NA	NA	\$173.32	NA	
Operating cost/hour:	\$252.89	NA	NA	\$109.71	NA	
%Utilization-ripper:	NA	NA	NA	NA	NA	
Ripper own. cost/hour:	NA	NA	NA	\$0.00	NA	
Ripper op. cost/hour:	NA	NA	NA	\$0.00	NA	
Operator cost/hour:	\$57.52	NA	NA	\$40.04	NA	
Unit Subtotals:	\$752.60	NA	NA	\$323.07	NA	
Number of Units:	2	0	0	1	0	
Group Subtotals:	Work:	\$1,505.20	Support:	\$323.07	Maint:	\$0.
Total work team cost/	hour: <b>\$1,828.27</b>					
MATERIAL QUA	NTITIES					
Initial volume:	11,455	CCY	Swell fact	tor: 1.215		
Loose volume:	13,918	LCY	Swell lact	1.215		
Sour	ce of estimated vol	ume: Operator	Estimate (7.1ac x	x 1ft)		
	f estimated swell fa					
HOURLY PRODU	ICTION					
HUUKLIIKUDU			Soronor D.	owl (volume) Basi	c.	
						OV
Material weight: Material description:	1,600 lbs/LCY Top Soil		Struck Heaped	Volume: <u>24.00</u> Volume: <u>34.00</u>		CY CY
Rated Payload:			Average			CY
Payload Capacity:	/					

<u>0.80</u> Minutes

0.70 Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5410 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 1" tire penetration 4.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	5.00	4.00	9.00	733	0.43

Haul Time: **0.43** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	-5.00	4.00	-1.00	2920	0.15
				Return Time:	0.15	minutes
			Total Scrape	er team cycle time:	2.08	minutes
			Adjusted	for job conditions:	694.33	LCY/Hour
			Selected N	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scrap	ber team (unit)	hourly production:	1,388.65	LCY/Hour
	Adjusted m	ultiple scrap	er team (fleet)	hourly production:	1,388.65	LCY/Hour
	Unadjusted unit pro-	duction/hour: r push dozer:		_ LCY/Hour		

Fleet size:	1	Team(s)	Total job time:	10.02	Hours
Unit cost:	\$1.317	/LCY	Total job cost:	\$18,324	-

Task description:	Aspect C - H	inal grade			
5J Pit		Permit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTI	FICATION				
Task #: 011	St	ate: Colorado		Abbreviation:	None
Date: $10/15/202$				Filename:	M032-011
User: JR2	<u></u>	<u> </u>			
Agency or or	ganization name:	DRMS			
	-				
HOURLY EQUIPM	<u>IENT COST</u>				
	Cat D8T - 8SU				
	<u>10</u>				
<b>7</b> 1	Semi-Universal				
	NA				
	per day CRG)				
<u></u>					
Cost Breakdown:			<b>** ***</b>		
Ownership Cast/II		¢172.20	<u>Utilization %</u>		
Ownership Cost/Hour Operating Cost/Hour		\$173.32 \$109.71	NA 100		
Ripper own. Cost/Hour		\$109.71	NA		
Ripper op. Cost/Hour		\$0.00	0		
Operator Cost/Hour		\$40.04	NA		
	727				
	125 <b>443</b> LCY				
Source of estimated vo Source of estimated sw		rator Estimate (7. Handbook	lac x 6in)		
source of estimated sw		Tandook			
HOURLY PRODU	CTION				
Average push distance:	50 feet				
Unadjusted hourly proc		) LCY/hr			
enaujusted nourry proc	<u>1,400.</u>				
Materials consistency d	lescription: <u>Co</u>	onsolidated stock	bile 1.0		
Average push gradient: Average site altitude:	5 % 5,410 feet				
Material weight:	2,650 lbs/LC	Y			
material weight.	2,000 105/LC	•			
		rock 25% Dock	, 75% Earth		
Weight description:	Decomposed	10CK - 23 % KOCK			
Job Condition Correction	on Factor		Source		
Job Condition Correction Operated	on Factor or Skill:	0.750	(AVG.)		
Job Condition Correction Operato Material consi	on Factor or Skill: istency:	0.750 1.000	(AVG.) (CAT HB)		
<u>Job Condition Correction</u> Operato Material consi Dozing r	on Factor or Skill: istency:	0.750	(AVG.)		

0.830	(1 SHIFT/DAY)
e: 0.800	(FND-RF)
t: 0.903	(CAT HB)
2: 1.000	(CAT HB)
t: 0.868	(CAT HB)
2: 1.000	(PAT)
n: 0.3903	
546.42 LCY/hr	
1092.84 LCY/hr	
	e:       0.800         t:       0.903         e:       1.000         t:       0.868         e:       1.000         a:       0.3903         546.42 LCY/hr

Fleet size:	2 Dozer(s)
Unit cost:	\$0.591/LCY

Total job time:	<b>5.90</b> Hours
Total job cost:	\$3,809

## BULLDOZER RIPPING WORK

	Task description:	Aspect D - Scarif	y employee	areas				
Site:	5J Pit	Perr	nit Action:	New Permit	Permit	/Job#: <u>M20</u> 2	24032	
	PROJECT IDE	ENTIFICATION						
	Task #:         012           Date:         10/           User:         JR2	15/2024 County:	Colorado Larimer		Abbrevia Filena		-012	
	Agency	or organization name: DR	MS					
	HOURLY EOU	JIPMENT COST						
		Machine: Cat D8T - 8SU			Horsepower:	310		
	Ripper Atta	achment: 3-Shank Ripper			Shift Basis:	1 per day		
					Data Source:	(CRG)		
	Cost Breakdown:				Utilization %			
		Ownership Cost/Hour:			NA			
	<b>D</b> .	Operating Cost/Hour:		\$109.71	100			
		r Ownership Cost/Hour: er Operating Cost/Hour:		\$14.53 \$7.95	<u>NA</u> 100			
	Кірр	Operator Cost/Hour:		\$40.04	NA			
		Total Unit Cost/Hour:		\$345.55	1171			
		Total Fleet Cost/Hour:	\$69	1.09				
	MATERIAL Q							
			Sele	ected estimating	method: Area			
	Alternate Method							
smic: Area:	<u>NA</u> 2.00		Volume: Depth (ft):	NA 2.00	BCY Volume: 6,453	NA	BCY or (	
fica.	2.00							
		Source of estimated quantity	y: Operat	or Estimate				
	HOURLY PRO	DUCTION						
	Seismic:							
		Seismic Velo	city:	NA	feet/second			
	Area:							
		Average Ripping De	·	2.56	feet/pass			
		Average Ripping Wi		7.08 300.00	feet/pass			
		Average Ripping Len Average Dozer Sp		88.00	feet/pass feet/minute			
		Average Maneuver T		0.25	neet/initiate minutes/pass			
		Production per unit a		0.800	acres/hour			
	Job Condition Correction Factors							
		adjusted Hourly Unit Product	ion:	0.800	Acres/hr			
	011	Site Altit		5,410	feet			
		Altitude .		1.00	(CAT HB)			
		Job Efficie	•	0.83	(1 shift/day)			
		Net Correct		0.83	multiplier			
		Adjusted Hourly Unit	Production:	0.66	Acres/hr			
		Adjusted Hourly Fleet		1.33	Acres/hr			
	JOB TIME AN	<u>D COST</u>						
	Fleet size:	2 Grader(s)		Total job time	e: <u>1.51</u>		Hours	
	Unit cost:	\$520.701 Per acre		Total job cos	st: <b>\$1,041</b>	I		

Task description:	Aspect D - Roug	n grade			
5J Pit	Perr	mit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTIF	<u> ICATION</u>				
Task #: 013	State:	Colorado		Abbreviation:	None
Date: $10/15/2024$		Larimer		Filename:	M032-013
User: JR2	<u> </u>	Luminor		i nenunie.	11032 013
Agency or orga	nization name: DR	RMS			
HOURLY EQUIPMI	ENT COST				
	t D8T - 8SU				
Horsepower: 31					
•	mi-Universal				
Attachment: NA					
	ber day				
Data Source: (C	RG)				
Cost Breakdown:			I		
			<u>Utilization %</u>		
Ownership Cost/Hour:		\$173.32	NA		
Operating Cost/Hour:		\$109.71	100		
Ripper own. Cost/Hour:		\$0.00	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$40.04	NA		
Total unit Cost/Hour: Total Fleet Cost/Hour:	\$323.07 <b>\$646.13</b>				
Total Fleet Cost/Hour: <u>MATERIAL QUAN</u> Initial Volume:1,61	<b>\$646.13</b> <b><u><b>ГІТІЕЅ</b></u> 13</b>				
Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>1,61</u> Swell factor: <u>1.12</u>	<b>\$646.13</b> <b><u><b>ГІТІЕЅ</b></u> 13</b>				
Total Fleet Cost/Hour: <u>MATERIAL QUANT</u> Initial Volume: <u>1,61</u> Swell factor: <u>1.12</u>	\$646.13 FITIES 13 25 15 LCY	 Estimate (2a	uc x 6in)		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81	\$646.13 <b>FITIES</b> 13 25 15 LCY ume:Operator		с x біп)		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel	\$646.13 FITIES 13 25 15 LCY Ime: Operator Il factor: Cat Hand		<u>ис х біп)</u>		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT       100	\$646.13 <b>FITIES</b> 13 25 15 LCY Ime: Operator Il factor: Cat Hand <b>TION</b>		<u>с х біп)</u>		
Total Fleet Cost/Hour:         MATERIAL QUANT         Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel	\$646.13 <b>FITIES</b> 13 25 15 LCY 11 factor: Operator 11 factor: Cat Hand <b>TION</b> 50 feet	book	<u></u>		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance:	\$646.13         IITIES         13         25         IS LCY         ume:       Operator         Il factor:       Cat Hand         TION         section:       50 feet         1,400.0 LCY	book			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ	\$646.13         IITIES         13         25         IS LCY         ume:       Operator         Il factor:       Cat Hand         TION         section:       50 feet         1,400.0 LCY	book Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUC' Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient:	\$646.13         FITIES         13         25         15 LCY         ume:       Operator         I factor:       Cat Hand         TION         action:       50 feet         1,400.0 LC         scription:       Consoli         5 %	book Y/hr			
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude:	\$646.13         ITTIES         13         25         I5 LCY         ume:       Operator         If factor:       Cat Hand         TION         action:       50 feet         action:       1,400.0 LCY         scription:       Consoli	book Y/hr idated stockp	 pile 1.0		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUCT Average push distance: Unadjusted hourly produ Materials consistency de: Average push gradient: Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction	\$646.13         ITTIES         13         25         15 LCY         Ime:       Operator         If factor:       Cat Hand         TION         action:       50 feet         action:       1,400.0 LCY         scription:       Consoli	book Y/hr idated stockp	 pile 1.0		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated volu Source of estimated swel HOURLY PRODUC' Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description:	\$646.13         ITTIES         13         25         15 LCY         Ime:       Operator         If factor:       Cat Hand         TION         action:       50 feet         action:       1,400.0 LCY         scription:       Consoli	book Y/hr idated stockp	 oile 1.0 , 75% Earth		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	\$646.13         II       II         I3       II         I25       II         IS LCY       III         III factor:       Operator         III factor:       Cat Hand         TION       III         Inction: $50$ feet         Inction: $1,400.0$ LCY         scription:       Consolid $5\%$ $5,410$ feet         2,650 lbs/LCY       Decomposed rock $n$ Factor       Skill:       0.         tency:       1.	book Y/hr idated stockp - 25% Rock	 <u></u>		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de: Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist Dozing me	\$646.13         ITTIES         I3         25         I5 LCY         Ime:       Operator         If factor:       Cat Hand         TION         action: $50$ feet         inction: $50$ feet         action: $200$ feet         action:	book Y/hr idated stockp - 25% Rock 750	 pile 1.0 , 75% Earth <u>Source</u> (AVG.)		

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3903	
Adjusted unit production: 54	6.42 LCY/hr	
Adjusted fleet production: 10	92.84 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.591/LCY

Total job time:	<b>1.66</b> Hours
Total job cost:	\$1,073

Page 1 of 2

# SCRAPER TEAM WORK

Site: 5J Pit	P	Permit	t Action:	New Permit	Perr	nit/Job#: <u>N</u>	12024032	2
PROJECT IDENT	<b>TIFICATION</b>							
Task #:014	State	e: (	Colorado		Abbrev	viation: <u>No</u>	one	
$\begin{array}{c} \text{Date:}  \underline{10/15/2}\\ \text{User:}  \mathbf{JR2} \end{array}$	024 County	: <u>I</u>	Larimer		Fil	ename: <u>M</u>	032-014	
Agency or c	rganization name:	DRM	IS					
HOURLY EQUIP	MENT			COSTS	hift basis: <u>1 per d</u>	<u>ay</u>		
				ent Description				
	-Scraj -Do		Cat 631 NA	G				
Support	rt Equipment -Load A	rea:	NA					
Road Mai	-Dump A ntenance –Motor Grae		Cat D8 NA	Γ - 8SU				
	-Water Tru		NA					_
Cost Breakdown:	Samaan Work T	<b>`</b> ~~~~		Sumport Four	nnont	Mainten	anaa Eau	
Cost Breakdown:	Scraper Work T Scraper	Doz	zer	Support Equi	Dump Area	Motor Gra		Water
%Utilization-machine:	100		NA	NA	100		NA	
Ownership cost/hour:	\$442.19		NA	NA	\$173.32		NA	
Operating cost/hour:	\$252.89		NA	NA	\$109.71	]	NA	
%Utilization-ripper:	NA		NA	NA	NA	]	NA	
Ripper own. cost/hour:	NA		NA	NA	\$0.00	]	NA	
Ripper op. cost/hour:	NA		NA	NA	\$0.00	]	NA	
Operator cost/hour:	\$57.52		NA	NA	\$40.04	]	NA	
Unit Subtotals:	\$752.60		NA	NA	\$323.07	]	NA	
Number of Units:	2		0	0	1		0	
Group Subtotals:	Work:	\$1,50	05.20	Support:	\$323.07	Ma	int:	\$0.
Total work team cost	/hour: <b>\$1,828.27</b>	_						
MATERIAL QUA	NTITIES							
Initial volume: Loose volume:	1,613 <b>1,960</b>		CCY LCY	Swell fac	tor: <u>1.215</u>			
	ce of estimated volum		Operator Cat Hand	Estimate (2ac x	1ft)			
HOURLY PRODU			Sur Huik	2000R				_
HOURLI FRODU				Scraper B	owl (volume) Basi	s:		
Material weight:	1,600 lbs/LCY				Volume: 24.00	<u></u>	LCY	
Material description:	Top Soil				Volume: <u>24.00</u> Volume: <u>34.00</u>		- LCT LCY	
Rated Payload:	81,600 pounds			-	Volume: 29.00		LCY	

<u>0.80</u> Minutes

0.70 Minutes

#### Cycle Time:

Scraper Loading Time: Maneuver and Spread Time:

Job Condition Correction:

Site Altitude: 5410 feet

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

#### Travel Time:

Road Condition: <u>Rutted dirt, little maintenance, no water, 1" tire penetration 4.0</u>

#### Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	5.00	4.00	9.00	733	0.43

Haul Time: **0.43** minutes

#### Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	300.00	-5.00	4.00	-1.00	2920	0.15
				Return Time:	0.15	minutes
			Total Scrape	er team cycle time:	2.08	minutes
			Adjusted	for job conditions:	694.33	LCY/Hour
			Selected N	umber of Scrapers:	2	Scraper(s)
	Adjuste	d single scra	per team (unit)	hourly production:	1,388.65	LCY/Hour
	Adjusted n	nultiple scrap	per team (fleet)	hourly production:	1,388.65	LCY/Hour
Optima	Unadjusted unit pro al Number of Scrapers pe			LCY/Hour		
JOB TI	IME AND COST					
Flee	t size: 1	Team(s)	1	Fotal job time:	1.41	Hours

Fleet size:	1	Team(s)	Total job time:	1.41	Hou
Unit cost:	\$1.317	/LCY	Total job cost:	\$2,580	

5J Pit	Permit Action:	New Permit	Permit/Job#:	M2024032
PROJECT IDENTIF	TICATION			
Task #: 015	State: Colorado		Abbreviation:	None
Date: 10/15/2024			Filename:	M032-015
User: JR2			· · · · · <u>-</u>	
Agency or orga	nization name: DRMS			
HOURLY EQUIPMI	ENT COST			
	ıt D8T - 8SU			
Horsepower: 310				
×1	mi-Universal			
Attachment: <u>NA</u> Shift Basis: 1 p				
	per day RG)			
<u></u>	NO)			
Cost Breakdown:		<b>.</b>		
	¢172.22	Utilization %		
Ownership Cost/Hour:	\$173.32 \$109.71	NA 100		
Operating Cost/Hour: Ripper own. Cost/Hour:	\$109.71	100 NA		
Ripper op. Cost/Hour:	\$0.00	0 NA		
Operator Cost/Hour:	\$40.04	NA		
operator costribui.	φ+0.0+	INA		
	ITTES			
MATERIAL QUANT Initial Volume: 1,61 Swall feator: 112	13			
Initial Volume: 1,61 Swell factor: 1.12	13			
Initial Volume:1,61Swell factor:1.12Loose volume:1,81Source of estimated volu	13 25 <b>15</b> LCY Ime:Operator Estimate (23	ac x 6in)		
Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel	13 25 15 LCY Ime: Operator Estimate (2) Il factor: Cat Handbook	ac x 6in)		
Initial Volume:1,61Swell factor:1.12Loose volume:1,81Source of estimated volu	13 25 15 LCY Ime: Operator Estimate (2) Il factor: Cat Handbook	ас х біп)		
Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel	13 25 15 LCY Ime: Operator Estimate (2) Il factor: Cat Handbook	ас x біп)		
Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUC	13 25 15 LCY Ime: Operator Estimate (2a Il factor: Cat Handbook TION 50 feet	ac x 6in)		
Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUC' Average push distance:	13 25 15 LCY Ime: Operator Estimate (2a) 11 factor: Cat Handbook TION 50 feet 1,400.0 LCY/hr			
Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel         HOURLY PRODUC'       Average push distance:         Unadjusted hourly produ       Materials consistency de         Average push gradient:       1	13         25         15 LCY         Is LCY         ume:       Operator Estimate (2:         Il factor:       Cat Handbook         TION         scription:       50 feet         1,400.0 LCY/hr         escription:       Consolidated stock         5 %			
Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel         HOURLY PRODUC'       Average push distance:         Unadjusted hourly produ       Materials consistency de	13         25         15 LCY         Is LCY         ume:       Operator Estimate (2:         Il factor:       Cat Handbook         TION         action:       50 feet         1,400.0 LCY/hr         escription:       Consolidated stock			
Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel         HOURLY PRODUC'       Average push distance:         Unadjusted hourly produ       Materials consistency de         Average push gradient:       1	13         25         15 LCY         Is LCY         ume:       Operator Estimate (2:         Il factor:       Cat Handbook         TION         scription:       50 feet         1,400.0 LCY/hr         escription:       Consolidated stock         5 %			
Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUC' Average push distance: Unadjusted hourly produ Materials consistency de: Average push gradient: Average site altitude:	13         25         15 LCY         In factor:       Operator Estimate (2a)         Il factor:       Cat Handbook         TION         action: $50$ feet         action:       1,400.0 LCY/hr         escription:       Consolidated stock $\frac{5 \%}{5,410 \text{ feet}}$	pile 1.0		
Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel         HOURLY PRODUC'         Average push distance:         Unadjusted hourly produ         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction	13         25         15 LCY         Ist correct in the second state of the second state in the s	pile 1.0		
Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel         HOURLY PRODUCT         Average push distance:         Unadjusted hourly produ         Materials consistency de         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator	13         25         15 LCY         ume:       Operator Estimate (2a)         Il factor:       Cat Handbook         TION         action: $1,400.0$ LCY/hr         escription:       Consolidated stock $5\%$ $5,410$ feet         2,650 lbs/LCY         Decomposed rock - 25% Rock         n Factor         Skill:       0.750	pile 1.0		
Initial Volume:       1,61         Swell factor:       1.12         Loose volume:       1,81         Source of estimated volu       Source of estimated swel         HOURLY PRODUCC         Average push distance:         Unadjusted hourly produ         Materials consistency de:         Average push gradient:         Average site altitude:         Material weight:         Weight description:         Job Condition Correction         Operator         Material consist	13         25         15 LCY         ume:       Operator Estimate (2a)         Il factor:       Cat Handbook         TION         action: $\frac{50 \text{ feet}}{1,400.0 \text{ LCY/hr}}$ escription:       Consolidated stock $\frac{5 \%}{5,410 \text{ feet}}$ 2,650 lbs/LCY         Decomposed rock - 25% Rock         n Factor         Skill:       0.750         tency:       1.000	pile 1.0 ., 75% Earth <u>Source</u> (AVG.) (CAT HB)		
Initial Volume: 1,61 Swell factor: 1.12 Loose volume: 1,81 Source of estimated volu Source of estimated swel HOURLY PRODUC Average push distance: Unadjusted hourly produ Materials consistency de Average push gradient: Average push gradient: Average site altitude: Material weight: Weight description: Job Condition Correction Operator Material consist	13         25         15 LCY         ume:       Operator Estimate (2a)         Il factor:       Cat Handbook         TION         action: $\frac{50 \text{ feet}}{1,400.0 \text{ LCY/hr}}$ escription:       Consolidated stock $\frac{5 \%}{5,410 \text{ feet}}$ 2,650 lbs/LCY         Decomposed rock - 25% Rock         n Factor         Skill:       0.750         tency:       1.000	pile 1.0		

Task # 015

Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.868	(CAT HB)
Blade type:	1.000	(PAT)
Net correction:	0.3903	
Adjusted unit production: 54	6.42 LCY/hr	
Adjusted fleet production: 10	92.84 LCY/hr	

Fleet size:	2 Dozer(s)
Unit cost:	\$0.591/LCY

Total job time:	<b>1.66</b> Hours
Total job cost:	\$1,073

## **REVEGETATION WORK**

Task d	description:	Seed all disturbed areas			
te: 5J l	Pit	Permit Action:	New Permit	Permit/Job	o#: <u>M2024032</u>
<u>PROJ</u>	ECT IDENTIFIC	CATION			
Tas	sk #: 016	State: Colorado		Abbreviation:	None
Γ	Date: 10/15/2024	County: Larimer		Filename:	M032-016
т	Jser: JR2				

## **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)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

## **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Switchgrass - Nebraska 28	0.40	3.57	\$4.45
Blue Grama - Native	0.45	7.35	\$9.60
Sideoats Grama - El Reno	2.70	8.86	\$65.95
Western Wheatgrass - Native	4.00	10.10	\$36.02
Needlegrass, Green - Lodorm	2.00	8.31	\$17.29
Totals Seed Mix	9.55	38.19	\$133.31

Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$236.64
	Total Seed Application Cost/Acre	\$236.64

#### **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	Nursery Stoc	k Cost / Acre	\$0.00

No. of Acres:	27.6	Cost /Acre:	\$826.36
Estimated Failure Rate:	0%	Cost /Acre*:	\$369.95
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$22,807.54
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$22,808
Job Hours:	48.30

## **REVEGETATION WORK**

Task descri	ption:	Re-seed 20% of disturbed an Permit Action:	 Permit/Job	o#:M2024032
PROJECT	IDENTIFIC	ATION		
Task #:	017	State: Colorado	Abbreviation:	None
Date:	10/15/2024	County: Larimer	Filename:	M032-017
User:	JR2		_	

## **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)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
Total Tilling Cost/Acre	\$456.41

## **SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Switchgrass - Nebraska 28	0.40	3.57	\$4.45
Blue Grama - Native	0.45	7.35	\$9.60
Sideoats Grama - El Reno	2.70	8.86	\$65.95
Western Wheatgrass - Native	4.00	10.10	\$36.02
Needlegrass, Green - Lodorm	2.00	8.31	\$17.29
Totals Seed Mix	9.55	38.19	\$133.31

Application

Description		Cost /Acre
Drill Seeding (DRMS Survey Cost)		\$236.64
	Total Seed Application Cost/Acre	\$236.64

#### **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 1	Nursery Stoc	k Cost / Acre	\$ \$0.00

No. of Acres:	5.5	Cost /Acre:	\$826.36
Estimated Failure Rate:	0%	Cost /Acre*:	\$369.95
*Selected Replanting Work Items:	SEEDING		

Initial Job Cost:	\$4,544.98
Reseeding Job Cost:	\$0.00
Total Job Cost:	\$4,545
Job Hours:	9.70

# EQUIPMENT MOBILIZATION/DEMOBILIZATION

: 5J Pit	Permit Action: <u>New P</u>		Permit	Permit/Job#: <u>M2024032</u>		12024032	
PROJECT IDEN	NTIFICATI	ON					
Task #: 018	5	State: Co	olorado		Abbre	viation: None	•
Date: 10/1 User: JR2	15/2024	County: La	rimer		Fi	lename: M032	2-018
Agency of	or organization	n name: DRMS					
EQUIPMENT T	RANSPOR	<u>T RIG COST</u>					
				C	Shift ba Cost Data Sour		
Truck	Tractor Desc	ription: GENE	RIC ON-HIGH	WAY TRU		OR, 6X4, DIESE	
Truck	k Trailer Desc	ription: G		ING GOO	SENECK, DF	OP DECK EQU	IPMENT
				RAILER (	(25T, 50T, AN	ND 1001)	
Cost Breakdown:				I RAILER (	(251, 501, AN	ND 1001)	
Available Rig Ca		0-25 Tons	26-50 Tons	51+	Tons	ND 1001)	
Available Rig Ca Ownership	Cost/Hour:	\$10.44	<b>26-50 Tons</b> \$22.18	<b>51</b> +	• <b>Tons</b> 3.94	ND 1001)	
Available Rig Ca Ownership Operating	Cost/Hour: Cost/Hour:	\$10.44 \$26.48	<b>26-50 Tons</b> \$22.18 \$54.55	<b>51</b> + \$2 \$5	<b>Tons</b> 3.94 5.65	1D 1001)	
Available Rig Ca Ownership Operating Operator	Cost/Hour: Cost/Hour: Cost/Hour:	\$10.44 \$26.48 \$22.52	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52	<b>51</b> + \$2 \$5 \$2	<b>Tons</b> 3.94 5.65 2.52	1D 1001)	
Available Rig Ca Ownership Operating Operator Helper	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	\$10.44 \$26.48 \$22.52 \$0.00	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52 \$23.53	<b>51</b> + \$2 \$5 \$2 \$2 \$2	Tons           3.94           5.65           2.52           3.53	ND 1001)	
Available Rig Ca Ownership Operating Operator Helper	Cost/Hour: Cost/Hour: Cost/Hour:	\$10.44 \$26.48 \$22.52	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52	<b>51</b> + \$2 \$5 \$2 \$2 \$2	<b>Tons</b> 3.94 5.65 2.52	<u>(1001)</u>	
Available Rig Ca Ownership Operating Operator Helper	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour:	\$10.44 \$26.48 \$22.52 \$0.00 \$59.44	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52 \$23.53	<b>51</b> + \$2 \$5 \$2 \$2 \$2	Tons           3.94           5.65           2.52           3.53	<u>(1001)</u>	
Available Rig Ca Ownership Operating Operator Helper Total Unit	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN	\$10.44 \$26.48 \$22.52 \$0.00 \$59.44 MENT:	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52 \$23.53 \$122.78	<b>51</b> + \$2 \$5 \$2 \$2 \$2 \$12	Tons       3.94       5.65       2.52       3.53       25.64	Return Trip	DOT Permit
Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAB Machine	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/	\$10.44 \$26.48 \$22.52 \$0.00 \$59.44 MENT: Owner ship	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52 \$23.53 \$122.78 Haul Rig	51+ \$2 \$5 \$2 \$2 \$12 Fleet	Tons         3.94         5.65         2.52         3.53         25.64		DOT Permit Cost/ fleet
Available Rig Ca Ownership Operating Operator Helper Total Unit	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit	\$10.44 \$26.48 \$22.52 \$0.00 \$59.44 MENT:	<b>26-50 Tons</b> \$22.18 \$54.55 \$22.52 \$23.53 \$122.78	<b>51</b> + \$2 \$5 \$2 \$2 \$2 \$12	Tons           3.94           5.65           2.52           3.53           25.64   Haul Trip Cost/hr/	Return Trip	
Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAB Machine Description	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit (TONS)	\$10.44 \$26.48 \$22.52 \$0.00 \$59.44 <b>MENT:</b> Owner ship Cost/hr/ unit	26-50 Tons \$22.18 \$54.55 \$22.52 \$23.53 \$122.78 Haul Rig Cost/hr/uni t	51+ \$2 \$5 \$2 \$2 \$12 Fleet	Tons           3.94           5.65           2.52           3.53           25.64   Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	Cost/ fleet
Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAB Machine Description Cat D8T - 8SU	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit (TONS) 53.08	\$10.44 \$26.48 \$22.52 \$0.00 \$59.44 <b>MENT:</b> Owner ship Cost/hr/ unit \$187.85	26-50 Tons \$22.18 \$54.55 \$22.52 \$23.53 \$122.78 Haul Rig Cost/hr/uni t \$125.64	51+ \$2 \$5 \$2 \$2 \$12 \$12 Fleet Size 2	Tons           3.94           5.65           2.52           3.53           25.64   Haul Trip Cost/hr/ fleet \$626.98	Return Trip Cost/hr/ fleet \$251.28	Cost/ fleet \$500.00
Available Rig Ca Ownership Operating Operator Helper Total Unit NON ROADAB Machine Description	Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: Cost/Hour: LE EQUIPN Weight/ Unit (TONS)	\$10.44 \$26.48 \$22.52 \$0.00 \$59.44 <b>MENT:</b> Owner ship Cost/hr/ unit	26-50 Tons \$22.18 \$54.55 \$22.52 \$23.53 \$122.78 Haul Rig Cost/hr/uni t	51+ \$2 \$5 \$2 \$2 \$12 \$12 Fleet Size	Tons           3.94           5.65           2.52           3.53           25.64   Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	

# **ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$24.60	1	\$24.60	\$24.60
		Subtotals:	\$24.60	\$24.60

## **EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	FORT COLLINS	
Total one-way travel distance:	16.00	miles
Average Travel Speed:	40.00	mph
Total Non-Roadable Mob/Demob Cost *	\$12,922.24	
<sup>*</sup> two round trips with haul rig: Total Roadable Mob/Demob Cost **	¢10.c0	
** one round trip, no haul rig:	\$19.68	

Transportation Cycle Time:

Haul Time (Hours): Return Time (Hours):	Non- Roadable Equipment 0.40 0.40	Roadable Equipment 0.40 0.40
Loading Time (Hours):	1.00	0.40 NA
Unloading Time (Hours):	1.00	NA
Subtotals:	2.80	0.80

## JOB TIME AND COST

Total job time: **5.60** Hours

Total job cost: \$12,942