COST SUMMARY WORK

Т	ask descrip	otion:	Cost Summary					
Site:	Skoglund	l Pit	Pe	rmit Action:	2016 Update	Permit/Jo	o#: <u>M1996089</u>	
<u>P</u>]	ROJECT	IDENTIFIC	CATION					
	Task #:	000	State:	Colorado		Abbreviation:	None	
	Date:	8/18/2016	County:	Saguache		Filename:	M089-000	
	User:	LJW				-		
	Age	ency or organi	zation name:	RMS				

TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
Task	Description	Used	Size	Hours	Cost
001	Highwall reduction to 4:1	DOZER	1	2.66	\$556.00
002	Rough Grade toe of slope	DOZER	1	1.50	\$312.00
003	Rough grade and rip pit floor and road	DOZER	1	8.96	\$1,909.00
004	Spread Topsoil on floor, and road appx 5 acres	DOZER	1	8.72	\$1,818.00
005	Reveg disturbed area, appx 5 acres	REVEGE	1	16.00	\$5,778.00
006	Haul reclamation equipment to and from site	MOBILIZE	1	6.00	\$2,769.00
		<u>SUBTO</u>	TALS:	43.84	\$13,142

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$265.47
Performance bond:	1.05	Total =	\$137.99
Job superintendent:	17.44	Total =	\$1,298.93
Profit:	10.00	Total =	\$1,314.20
		TOTAL O & P =	\$3,016.59
		CONTRACT AMOUNT (direct + O & P) = $($	\$16,158.59

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	0.00	Total =	0.00
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0.00
Reclamation management and/or administration:	7.10		\$1,147.26
CONTINGENCY:	3.00	Total =	\$394.26
	TOTAL I	NDIRECT COST =	\$4,558.11
TOTAL BO	ND AMOUNT (lirect + indirect) =	\$17,700.11

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Task description:	Highwall reduction to 4:1			
ite: Skoglund Pit	Permit Action:	2016 Update	Permit/Jo	b#: <u>M1996089</u>
PROJECT IDENTIFIC	CATION			
Task #: 001	State: Colorado		Abbreviation:	None
Date: 8/18/2016	County: Saguache		Filename:	M089-001
User: LJW				
Agency or organ	ization name: DRMS			
HOURLY EQUIPMEN	<u>NT COST</u>			
Basic Machine: Cat	D8T - 8SU			
Horsepower: 310				
	ni-Universal			
• •	nank ripper			
	er day			
Data Source: (CR				
<u></u>				
Cost Breakdown:	1			
Ownership Cost/Hour:	\$82.01	<u>Utilization %</u> NA		
Operating Cost/Hour:	\$79.23	100		
Ripper own.				
Cost/Hour:	\$8.40	NA		
Ripper op. Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.89	NA		
MATERIAL QUANTI)			
Swell factor: 1.430 Loose volume: 1,573	3 LCY			
Source of estimated volu	me: Division of Reclamation	n, Mining & Safety		
Source of estimated swel factor:				
HOURLY PRODUCT	ION			
Average push distance:	50 feet			
Unadjusted hourly production:	1,400.0 LCY/hr			
Materials consistency des	scription: <u>Compacted fill or emb</u>	oankment 0.9		
Average push gradient:	0 %			
Average site altitude:	7,740 feet			
Material weight:	3,300 lbs/LCY			
Weight description:	Decomposed rock - 75% Rock, 2	25% Earth		
Job Condition Correction H	Factor	Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.200	(SLOT)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4217

Adjusted unit production:	590.38 LCY/hr
Adjusted fleet production:	590.38 LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$0.353/LCY

Total job time:	2.66 Hours
Total job cost:	\$556

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: Skoglund Pit		-		
Shogiuna I It	Permit Action:	2016 Update	Permit/Jo	b#: <u>M1996089</u>
PROJECT IDENTIFICA	ATION			
Task #: 002	State: Colorado		Abbreviation:	None
Date: 8/18/2016 User: LJW	County: Saguache		Filename:	M089-002
Agency or organiza	ation name: DRMS			
HOURLY EQUIPMENT	<u>r cost</u>			
Basic Machine: Cat D	98T - 8SU			
Horsepower: 310		_		
1	Universal	_		
	nk ripper	_		
Shift Basis: 1 per		_		
Data Source: (CRG		_		
Cost Breakdown:	<u></u>	—		
<u>Jost Dicardown</u> .		Utilization %		
Ownership Cost/Hour:	\$82.01	NA		
Operating Cost/Hour:	\$79.23	100		
Ripper own.	\$8.40	NA		
Cost/Hour:	\$0.00	0		
Operator Cost/Hour:	\$38.89	NA		
MATERIAL QUANTIT	IES			
Initial Volume: 800				
Swell factor: 1.000 Loose volume: 800 LC				
Loose volume: xilling	_ Y			
Source of estimated volume	e:5 acre area x 6" avg c	lepth		
Source of estimated volume Source of estimated swell	e:5 acre area x 6" avg c Cat Handbook	lepth		
Source of estimated volume		lepth		
Source of estimated volume Source of estimated swell	Cat Handbook	depth		
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIO	Cat Handbook	depth		
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIO Average push distance:	Cat Handbook <u>DN</u> 50 feet	depth		
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIO	Cat Handbook	depth		
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIC Average push distance: Unadjusted hourly production:	Cat Handbook <u>50 feet</u> 1,400.0 LCY/hr			
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIO Average push distance: Unadjusted hourly production: Materials consistency descr	Cat Handbook <u>50 feet</u> 1,400.0 LCY/hr ription: Partly consolidated			
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIO Average push distance: Unadjusted hourly production: Materials consistency desce Average push	Cat Handbook <u>50 feet</u> 1,400.0 LCY/hr			
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIO Average push distance: Unadjusted hourly production: Materials consistency desce Average push gradient:	Cat Handbook <u>50 feet</u> <u>1,400.0 LCY/hr</u> ription: <u>Partly consolidated</u> 0 %			
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIO Average push distance: Unadjusted hourly production: Materials consistency desce Average push gradient:	Cat Handbook <u>50 feet</u> 1,400.0 LCY/hr ription: Partly consolidated			
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIC Average push distance: Unadjusted hourly production: Materials consistency descr Average push gradient: Average site altitude:	Cat Handbook <u>50 feet</u> <u>1,400.0 LCY/hr</u> ription: <u>Partly consolidated</u> 0 %			
Source of estimated volume Source of estimated swell factor: HOURLY PRODUCTIC Average push distance: Unadjusted hourly production: Materials consistency desce Average push gradient: Average site altitude:	Cat Handbook <u>50 feet</u> <u>1,400.0 LCY/hr</u> ription: <u>Partly consolidated</u> 0 % 7,740 feet	stockpile 1.1		

Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3818

Adjusted unit production:	534.52 LCY/hr
Adjusted fleet production:	534.52 LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$0.390/LCY

Total job time:	1.50 Hours
Total job cost:	\$312

Task description:	Rough grade a	nd rip pit floo	or and road		
: Skoglund Pit	F	ermit Action:	2016 Update	Permit/Jo	b#: <u>M1996089</u>
PROJECT IDENTI	FICATION				
Task #: 003	State:	Colorado		Abbreviation:	None
Date: 8/18/202	16 County:	Saguache		Filename:	M089-003
User: LJW					
Agency or org	ganization name: <u>I</u>	ORMS			
HOURLY EQUIPM	IENT COST				
Basic Machine:	Cat D8T - 8SU				
	310		_		
	Semi-Universal				
• I	3-shank ripper		_		
	1 per day		_		
Data Source:	(CRG)		_		
Cost Breakdown:					
Cost Divarao will.		1	Utilization %		
Ownership Cost/Hou	r:	\$82.01	NA		
Operating Cost/Hou		\$79.23	100		
Ripper own Cost/Hou	n.	\$8.40	NA		
Ripper op. Cost/Hou		\$4.50	80		
Operator Cost/Hou		\$38.89	NA		
Total Fleet Cost/Hour					
MATERIAL QUAN	<u>TTTIES</u>				
	,226				
	.215				
Loose volume: 3	,920 LCY				
Source of estimated v Source of estimated sy factor:	-	spection, 4 acr ndbook	es, 6" deep		
HOURLY PRODUC	<u>CTION</u>				
Average push distance	e: 50 feet				
Unadjusted hourly	1,400.0 L	CY/hr			
production:					
Materials consistency	description: Com	pacted fill or er	nbankment 0.9		
······································	<u></u>				
Average push	0 %				
gradient:					
Average site altitude:	7,740 feet				
Material weight:	3,300 lbs/LCY				
Weight description:	Decomposed roo	ck - 75% Rock	, 25% Earth		
Job Condition Correction	on Factor		Source		
condition contection			Source		

Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.697	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3124

Adjusted unit production:	437.36 LCY/hr
Adjusted fleet production:	437.36 LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$0.487/LCY

Total job time:	8.96 Hours	
Total job cost:	\$1,909	_

Task description:	Spread Topsoil o	n floor, and	road appx 5 acres		
e: Skoglund Pit	Per	mit Action:	2016 Update	Permit/Jol	o#: <u>M1996089</u>
PROJECT IDENTIFI	ICATION				
Task #: 004 Date: 8/18/2016 User: LJW	State: County:	Colorado Saguache		Abbreviation: Filename:	None M089-004
Agency or organ	nization name: DR	MS			
HOURLY EQUIPME	ENT COST				
Horsepower: 31 Blade Type: Se Attachment: 3-s Shift Basis: 1 p	emi-Universal shank ripper per day		-		
Data Source: <u>(C</u> <u>Cost Breakdown</u> :	CRG)		_		
<u>Cost Breakdown</u> : Ownership Cost/Hour:		\$82.01	<u>Utilization %</u> NA		
Operating Cost/Hour:		\$79.23	100		
Ripper own. Cost/Hour:		\$8.40	NA		
Ripper op. Cost/Hour:		\$0.00	0		
Operator Cost/Hour:		\$38.89	NA		
Total Fleet Cost/Hour: MATERIAL QUANT Initial Volume: 4,02 Swell factor: 1.2 Loose volume: 4,90	33				
Source of estimated volu- Source of estimated swe factor:			Reclamation Plan		
HOURLY PRODUCT	<u>FION</u>				
Average push distance: Unadjusted hourly production:	150 feet 634.3 LCY/	hr			
Materials consistency de	escription: Partly c	onsolidated	stockpile 1.1		
Average push gradient:	0 %				
Average site altitude:	7,740 feet				
Material weight:	1,600 lbs/LCY				
Material weight: Weight description:	1,600 lbs/LCY Top Soil				

Operator Skill:	0.750	(AVG.)
Material consistency:	1.100	(CAT HB)
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.900	(SSD-FC)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8862

Adjusted unit production:	562.12 LCY/hr
Adjusted fleet production:	562.12 LCY/hr

Fleet size:	1 Dozer(s)
Unit cost:	\$0.371/LCY

Total job time:	8.72 Hours
Total job cost:	\$1,818

REVEGETATION WORK

Task descrip	otion:	Reveg disturbed	area, appx s	5 acres		
Site: Skoglund	l Pit	Per	mit Action:	2016 Update	Permit/Jol	o#: <u>M1996089</u>
	IDENTIFIC		Colorado		Abbreviation:	None
Task #: Date:	005 8/18/2016	State: County:	Colorado Saguache		Abbreviation: Filename:	None M089-005
User:	LJW				_	
User:			MS			10009-0

FERTILIZING

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Ammonium nitrate, 33-0-0	100.00	pound	\$0.37	\$37.00
			Total Fertilizer Materials	
			Cost/Acre	\$37.00

Application

Description	Cost /Acre
Truck whirlwind spreader (MEANS 32 01 90.13 0140)	\$13.93
Total Fertilizer Application Cost/Acre	\$13.93

TILLING

Description	Cost /Acre
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$107.59
Total Tilling Cost/Acre	\$107.59

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Hachita	0.80	13.06	\$8.54
Indian Ricegrass - Nespar	4.05	13.11	\$28.71
Sand Dropseed	0.10	11.94	\$0.70
Western Wheatgrass - Arriba	2.80	7.07	\$10.33
Needle and Thread	2.30	6.07	\$108.28
Totals Seed Mix	10.05	51.25	\$156.57

Application

Description		Description	Cost /Acre
-------------	--	-------------	------------

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

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$246.00	\$246.00
Total Mulch Materials Cost/Acre				\$246.00

Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$66.02
Power mulcher (MEANS 32 91 13.16 0350)		\$97.14
	Total Mulch Application Cost/Acre	\$163.16

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:	5		Cost /Acre:	\$956.25
Estimate	ed Failure Rate:	25%		Cost /Acre*:	\$797.73
*Selected Replanti	ng Work Items:	SEEDING,MUL	.CHING		
Initial Job Cost:	\$4,781.25				
Reseeding Job Cost:					
Total Job Cost:	\$5,778				
Job Hours:	16.00				

EQUIPMENT MOBILIZATION/DEMOBILIZATION

Task descripti	on: Ha	ul reclamation eq	uipinent to and	I II OIII SIU	e		
: Skoglund I	Pit	Permit	Action: 2016	Update]	Permit/Job#: <u>M</u>	1996089
PROJECT II	DENTIFICAT	<u>ION</u>					
Task #:	006	State: Co	lorado		Abbre	eviation: None	
Date:	8/18/2016	County: Sa	guache		Fi	ilename: M089	9-006
User:	LJW	-					
Agen	cy or organizatio	n name: DRMS					
EQUIPMEN	T TRANSPOR	<u>AT RIG COST</u>					
					Shift ba Cost Data Sour	i	
Tı	ruck Tractor Desc	cription: GENE	RIC ON-HIGHV		UCK TRACTO (2ND HALF,	OR, 6X4, DIESEI 2006)	L POWERED,
Т	ruck Trailer Desc	cription: G	ENERIC FOLD		· · · · · · · · · · · · · · · · · · ·	ROP DECK EQU	IPMENT
Т	ruck Trailer Desc	cription: G		ING GOO	· · · · · · · · · · · · · · · · · · ·	ROP DECK EQU	IPMENT
		cription: G		ING GOO	DSENECK, DF	ROP DECK EQU	IPMENT
Cost Breakdow	<u>'n:</u>	·	Τ	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN	ROP DECK EQU	IPMENT
Cost Breakdow	<u>n:</u> g Capacities	0-25 Tons	T 26-50 Tons	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons	ROP DECK EQU	IPMENT
Cost Breakdow Available Ri Owners	<u>n:</u> g Capacities ship Cost/Hour:	0-25 Tons \$16.63	26-50 Tons \$18.37	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33	ROP DECK EQU	IPMENT
Cost Breakdow Available Ri Owner Opera	<u>n:</u> g Capacities ship Cost/Hour: ting Cost/Hour:	0-25 Tons \$16.63 \$44.38	T 26-50 Tons \$18.37 \$46.13	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07	ROP DECK EQU	IPMENT
Cost Breakdow Available Ri Owners Opera Oper	<u>g Capacities</u> ship Cost/Hour: ting Cost/Hour: ator Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66	T 26-50 Tons \$18.37 \$46.13 \$27.66	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07 27.66	ROP DECK EQU	IPMENT
Cost Breakdow Available Ri Owners Opera Oper He	<u>n:</u> g Capacities ship Cost/Hour: ting Cost/Hour:	0-25 Tons \$16.63 \$44.38	T 26-50 Tons \$18.37 \$46.13	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07	ROP DECK EQU	IPMENT
Cost Breakdow Available Ri Owners Opera Oper He	n: g Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00	T 26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07 27.66 25.39	ROP DECK EQU	IPMENT
Cost Breakdow Available Ri Owners Opera Oper He Total V	n: g Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour:	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67	T 26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07 27.66 25.39	ROP DECK EQU	IPMENT
Cost Breakdow Available Ri Owners Opera Oper He Total V	n: g Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour: Unit Cost/Hour: ABLE EQUIP	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT:	26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55	ING GOC TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07 27.66 25.39 25.45	ROP DECK EQU ND 100T)	IPMENT DOT Permit
Cost Breakdow Available Ri Owners Opera Oper He Total V	rn: g Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour: Unit Cost/Hour: ABLE EQUIP Weight/ Unit	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67	T 26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39	ING GOO TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07 27.66 25.39	ROP DECK EQU	
Cost Breakdow Available Ri Owners Opera Oper He Total U NON ROAD	rn: g Capacities ship Cost/Hour: ting Cost/Hour: ator Cost/Hour: lper Cost/Hour: Unit Cost/Hour: ABLE EQUIP Weight/ Unit (TONS)	0-25 Tons \$16.63 \$44.38 \$27.66 \$0.00 \$88.67 MENT: Owner ship	T 26-50 Tons \$18.37 \$46.13 \$27.66 \$25.39 \$117.55 Haul Rig Cost/hr/uni	ING GOC TRAILER	DSENECK, DF (25T, 50T, AN + Tons 22.33 50.07 27.66 25.39 25.45 Haul Trip Cost/hr/	ROP DECK EQU ND 100T) Return Trip	DOT Permit

Subtotals: \$335.18 \$214.12 \$500.00

ROADABLE EQUIPMENT:

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

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region: Total one-way travel distance: Average Travel Speed:	ALAMOSA 50.00 50.00	miles mph
Total Non-Roadable Mob/Demob Cost *	\$2,768.96	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$0.00	

Transportation Cycle Time:

Haul Time (Hours):	Non- Roadable Equipment 1.00	Roadable Equipment 1.00
Return Time (Hours):	1.00	1.00
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	3.00	2.00

JOB TIME AND COST

Total job time: **6.00** Hours

Total job cost: \$2,769