# STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY Department of Natural Resources

1313 Sherman St., Room 215 Denver, Colorado 80203 Phone: (303) 866-3567 FAX: (303) 832-8106



Christopher Varra Varra Companies, Inc. 8120 Gage Street Fredrick, CO 80516



John W. Hickenlooper Governor

Mike King Executive Director

Loretta Piñeda Director

# **RE:** Sea Horse Ranch West Gravel Pit, Permit No. M-2001-113, Reclamation Costs Update and Notice of Surety Increase SI-1

Dear Mr. Varra:

In an effort to ensure the Financial Warranty for the above referenced site adequately reflects the actual current costs of fulfilling the requirements of the approved reclamation plan, the Colorado Division of Reclamation, Mining and Safety (Division) has updated the reclamation cost estimate (copy enclosed). *Therefore, pursuant to Section 34–32.5–117(4) of the Colorado Land Reclamation Act, adequate Financial Warranty must be submitted to the Division within 60 days of the mailing date of this letter.* The additional amount needs to be accepted prior to Monday, November 05, 2012. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

Staff calculations estimate the cost to reclaim the above referenced site to be <u>\$100,980.00</u>. This is an increase of <u>\$71,176.00</u> over the <u>\$29,804.00</u> currently held by the Division. This estimate is based on conditions observed during the August 15, 2012 inspection.

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

If you require additional information, have questions or concerns, please contact me at the DRMS Grand Junction Field-Office.

Sincerely, fustin Czapla

Environmental Protection Specialist Division of Reclamation, Mining and Safety 101 South 3<sup>rd</sup>, Suite 301 Grand Junction, CO 81501 Phone: (970) 243-6299

Cc: Jason Burkey, United Companies Enc: Financial Warranty Cost Estimate

#### COST SUMMARY WORK

te:	Sea Hors Gravel P	e Ranch West	Pen	mit Action:	2012AugInsp	Permit/Job#:	M2001113
р	ROJECT	' IDENTIFIC	CATION				
<u>P</u>	<b>ROJEC1</b> Task #:	000	CATION State:	Colorado		Abbreviation:	None
<u>P</u>				Colorado Gunnison		Abbreviation: Filename:	None M113-000

#### TASK LIST (DIRECT COSTS)

Task		Form	Fleet	Task	
Iask	Description	Used	Size	Hours	Cost
01a	Remove misc. debris	DEMOLISH	1	5.00	\$400.81
02a	Dewater pit	PUMPING	1	239.14	\$31,314.00
03a	Haul backfill material from stockpiles to slopes	TRUCK1	1	28.09	\$18,042.74
03b	Grade slopes, final site grading	DOZER	1	28.27	\$5,650.22
04a	Haul topsoil from stockpiles	TRUCK1	1	12.59	\$8,086.15
04b	Spread topsoil	DOZER	1	7.34	\$1,467.40
05a	Revegetate disturbed areas above water level	REVEGE	1	8.00	\$4,786.13
06a	Mobilize reclamation crew/equipment	MOBILIZE	1	2.57	\$6,206.22
		SUBTO	TALS:	331	\$75,953.67

#### **INDIRECT COSTS**

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$1,534.26	
Performance bond:	1.05	Total =	\$797.51	
Job superintendent:	165.50	Total =	\$9,814.15	
Profit:	10.00	Total =	\$7,595.37	
		TOTAL O & P =	\$19,741.29	
		CONTRACT AMOUNT (direct + $O \& P$ ) =	\$95,694,96	

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	500.0	0 Total =	500.00
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0.00
Reclamation management and/or administration:	5.00		\$4,784.75
CONTINGENCY:	0.00	Total =	\$0.00
		TOTAL INDIRECT COST =	\$25,026.04
TOTAL DOND AND			¢100.000.00

.

TOTAL BOND AMOUNT (direct + indirect) = \$100,980.00

# DEMOLITION WORK

	Sea Horse Ranch West		Permit Action:			
Site:	Gravel Pit			2012AugInsp	Permit/.	Job#: M2001113
ROJE	CT IDENTIFICATION	<u>N</u>				
		State:	Colorado		Abbreviation:	None
Fask #:	01A	State.	Colorado		11001014010111	
Task #: Date:		County:	Gunnison		Filename:	M113-01a

# UNIT COSTS

#### Location adjustment: 91.30 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	<b>Total Cost</b>
Pipes, barrels, wood, etc.	50 cy	Loading and 5 mile haul, salvage allowed - Steel frame structures	50.00	CY	\$8.78	\$439.00

				Total Cost	
		Subtotal		(adjusted for	
Job Hours: _	5.00	(unadjusted):	\$439.00	location):	\$400.81

# PUMPING WORK

Task description:	Dewat	er pit			
Sea Horse Ranch We	est	Permit Actio			
te: Gravel Pit		5	2012AugInsp	Permit/Job#:	M2001113
PROJECT IDENTIF	ICATIO	N			
Task #: 02A		State: Colora	do	Abbreviation:	None
Date: 9/4/2012		County: Gunnis	son	Filename:	M113-02a
User: DMC					
Agency or orga	nization na	ame: DRMS			
HOURLY EQUIPM	ENT COS	<u>5T</u>			
	Descrip			Quantity	
Make and Model:		igal pump - 200M,		4	
Attachment 1:		pipe - 10 in. diam.,		4	
Attachment 2:		ge pipe - 10 in. D., 2	25 ft.	4	
Labor Unit 1:	Pump o	perator		1	
Horsepower:	70				
	per day				
Weight:	1.95	_			
	S Tons)				
Cost Breakdown:			Utilization %		
Ownership Cost/	Hour:	\$42.16	NA		
Operating Cost/		\$69.36	100		
Operator Cost/	Hour:	\$19.42	NA		
Total Unit Cost/	Hour:	\$130.94			
Total Fleet Cost	/Hour:	\$130.94			
<b>PUMPING QUANTI</b>	TIES				
Initial Pond Vol		700.00		Conversion factor:	325850.5800
Final Pond Vol		228,095,406.00	gallons	Conversion factor.	525650.5800
Total Pond Inflow Su		220,070,100.00	Building	Unit inflow rate in	
	Area:	48,000	Sq. ft.	gph/sq. ft.:	0.1758
Total Pond Inflow Vo					
per	Hour:	8,438.40	gallons		
Source	of estimate	ed volume: Site r	naps, roughly 35 ac. lal	ke approx. 20' depth	
<b>PUMPING TIME</b>					
	vimum Pu	mp Capacity:	200,000	gph/pump	
		uction Head:	10	feet	
		charge Head:	10	feet	
		Total Head:	20	feet	
	CPB Pu	mp Capacity:	201,000	gph/pump	
	1	Site Altitude:	7,750	feet	
		ing Capacity:	804,000	gph	
		mping Time:	283.70	hours	
		ial Pumping:	2,393,980	gallons	
		mping Time:	286.68	Hours (3% rule)	
		iency Factor:	0.9100	(55  min./hr.)	
		mping Time:	239.15	hours	
JOB TIME AND CO	ST				
<u> </u>			Total job	time: <b>239.15</b>	Hours
			-		
Unit cost: \$0.0	00136	/Gallon	Total joł	o cost: \$31,314.0	0

CIRCES Cost Estimating Software

# TRUCK/LOADER TEAM WORK

Sea Horse Rancl Site: Gravel Pit	1 West	Permi	t Actio	on: 2012AugIns	p	Permit/Job#:	M2001113
PROJECT IDEN	TIFICATION	[					
Task #: 03A		State:	Colora	ado	,	Abbreviation:	None
Date: 9/4/20	012	County:	Gunnison			Filename:	M113-03a
User: DMC							
Agency or	organization nat	ne: DRM	1S				
HOURLY EQUI	PMENT COS	<u>r</u>				oasis: <u>1 per day</u>	
1	ruck Loader Tea	m -Truck:		Equipment Descri 769D	ption		
		-Loader:		T 980H high lift			
Supp	ort Equipment -I		NA				
Dead M	-D aintenance –Mot	ump Area:	NA				
Koad M		or Grader: iter Truck:	NA Wa	ter Tanker, 10,000	) Gal.		100
·					- Out		
Cost Breakdown:		ader Team		r	Equipment	7	enance Equipmen
	Truck	Loader		Load Area	Dump Area	Motor Grad	der Water Truc
6Utilization-machine:	100	100		NA	NA	NA	100
Ownership cost/hour:	\$43.04	\$44.8	5	NA	NA	NA	\$54.68
Operating cost/hour:	\$91.48	\$73.2	5	NA	NA	NA	\$117.24
Ripper op. cost/hour:	NA	\$0.00	)	NA	NA	NA	\$0.00
Operator cost/hour:	\$22.29	\$38.6	7	NA	NA	NA	\$0.00
Unit Subtotals:	\$156.81	\$156.7	8	NA	NA	NA	\$171.91
Number of Units:	2	1		0	0	0	1
Group Subtotals:	Work:	\$470.40		Support:	\$0.00	Ma	int: \$171.91
Total work team cos MATERIAL QU		<u> </u>					
Initial volume:	16,000		CCY	Swell	factor: 1.12:	5	
Loose volume:	18,00	00	LCY				
	urce of estimated			ox. 6k lft pond (s	) perimeter, 1.5	H:1V to 3H:1V	, 20' dp
Source	of estimated swo Material Purch		Cat H \$0.00	Handbook			
		otal Cost:	\$0.00				
		8				N. (1970)	
HOURLY PRO	DUCTION						
<u>Truck Capacity:</u> <u>Truck Payload (wei</u> Material v				Pounds/LCY			
		posed rock	- 25%	Rock, 75% Earth	h		
Rated Pa				Pounds			

Truck Bed (volume) Basis:

Struck Volume:	71.60	LCY				
Heaped Volume:		LCY				
Average Volume:		LCY				
Adjusted Volume:		LCY				
Aujusteu volume.	1					
Final	Truck Volume !	Based on Number of	Loader Passes:	29.25	LCY	
Loading Tool Capacity						
			Buck	et Size Class: N	JA	
Rated Capacity:	7.500	LCY (heaped)	Duor		11	_
Bucket Fill Factor:	0.975		mixed moist age	gregates (95-100%)	0.975	
Adjusted Capacity:	7.313	LCY		<u> </u>	,	
Job Condition Corrections:		Site	e Altitude (ft.): 7	750 feet		
	- Truck	Loader	Source			
Altitude Adj:	0.930	1.000	(CAT HB	)		
Job Efficiency:	0.830	0.830	(CAT HB	<u> </u>		
Net Correction:	0.772	0.830				
	007712	01000				
Loading Tool Cycle Time:	Number	of Loading Tool Pass	ses Required to I	Fill Truck:	p	asses
Excavators and Front Shovel	s:					
Machine Cycle Time vs	. Job Condition					
	. Job Condition					
Machine Cycle Time vs	s. Job Condition within this Basic	Rating: NA				
Machine Cycle Time vs Selected Value w	s. Job Condition within this Basic	Rating: NA		C		
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.):	s. Job Condition vithin this Basic Material Descri	c Rating: NA ption:		Dump: 0.100	0	
Machine Cycle Time vs Selected Value w Track Loaders – I	s. Job Condition vithin this Basic Material Descri	Rating: NA		Dump: 0.100	0	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.):	s. Job Condition vithin this Basic Material Descrip Ma	e Rating: NA ption:	ne (load, dump, r	•	0 ).550 minu	ites
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA	s. Job Condition vithin this Basic Material Descrip Ma	e Rating: NA ption:	ue (load, dump, r	•		ites
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders -	s. Job Condition vithin this Basic Material Descrip Ma	c Rating: NA ption:	ue (load, dump, r	naneuver): 0	).550 minu	ites
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors	s. Job Condition vithin this Basic Material Descrip Material Descrip Material Descrip Material Descrip	c Rating: NA ption:		naneuver):0 Factor (min.)	).550 minu Source	ites 
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	s. Job Condition vithin this Basic Material Descri Ma Unadjusted Bas Mixed materia Conveyor or d Common own	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and 1	and up 0.00	naneuver): 0 Factor (min.) 0.020 0.000 -0.040	).550 minu Source (Cat HB) (Cat HB) (Cat HB)	ites  
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descri Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and 1 ation -0.04	and up 0.00	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040	).550 minu Source (Cat HB) (Cat HB)	ites 
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership:	s. Job Condition vithin this Basic Material Descri Ma Unadjusted Bas Mixed materia Conveyor or d Common own	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high lership of trucks and 1 ation -0.04 ct 0.00	and up 0.00 loaders -0.04	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	).550 minu Source (Cat HB) (Cat HB) (Cat HB)	Ites   
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descri Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and 1 ation -0.04 et 0.00 Net Cycle Time	a and up 0.00 loaders -0.04 e Adjustment:	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	).550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	ites   
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descri Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and I ation -0.04 ct 0.00 Net Cycle Time Adjusted Loade	a and up 0.00 loaders -0.04 e Adjustment: r Cycle Time:	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490	0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	ites    
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descri Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and I ation -0.04 ct 0.00 Net Cycle Time Adjusted Loade	a and up 0.00 loaders -0.04 e Adjustment:	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	).550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes	ites 
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	s. Job Condition vithin this Basic Material Descri Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and I ation -0.04 ct 0.00 Net Cycle Time Adjusted Loade	a and up 0.00 loaders -0.04 e Adjustment: r Cycle Time:	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490	).550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	Ites   
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Condition vithin this Basic Material Descrip Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper Nominal targe	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and I ation -0.04 ct 0.00 Net Cycle Time Adjusted Loade	and up 0.00 loaders -0.04 e Adjustment: r Cycle Time: me per Truck:	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490	).550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes	
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	s. Job Condition vithin this Basic Material Descrip Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper Nominal targe 0.60	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and I ation -0.04 ct 0.00 Net Cycle Time Adjusted Loade Net Load Time	a and up 0.00 loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 0.000 -0.060 0.490 1.570	0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes	    Minute
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time:	s. Job Condition vithin this Basic Material Descrip Ma Unadjusted Bas Mixed materia Conveyor or d Common own Constant opera Nominal targe 0.60	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and I ation -0.04 et 0.00 Net Cycle Time Adjusted Loade Net Load Time Minutes	a and up 0.00 loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490 1.570 for site altitude:	0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.645	Minute Minute Minute
Machine Cycle Time vs Selected Value w Track Loaders – I Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time:	s. Job Condition vithin this Basic Material Descrip Material Descrip Unadjusted Bas Mixed materia Conveyor or d Common own Constant oper Nominal targe 0.60 1.570 1.00	c Rating: NA ption: aneuver: NA sic Loader Cycle Tim al 0.02 lozer piled 10 ft. high tership of trucks and I ation -0.04 ct 0.00 Net Cycle Time Adjusted Loade Net Load Time Minutes Minutes	a and up 0.00 loaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted Adjusted	naneuver): 0 Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490 1.570 for site altitude: for site altitude: for site altitude:	0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.645 1.570 1.075	Minute

Haul Rou	te:							
Seg #	Haul I (Ft)	Distance	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)	
1	800.00	)	0.00	5.00	5.00	1629	0.645	
					Haul Time:	0.645	minutes	
Return Ro								
Seg #		Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	800.00	)	0.00	5.00	5.00	3600	0.611	
				Total Tru	Return Time: ck Cycle Time:	0.611 4.546	minutes minutes	
Loading Too Produ		792.27	LCY/Hour		Adjusted for j	ob efficiency:	657.58	LCY/Hour
Truck Unit Produ	iction –	386.02	LCY/Hour		Adjusted for j	ob efficiency:	320.39	LCY/Hour
Optimal No. of Tr	ucks: _	2	Truck(s)		Selected Num	per of Trucks:	2	Truck(s)
				le truck/loade	k team productio er team productio er team productio	on: 640.	.79 LCY/	Hour
JOB TIN	ME AN	<u>D COST</u>						
Fleet	size:	1	Team(s)	-	Fotal job time:	28.0	9 Hou	ırs
Unit	cost:	\$1.002	/LCY		Total job cost:	\$18,042	2.74	

#### BULLDOZER WORK

Task description:	Grad	e slopes, fin	al site gradi	ing		
Sea Horse Ranch Gravel Pit	West	Peri	nit Action:	2012AugInsp	Permit/Job#:	M2001113
PROJECT IDEN	FIFICATIC	<b>DN</b>				
Task #: 03B Date: 9/4/201		State: County:	Colorado Gunnison		Abbreviation: Filename:	None M113-03b
User: DMC						
Agency or c	organization r	name: DR	MS			
HOURLY EQUIP	MENT CO	ST				
Basic Machine:	Cat D8T - 8	U				
Horsepower:	310					
Blade Type:	Universal					
Attachment:	NA					
Shift Basis:	1 per day					
Data Source:	(CRG)					
_	()					
Cost Breakdown:				TT.111 A <sup>(2)</sup>		
o				Utilization %		
Ownership Cost/Ho		\$58.56		NA		
Operating Cost/Ho		\$102.84		100		
Ripper op. Cost/Ho		\$0.00		0		
Operator Cost/Ho	ur:	\$38.49		NA		
Total Fleet Cost/Hou		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
	16,667					
	1.125					
Loose volume:	18,750 LCY					
Source of estimated v	volume:	Division	of Reclamat	ion, Mining & Safety		
Source of estimated s		Cat Hand		ion, mining & Surety		
Source of estimated a	wen neter.	Cat Hand	UUUK			
HOURLY PROD	UCTION					
HUUKLI IKUD						
Average push distance	e:	50 feet				
Unadjusted hourly pr	oduction:	1,627.0 LC	Y/hr			
Materials consistency	description:	Loose s	stockpile 1.2			
	-					
Average push gradier		<b>C</b>				
Average site altitude:	7,750	reet				
Material weight:	2,650	lbs/LCY				
Weight description:	Decon	nposed rock	- 25% Rock	, 75% Earth		
Job Condition Com	tion Easter			Course		
Job Condition Correct	tor Skill:	^	750	Source (AVG.)		
Material con		A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O				
iviateriai coi	isistency:	1.	200	(CAT HB)		

Dozing metho	od: 1.000	(GEN.)
Visibili	ty: 1.000	(AVG.)
Job efficient	cy: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradie	nt: 0.786	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weig	ht: 0.868	(CAT HB)
Blade typ	be: 1.000	(PAT)
Net correction	on: 0.4077	
Adjusted unit production:	663.33 LCY/hr	
Adjusted fleet production:	663.33 LCY/hr	
Adjusted fleet production:	663.33 LCY/hr	

# JOB TIME AND COST

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.301/LCY	

Total job time:	28.27 Hours
Total job cost:	\$5,650.22

# TRUCK/LOADER TEAM WORK

Sea Horse Ranc Site: Gravel Pit	h West	Permi	t Actio	n: 2012AugIr	nsp	Permit/Job#:	M2001113
<b>PROJECT IDEN</b>	NTIFICATION	J					
Task #: 04A		-	Colorad	do		Abbreviation:	None
Date: 9/4/2	012	County:	Gunnis	on		Filename:	M113-04a
User: DMC	,						
Agency of	r organization na	me: DRM	ſS				
HOURLY EQUI	PMENT COS	<u>T</u>			Shift I	basis: <u>1 per day</u>	
			E	quipment Desc	ription		
r	Fruck Loader Te		Cat 7				
Sum	ort Equipment -	-Loader:	CAT NA	980H high lift			
Subt		ump Area:	NA				
Road M	laintenance – Mo	tor Grader:	NA				
	-W	ater Truck:	Wate	er Tanker, 10,00	00 Gal.		
Cost Breakdown:	Truck/Le	ader Team		Support	t Equipment	Mainte	nance Equipment
<u>Cost Breakdown</u> .	Truck	Loader		Load Area	Dump Area	Motor Grad	
Utilization-machine:	100	100		NA	NA	NA	100
Ownership cost/hour:	\$43.04	\$44.85	5	NA	NA	NA	\$54.68
Operating cost/hour:	\$91.48	\$73.25	5	NA	NA	NA	\$117.24
Ripper op. cost/hour:	NA	\$0.00		NA	NA	NA	\$0.00
Operator cost/hour:	\$22.29	\$38.67	7	NA	NA	NA	\$0.00
Unit Subtotals:	\$156.81	\$156.7	8	NA	NA	NA	\$171.91
Number of Units:	2	1		0	0	0	1
Group Subtotals:	Work:	\$470.40		Support:	\$0.00	Mair	nt: \$171.91
Total work team co MATERIAL QU	ANTITIES	1	COV	Sauce	11 6 1 00	0	
Initial volume Loose volume		57	CCY LCY	Swe	ll factor: 1.00	0	
	ource of estimate			nermit area - r	oughly 35 lake/n	ond surface, 12"	denth
	e of estimated sw			andbook	oughly 55 lake/p	ond surface, 12	deptit
	Material Purch	ase Cost:	\$0.00				
	Т	otal Cost:	\$0.00				
HOURLY PRO	DUCTION						
<u>Truck Capacity:</u> <u>Truck Payload (wei</u> Material	weight: 1,600	oil		Pounds/LC	Y		
Rated Pa				Pounds			
Payload Ca				LCY			

Truck Bed (volume) Basis:

II Values	21.60	LCY				
Heaped Volume:	31.70	LCY				
Average Volume:	26.65	LCY				
Adjusted Volume:	31.70	LCY				
Final	Truck Volume	Based on Number of	Loader Passes:	29.25	LCY	
Loading Tool Capacity						
			Bucl	ket Size Class: 1	NA	
Rated Capacity:	7.500	LCY (heaped)				
Bucket Fill Factor:	0.975	Loose material -	uniform aggreg	ates to 1/8" (95-10	0%) 0.975	
Adjusted Capacity:	7.313	LCY				-
Job Condition Corrections:		Site	e Altitude (ft.):	7750 feet		
	Truck	Loader	Source			
Altitude Adj:	0.930	1.000	(CAT HE			
Job Efficiency:	0.830	0.830	(CAT HE			
Net Correction:	0 773	0.920				
Net Correction:	0.772	0.830				
Loading Tool Cycle Time:	Number	of Loading Tool Pass	ses Required to	Fill Truck:	4	basses
Excavators and Front Shovel	<u>ls:</u>					
Machine Cycle Time vs	s. Job Conditior	n Rating: NA				
÷		1.4				
Selected Value v	vithin this Basic	c Rating: NA				
		•				
Selected Value v Track Loaders – Cycle Time Elements (min.):	Material Descri	•				
Track Loaders –	Material Descri	•		Dump: 0.10	0	
Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u>	Material Descri M	aneuver: NA	e (load dump t	-		ites
Track Loaders – Cycle Time Elements (min.): Load: <u>NA</u> Wheel and Track Loaders –	Material Descri M	aneuver: NA	e (load, dump, r	naneuver):(	0.550 min	utes
Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors	Material Descri M Unadjusted Ba	aneuver: NA sic Loader Cycle Time	e (load, dump, r	naneuver):( Factor (min.)	0.550 min Source	utes
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material:	Material Descri M Unadjusted Ba Material up to	aneuver: NA sic Loader Cycle Time 0 1/8" diameter 0.02		naneuver): ( Factor (min.) 0.020	0.550 min Source (Cat HB)	utes
Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile:	Material Descri M Unadjusted Ba Material up to Conveyor or o	aneuver: NA sic Loader Cycle Time 0 1/8" diameter 0.02 dozer piled 10 ft. high	and up 0.00	naneuver): ( Factor (min.) 0.020 0.000	0.550 minu Source (Cat HB) (Cat HB)	utes
Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and h	and up 0.00	naneuver): ( Factor (min.) 0.020 0.000 -0.040	0.550 minu Source (Cat HB) (Cat HB) (Cat HB)	utes 
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own Constant oper	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high tership of trucks and hership o	and up 0.00	maneuver): ( Factor (min.) 0.020 0.000 -0.040 -0.040	0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB)	utes 
Track Loaders – Cycle Time Elements (min.): Load: NA Wheel and Track Loaders – Cycle Time Factors Material: Stockpile: Truck Ownership:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high tership of trucks and hership of trucks and hership ation -0.04 et 0.00	and up 0.00 oaders -0.04	naneuver): ( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000	D.550minuteSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)	utes 
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own Constant oper	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high tership of trucks and I ration -0.04 et 0.00 Net Cycle Time	and up 0.00 oaders -0.04 e Adjustment:	naneuver): ( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	D.550minutesSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)	utes 
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own Constant oper	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and le ation -0.04 et 0.00 Net Cycle Time Adjusted Loader	and up 0.00 oaders -0.04 e Adjustment: r Cycle Time:	maneuver):( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490	D.550minuSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutes	utes 
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own Constant oper	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and le ation -0.04 et 0.00 Net Cycle Time Adjusted Loader	and up 0.00 oaders -0.04 e Adjustment:	naneuver): ( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060	D.550minutesSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)	utes 
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own Constant oper	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and le ation -0.04 et 0.00 Net Cycle Time Adjusted Loader	and up 0.00 oaders -0.04 e Adjustment: r Cycle Time:	maneuver):( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490	D.550minuSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutes	utes 
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own Constant oper Nominal targe	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and le ation -0.04 et 0.00 Net Cycle Time Adjusted Loader	and up 0.00 oaders -0.04 e Adjustment: r Cycle Time: me per Truck:	maneuver):( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490	D.550minuSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutes	
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target:	Material Descri M Unadjusted Ba Material up to Conveyor or o Common own Constant oper Nominal targe	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and le ation -0.04 et 0.00 Net Cycle Time Adjusted Loader Net Load Tir	and up 0.00 oaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted	maneuver):( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490 1.570	0.550     minutes       Source     (Cat HB)       (Cat HB)     (Cat HB)       (Cat HB)     (Cat HB)	
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time: Truck Load Time:	Material Descri M Unadjusted Ba Material up to Conveyor or c Common own Constant oper Nominal targe	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and hership of trucks and hership ation -0.04 et 0.00 Net Cycle Time Adjusted Loaden Net Load Tir Minutes	and up 0.00 oaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted	maneuver): ( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490 1.570 for site altitude:	0.550 minu Source (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) (Cat HB) minutes minutes minutes 0.645	Minutes
Track Loaders Cycle Time Elements (min.): Load: NA Wheel and Track Loaders - Cycle Time Factors Material: Stockpile: Truck Ownership: Operation: Dump Target: Truck Exchange Time:	Material Descri M Unadjusted Ba Material up to Conveyor or c Common own Constant oper Nominal targe : 0.60 : 1.570 : 1.00	aneuver: NA sic Loader Cycle Time o 1/8" diameter 0.02 dozer piled 10 ft. high hership of trucks and hership of trucks and hership to 1.00 Net Cycle Time Adjusted Loader Net Load Time Minutes Minutes	and up 0.00 oaders -0.04 e Adjustment: r Cycle Time: me per Truck: Adjusted Adjusted Adjusted	naneuver): ( Factor (min.) 0.020 0.000 -0.040 -0.040 0.000 -0.060 0.490 1.570 for site altitude: for site altitude: for site altitude:	D.550minuSource(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)(Cat HB)minutesminutesminutes0.6451.5701.075	utes 

Haul Rou	te:							
Seg #	1	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	800.00	)	0.00	5.00	5.00	1629	0.645	
	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		Haul Time:	0.645	minutes	
Return Ro	oute:					0.045	IIIIIutes	
Seg #	Haul I	Distance	Grade (%)	Roll. Res	Total Res	Velocity	Travel	
	(Ft)			(%)	(%)	(fpm)	Time (min)	
1	800.00		0.00	5.00	5.00	3600	0.611	
					Return Time:	0.611	minutes	;
				Total Tru	ck Cycle Time:	4.546	minutes	5
Loading Too	ol unit							
	uction _	792.27	LCY/Hour		Adjusted for j	ob efficiency:	657.58	LCY/Hour
Truck Unit Produ	uction	386.02	LCY/Hour		Adjusted for j	oh officiana.	320.39	LCY/Hour
	_	560.02			Adjusted for j	ob efficiency.	320.39	
Optimal No. of Tr	rucks:	2	Truck(s)		Selected Num	per of Trucks:	2	Truck(s)
			Adjuste	d hourly truc	k team production	on: 640.	.79 LCY	/Hour
					er team production			/Hour
			Adjusted multip	le truck/loade	er team production	on: <u>640</u> .	.79 LCY	Hour
JOB TI	ME AN	D COST						
Fleet	size:	1	Team(s)	- -	Total job time:	12.59	9 Но	urs
Unit	cost:	\$1.002	/LCY		Total job cost:	\$8,086	.15	

#### BULLDOZER WORK

Та	isk descriptior	1:	Sprea	d topsoil				
	Sea Horse Ra Gravel Pit	anch V	Vest	Per	mit Action:	2012AugInsp	Permit/Job#:	M2001113
PI	ROJECT ID	DENTI	FICATIO	DN				
		4B		State:	Colorado		Abbreviation:	None
		4/2012		County:	Gunnison		Filename:	M113-04b
		MC		county.	Guillioon		T nonume.	MITS OID
	Agenc	y or or	ganization r	name: DI	RMS			
H	OURLY EC	ЭІЛРМ	IENT CO	ST				
	Basic Machin		Cat D8T - 8					
	Horsepow		10	0				
	Blade Typ		Jniversal					
	Attachme		VA					
	Shift Bas		per day					
	Data Source		CRG)					
			cito)					
<u>Cc</u>	ost Breakdown	<u>n</u> :						
						Utilization %		
	Ownership Co			\$58.56		NA		
	Operating Co			\$102.84	•	100		
	Ripper op. Co			\$0.00		0		
	Operator Co	st/Hou	r:	\$38.49		NA		
Тс	otal unit Cost/	Hour:	\$199.8	9				
Тс	otal Fleet Cost	/Hour:	\$199.8	19				
M	ATERIAL	QUAN	<u>NTITIES</u>					
]	Initial Volume	e: 8,	067					
	Swell factor	r: 1.	000					
	Loose volume	e: 8,	067 LCY					
50	ource of estimation	ated vo	lume	Division	of Declamat	ion, Mining & Safety		
	ource of estimation			Cat Hand		ion, winning & Salety		
00		ated 3W	cii idotoi.	Cat Hand	JOOK			
H	OURLY PR	RODU	CTION					
_				50 E+				
	verage push di			50 feet 1,627.0 LC	V/1			
U	nadjusted hour	riy pro	uction: _	1,027.0 LC	I/III			
M	aterials consis	stency of	description:	Loose	stockpile 1.2			
A	verage push g	radient	: 10 %					
	verage site alt		7,750	feet				
M	aterial weight	:	1,600	lbs/LCY				
w	eight descript	ion:	Top So	oil				
Jo	b Condition C	Correcti	on Factor			Source		
			or Skill:	0	750	(AVG.)		
		UDCIAN	11 28/11	11	.7.00	IAVITI		

 $\mathbf{A}_{i}$ 

Dozing metho	d: 1.000	(GEN.)
Visibilit	ty: 1.000	(AVG.)
Job efficience	ey: 0.830	(1 SHIFT/DAY)
Spoil pi	le: 0.800	(FND-RF)
Push gradier	nt: 0.786	(CAT HB)
Altitud	le: 1.000	(CAT HB)
Material Weigl	nt: 1.438	(CAT HB)
Blade typ	e: 1.000	(PAT)
Net correctio	on: 0.6754	
Adjusted unit production:	1,098.88 LCY/hr	
Adjusted fleet production:	1098.88 LCY/hr	

#### JOB TIME AND COST

Fleet size:	1 Dozer(s)	
Unit cost:	\$0.182/LCY	

Total job time:	7.34 Hours	
Total job cost:	\$1,467.40	

# **REVEGETATION WORK**

Laterials       Units / Acre       Unit       Cost / Unit       Cost / Acre         Description       \$       \$       \$       \$         pplication       Total Fertilizer Materials Cost/Acre       \$0.00         pplication       Cost / Acre       \$         Description       Cost / Acre       \$         Total Fertilizer Application Cost/Acre       \$         S       \$       \$         Total Fertilizer Application Cost/Acre       \$         S       \$       \$         Total Fertilizer Application Cost/Acre       \$         S       \$       \$         Pescription       Cost / Acree       \$         Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)       \$92.35         Weed control spraying (MEANS 31 31 16.13 3100)       \$145.20         Total Tilling Cost/Acre       \$237.55	Task description:	<b>Revegetate disturbed</b>	areas abo	ve water leve	el		
Task #:         05A         State:         Colorado         Abbreviation:         None           Date:         94/2012         County:         Gunnison         Filename:         M113-05a           User:         DMC         Agency or organization name:         DRMS         State:         M113-05a           ERTILIZING         Units /         Units /         Cost / Unit         Cost / Acre         S           Description         Units /         Image: State:         S         S         S           Description         Units /         Cost / Unit         Cost / Acre         So.00           pplication         S         S         S         S           Description         Cost / Acre         S         S           Total Fertilizer Application Cost/Acre         So.00         So.00           TLLING         S         So         So           Description         Cost / Acree         So         So           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         Sp2.35         St45.20         St45.20           EEDING         So         So         So         So           Seed Mix         Rate - PLS         Seeds         So         So           Slender Wheatgras		t Permit A		)12AugInsp		Permit/Job#	t: M2001113
Task #:         05A         State:         Colorado         Abbreviation:         None           Date:         94/2012         County:         Gunnison         Filename:         M113-05a           User:         DMC         Agency or organization name:         DRMS         State:         M113-05a           ERTILIZING         Units /         Units /         Cost / Unit         Cost / Acre         S           Description         Units /         Image: State:         S         S         S           Description         Units /         Cost / Unit         Cost / Acre         So.00           pplication         S         S         S         S           Description         Cost / Acre         S         S           Total Fertilizer Application Cost/Acre         So.00         So.00           TLLING         S         So         So           Description         Cost / Acree         So         So           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         Sp2.35         St45.20         St45.20           EEDING         So         So         So         So           Seed Mix         Rate - PLS         Seeds         So         So           Slender Wheatgras	<b>PROJECT IDENTIFI</b>	CATION					
ERTILIZING         Intervals         Description       Units / Acre       Unit       Cost / Unit       Cost / Acre         Description       5       S       S         Total Fertilizer Materials Cost/Acre       \$0.00         pplication         Description       Cost / Acre         Total Fertilizer Materials Cost/Acre         S       S       S         Total Fertilizer Application Cost/Acre         Description       Cost / Acre         Disc harrowing, 6" deep (MEANS 32 91 13 23 6100)       \$92.35         Total Tilling Cost/Acre         Disc harrowing, 6" deep (MEANS 31 31 16.13 3100)       \$145.20         Total Tilling Cost/Acre         Description       Cost / Acre         Description       \$237.55         EEDING         Seed Mix       Rate - PLBS / Acre       Seeds Per SQ. FT       Cost / Acre         Slender Wheatgrass - Native       5.50       20.08       \$12.10         Red Top       0.10       11.46       \$0.60         Reed Graasy - VNS       1.00       11.62       \$4.72         Ree	Date: 9/4/2012						
Laterials         Units / Acre         Unit         Cost / Unit         Cost / Acre           Description         \$	Agency or organ	ization name: DRMS	0.000				
Units / Acre         Unit         Cost / Unit         Cost /Acre           Description         \$ <td>ERTILIZING</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	ERTILIZING						
Description         Acre         Unit         Cost / Unit         Cost / Acre           Image: Second Sec	laterials						
Total Fertilizer Materials Cost/Acre         \$0.00           pplication         Cost /Acre           Description         \$           Total Fertilizer Application Cost/Acre         \$0.00           ILLING         Soloo           Description         Cost /Acre           Description         Cost /Acre           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         \$92.35           Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre         \$237.55           EEDING         Seed Mix         Rate - PLS LBS / Acre         \$237.55           Seed Mix         \$.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57	Description				Co	st / Unit	Cost /Acre
Pplication         Cost /Acre           Description         \$           Total Fertilizer Application Cost/Acre           Secription         \$           Cost /Acre           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         \$92.35           Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre           Seed Mix           Seed Mix         Rate - PLS LBS / Acre         \$           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Top         0.10         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57					\$		\$
Description         Cost /Acre           S         S           Total Fertilizer Application Cost/Acre         \$0.00           ILLING           Description         Cost /Acre           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         \$92.35           Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre           Seed Mix           Seed Mix           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Reed Top         0.10         11.46         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57			]	Fotal Fertiliz	er Materia	ls Cost/Acre	\$0.00
Description         Cost /Acre           S         S           Total Fertilizer Application Cost/Acre         \$0.00           ILLING           Description         Cost /Acre           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         \$92.35           Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre           Seed Mix           Seed Mix           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Reed Top         0.10         11.46         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57	nnlication						1. ·
S         S           Total Fertilizer Application Cost/Acre         \$0.00           ILLING         Cost /Acre           Description         Cost /Acre           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         \$92.35           Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre         \$237.55           EEDING         Cost /Acre         \$237.55           Seed Mix         Rate - PLS LBS / Acre         Seeds per SQ. FT         Cost /Acre           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Granzygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57					inge ærnenter		Cost /Acre
Total Fertilizer Application Cost/Acre         \$0.00           ILLING           Description         Cost /Acre           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         \$92.35           Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre           Seed Mix         Rate - PLS LBS / Acre         Seeds Per SQ. FT         Cost /Acre           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57	Description						
Description         Cost /Acre           Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)         \$92.35           Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre         \$237.55           EEDING         Seed Mix         Rate - PLS LBS / Acre         Seeds per SQ. FT         Cost /Acre           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57			То	tal Fertilizer	Applicatio	on Cost/Acre	
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)       \$92.35         Weed control spraying (MEANS 31 31 16.13 3100)       \$145.20         Total Tilling Cost/Acre         \$237.55         EEDING         Seed Mix       Rate – PLS LBS / Acre       Seeds per SQ. FT       Cost /Acre         Slender Wheatgrass - Native       5.50       20.08       \$12.10         Red Top       0.10       11.46       \$0.60         Reed Canarygrass - VNS       1.00       11.62       \$4.72         Reedgrass, Canadian (or Blue Joint)       0.10       10.28       \$19.88         Slough Grass       0.30       7.58       \$6.36         Timothy - Climax       0.50       14.35       \$0.57	TILLING						
Weed control spraying (MEANS 31 31 16.13 3100)         \$145.20           Total Tilling Cost/Acre         \$237.55           EEDING         Rate – PLS LBS / Acre         Seeds per SQ. FT         Cost /Acre           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57		(MEANE 22 01 12 22 6	(100)				
Rate – PLS Beed Mix         Seeds PES Beed Mix         Cost /Acre           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36							
Seed Mix         Rate – PLS LBS / Acre         Seeds per SQ. FT         Cost /Acre           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57					Total Tillin	ng Cost/Acre	
Seed Mix         PLS LBS / Acre         Seeds per SQ. FT         Cost /Acre           Slender Wheatgrass - Native         5.50         20.08         \$12.10           Red Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57	SEEDING					2.2	<u>}</u>
Slender Wheatgrass - Native       5.50       20.08       \$12.10         Red Top       0.10       11.46       \$0.60         Reed Canarygrass - VNS       1.00       11.62       \$4.72         Reedgrass, Canadian (or Blue Joint)       0.10       10.28       \$19.88         Slough Grass       0.30       7.58       \$6.36         Timothy - Climax       0.50       14.35       \$0.57	Seed Mix				PLS LBS /	per SQ.	Cost /Acre
Red Top         0.10         11.46         \$0.60           Reed Canarygrass - VNS         1.00         11.62         \$4.72           Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57	Slender Wheatgrass - N	ative				20.08	\$12.10
Reedgrass, Canadian (or Blue Joint)         0.10         10.28         \$19.88           Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57	Red Top				-		
Slough Grass         0.30         7.58         \$6.36           Timothy - Climax         0.50         14.35         \$0.57							
Timothy - Climax         0.50         14.35         \$0.57	<u> </u>	r Blue Joint)			-		
· · · · · · · · · · · · · · · · · · ·					+		+
<b>Totals Seed Mix</b> 7.50 75.36 <b>\$44.23</b>	Timothy - Climax				0.50	14.35	\$0.57
			Tota	ls Seed Mix	7.50	75.36	\$44.23

Application

Description

Cost /Acre

	Total Seed Application Cost/Acre	
Drill seeding {DMG}		\$90.11

## **MULCHING and MISCELLANEOUS**

#### Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$164.00	\$328.00
	Total Mulch Materials Cost/Acre			\$328.00

#### Application

Description		Cost /Acre
Crimping, with tractor {DMG survey data}		\$65.89
	Total Mulch Application Cost/Acre	\$65.89

# **NURSERY STOCK PLANTING**

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

#### JOB TIME AND COST

	No. of Acres: ed Failure Rate: ng Work Items:	 Cost /Acre: Cost /Acre*: G, MULCHING	
Initial Job Cost: Reseeding Job Cost:	the second se		
Total Job Cost: Job Hours:	\$4,786.13		
300 110015.	0.00		

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# EQUIPMENT MOBILIZATION/DEMOBILIZATION

Sea Horse Ra	nch West	Permit A			_			
: Gravel Pit			2012A	ıgInsp	Pe	rmit/Job#:	M200	1113
PROJECT ID	ENTIFICAT	ION						
Task #: 06	A	State: Co	lorado		Abbr	eviation:	None	
Date: 9/2 User: DN	/2012 //C	County: Gu	innison		F	ilename:	M113-(	)ба
Agency	or organization	n name: DRMS						
EQUIPMENT	TRANSPOR	<u>RT RIG COST</u>						
					Shift ba		per day	
					Cost Data Sou	rce: <u>C</u>	RG Data	
True	ck Tractor Desc	cription: GEN	ERIC ON-HIGH		UCK TRACTO (2ND HALF,		IESEL F	OWERED,
Tm	ck Trailer Desc	ription: GENE	RIC FOLDING				IIPMEN	
114	lok Hanel Dest	Suption. OLIVE			, 50T, AND 10			I IKAILLK
Cost Breakdown	<u>.</u>			(201	, , , , , , , , , , , , , , , , , , , ,			
Available Rig C	apacities	0-25 Tons	26-50 Tons	51-	+ Tons			
Ownershi	p Cost/Hour:	\$16.63	\$18.37	\$	22.33			
Operatin	g Cost/Hour:	\$44.38	\$46.13	\$	50.07			
Operate	or Cost/Hour:	\$27.66	\$27.66	\$	27.66			
Help	-	¢0.00	P25 20	8	\$25.39			
110Ip/	er Cost/Hour:	\$0.00	\$25.39	Ψ	25.39			
	er Cost/Hour: it Cost/Hour:	\$88.67	\$25.39		25.39 .25.45			
Total Un	it Cost/Hour:	\$88.67						
Total Un	it Cost/Hour:	\$88.67 MENT:	\$117.55	\$1	25.45	Return 7	<b>rin</b>	DOT Permi
Total Un NON ROADA Machine	it Cost/Hour:           BLE EQUIP           Weight/	\$88.67 <b>MENT:</b> Owner ship	\$117.55 Haul Rig	Fleet	25.45 Haul Trip	Return T Cost/hr/		DOT Perm Cost/ fleet
Total Un	it Cost/Hour: BLE EQUIP Weight/ Unit	\$88.67 MENT:	\$117.55	\$1	25.45	Return T Cost/hr/		
Total Un NON ROADA Machine	it Cost/Hour: BLE EQUIP Weight/ Unit (TONS)	\$88.67 <b>MENT:</b> Owner ship	\$117.55 Haul Rig	Fleet	25.45 Haul Trip Cost/hr/			
Total Un <u>NON ROADA</u> Machine Description Centrifugal pump 200M, 10 in. Cat 769D	it Cost/Hour: BLE EQUIP Weight/ Unit (TONS) - 1.95 37.54	\$88.67 MENT: Owner ship Cost/hr/ unit	\$117.55 Haul Rig Cost/hr/unit	Fleet Size	25.45 Haul Trip Cost/hr/ fleet	Cost/hr/		Cost/ fleet
Total Un <u>NON ROADA</u> Machine Description Centrifugal pump 200M, 10 in.	it Cost/Hour: BLE EQUIP Weight/ Unit (TONS) - 1.95 37.54	\$88.67 MENT: Owner ship Cost/hr/ unit \$7.66	\$117.55 Haul Rig Cost/hr/unit \$88.67	Fleet Size	25.45 Haul Trip Cost/hr/ fleet \$96.33	Cost/hr/ \$88.67		\$250.00
Total Un <u>NON ROADA</u> Machine Description Centrifugal pump 200M, 10 in. Cat 769D	it Cost/Hour: BLE EQUIP Weight/ Unit (TONS) - 1.95 37.54	\$88.67 MENT: Owner ship Cost/hr/ unit \$7.66 \$43.04	\$117.55 Haul Rig Cost/hr/unit \$88.67 \$117.55	Fleet Size	25.45 Haul Trip Cost/hr/ fleet \$96.33 \$321.18	Cost/hr/ \$88.67 \$235.10		Cost/ fleet \$250.00 \$1,000.00

Subtotals: \$884.28 \$647.54 \$2,000.00

# **ROADABLE EQUIPMENT:**

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

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

Nearest Major City or Town within project area region:	GUNNISON	
Total one-way travel distance:	5.00	miles
Average Travel Speed:	35.00	mph
Total Non-Roadable Mob/Demob Cost *	\$6,206.22	
Total Roadable Mob/Demob Cost ** ** one round trip, no haul rig:	\$0.00	Later in the second

Transportation Cycle Time:

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

#### JOB TIME AND COST

Total job time: 2.57 Hours

Total job cost: \$6,206.22