

COST SUMMARY WORK

Task description: Totals

Site: Ross Pit

Permit Action: AM02 2014

Permit/Job#: M1990134

PROJECT IDENTIFICATION

Task #: 001

State: Colorado

Abbreviation: None

Date: 5/27/2014

County: Moffat

Filename: M134-001

User: SJM

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
002	Final Grading	DOZER	1	18.13	\$3,787.49
003	spread topsoil over disturbed area	DOZER	1	5.46	\$1,140.55
004	revegetate pit area	REVEGE	1	0.00	\$2,395.35
005	mob/demob	MOBILIZE	1	0.68	\$1,181.72
<u>SUBTOTALS:</u>				24.27	\$8,505.11

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.700	(FND-MF)
Push gradient:	0.545	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.1695

Adjusted unit production: 275.78 LCY/hr

Adjusted fleet production: 275.78 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.757/LCY

Total job time: 18.13 Hours
Total job cost: \$3,787.49

BULLDOZER WORKTask description: Spread topsoil over disturbed areaSite: Ross PitPermit Action: AM02 2014Permit/Job#: M1990134**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 5/27/2014County: MoffatFilename: M134-003User: SJMAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: Cat D8T - 8SUHorsepower: 310Blade Type: Semi-UniversalAttachment: NAShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$62.67	NA
Operating Cost/Hour:	\$108.22	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.01	NA

Total unit Cost/Hour: \$208.90Total Fleet Cost/Hour: \$208.90**MATERIAL QUANTITIES**Initial Volume: 4,000Swell factor: 1.000Loose volume: 4,000 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 100 feetUnadjusted hourly production: 852.6 LCY/hrMaterials consistency description: Loose stockpile 1.2Average push gradient: 0 %Average site altitude: 6,200 feetMaterial weight: 1,600 lbs/LCYWeight description: Top Soil**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	1.200	(CAT HB)
Dozing method:	1.000	(GEN.)

Visibility:	1.000	(AVG.)
Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	1.438	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.8593

Adjusted unit production: 732.64 LCY/hr

Adjusted fleet production: 732.64 LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.285/LCY

Total job time: 5.46 Hours
Total job cost: \$1,140.55

REVEGETATION WORKTask description: Revegetate pit areaSite: Ross PitPermit Action: AM02 2014Permit/Job#: M1990134PROJECT IDENTIFICATIONTask #: 004State: ColoradoAbbreviation: NoneDate: 5/27/2014County: MoffatFilename: M134-004User: SJMAgency or organization name: DRMSFERTILIZING**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
Chisel plowing {DMG}	\$88.58
Total Tilling Cost/Acre	\$88.58

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Perennial Tetraploid - Tetra-Plus	2.80	15.88	\$4.84
Crested Wheatgrass - Hy-Crest	2.80	12.86	\$6.69
Crested Wheatgrass - Standard	2.80	12.86	\$6.22
Intermediate Wheatgrass - Rush	2.80	5.98	\$6.27
Pubescent Wheatgrass - Luna	2.80	5.79	\$6.27
Totals Seed Mix	14.00	53.35	\$30.30

Application

Description	Cost /Acre
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Drill seeding (DRMS Cost Data)	\$88.20
Total Seed Application Cost/Acre	\$88.20

MULCHING and MISCELLANEOUS**Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Herbicide - Curtail @ 4.0 pt/ac	2.64	ACRE	\$16.24	\$42.87
Straw, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$265.00	\$530.00
Total Mulch Materials Cost/Acre				\$572.87

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$65.89
Weed spray, truck, aquatic area, nox. [DMG]	\$61.49
Total Mulch Application Cost/Acre	\$127.38

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:	2.64	Cost /Acre:	\$907.33
Estimated Failure Rate:	0%	Cost /Acre*:	\$207.08
*Selected Replanting Work Items:	TILLING,SEEDING		
Initial Job Cost:	\$2,395.35		
Reseeding Job Cost:	\$0.00		
Total Job Cost:	\$2,395.35		
Job Hours:	0.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Mob/demobSite: Ross PitPermit Action: AM02 2014Permit/Job#: M1990134**PROJECT IDENTIFICATION**Task #: 005State: ColoradoAbbreviation: NoneDate: 5/27/2014County: MoffatFilename: M134-005User: SJMAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per day
Cost Data Source: CRG DataTruck Tractor Description: GENERIC ON-HIGHWAY TRUCK TRACTOR, 6X4, DIESEL POWERED,
400 HP (2ND HALF, 2006)Truck Trailer Description: GENERIC FOLDING GOOSENECK, DROP DECK EQUIPMENT TRAILER
(25T, 50T, AND 100T)**Cost Breakdown:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$16.63	\$18.37	\$22.33
Operating Cost/Hour:	\$44.38	\$46.13	\$50.07
Operator Cost/Hour:	\$27.66	\$27.66	\$27.66
Helper Cost/Hour:	\$0.00	\$25.39	\$25.39
Total Unit Cost/Hour:	\$88.67	\$117.55	\$125.45

NON ROADABLE EQUIPMENT:

Machine Description	Weight/ Unit (TONS)	Owner ship Cost/hr/ unit	Haul Rig Cost/hr/unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet	DOT Permit Cost/ fleet
Cat D8T - 8U	48.33	\$62.67	\$117.55	1	\$180.22	\$117.55	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00

Subtotals: **\$308.48** **\$206.22** **\$500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 3/4 T.	\$15.30	1	\$15.30	\$15.30

Subtotals: **\$15.30** **\$15.30**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	CRAIG	
Total one-way travel distance:	6.00	miles
Average Travel Speed:	35.00	mph

Total Non-Roadable Mob/Demob Cost *	\$1,176.47
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* two round trips with haul rig:

Total Roadable Mob/Demob Cost **	\$5.25
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** one round trip, no haul rig:

Transportation Cycle Time:

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

JOB TIME AND COST

Total job time:	0.69	Hours
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Total job cost:	\$1,181.72
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