

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
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August 29, 2012

Ed MacArthur
Alpine Aggregates, Inc.
P.O. Box 880202
Steamboat Springs, CO
80488

John W. Hickenlooper
Governor

Mike King
Executive Director

Loretta Piñeda
Director

RE: Steamboat Sand and Gravel Pit, File No. M-2001-090, Construction Material Regular (112) Operation Reclamation Permit Amendment Application (AM2), Decision Letter – Financial and Performance Warranty Request

Dear Mr. MacArthur:

On August 29, 2012, the Division of Reclamation, Mining and Safety (Division) approved the above noted permit amendment application.

The amount of financial warranty set by the Division for this operation is an amount of (\$422,000.00). A financial warranty of the entire amount, as well as a performance warranty, must be submitted to the Division before a Reclamation Permit may be issued. Please select a type of financial warranty from those detailed in Rule 4.3. Once a financial warranty type is selected, please download the applicable financial warranty and performance warranty forms from the Division's website <http://mining.state.co.us/Mineral%20Forms.htm>. You may also contact the the Division to have copies of your selected warranty forms mailed to you.

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 and performance warranties. Any questions regarding completion, execution and/or submittal of financial and/or performance warranty forms should also be directed to Barbara Coria.

PLEASE NOTE THAT MINING OPERATIONS MAY NOT COMMENCE UNTIL A PERMIT HAS BEEN ISSUED BY THE DIVISION AFTER RECEIPT OF THE FINANCIAL AND PERFORMANCE WARRANTIES. A PERMIT WILL NOT BE

ISSUED UNTIL THE ADEQUACY OF BOTH THE FINANCIAL WARRANTY AND PERFORMANCE WARRANTY ARE VERIFIED BY THE DIVISION.

Please feel free to contact me, regarding any questions or concerns you may have, at the Division of Reclamation, Mining and Safety Grand Junction Field Office.

Sincerely,



Dustin Czapla

Environmental Protection Specialist
Department of Natural Resources
Division of Reclamation, Mining and Safety
101 South 3rd, Suite 301
Grand Junction, CO 81501
Phone: (970) 243-6299
Fax: (970) 241-1516

Enclosure: *DRMS Bond Calculation Worksheets*

Cc:

COST SUMMARY WORK

Task description: AM2 FW Review

Site: River Valley Resource

Permit Action: AM2

Permit/Job#: M2001090

PROJECT IDENTIFICATION

Task #: 000

State: Colorado

Abbreviation: None

Date: 7/5/2012

County: Routt

Filename: M090-000

User: DMC

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Remove scale and scalehouse	DEMOLISH	1	16.00	\$8,605.21
02a	Dewater Phase 1A Pit	PUMPING	1	232.22	\$28,926.00
03a	Import backfill material	TRUCK1	1	175.75	\$96,612.69
03b	Placement of backfill	LOADER	4	246.15	\$138,571.00
03c	Grade backfill material	DOZER	1	18.74	\$3,745.95
04a	Placement of topsoil	DOZER	1	34.96	\$6,987.77
05a	Reveg. shoreline	REVEGE	1	8.00	\$10,899.92
05b	Reveg. Hay Meadows	REVEGE	1	25.00	\$34,282.40
06a	Mobilize reclamation crew and equipment	MOBILIZE	1	3.14	\$6,463.69
<u>SUBTOTALS:</u>				759.96	\$335,094.63

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance: 2.02
Performance bond: 1.05
Job superintendent: 379.98
Profit: 10.00

Total = \$6,768.91

Total = \$3,518.49

Total = \$22,532.81

Total = \$33,509.46

TOTAL O & P = \$66,329.67

CONTRACT AMOUNT (direct + O & P) = \$401,424.30

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs): 500.00
Engineering work and/or contract/bid preparation: 0.00
Reclamation management and/or administration: 5.00

Total = 500.00

Total = \$0.00

\$20,071.22

CONTINGENCY: 0.00

Total = \$0.00

TOTAL INDIRECT COST = \$86,900.89

TOTAL BOND AMOUNT (direct + indirect) = \$422,000

DEMOLITION WORK

Task description: Remove scale and scalehouse

Site: River Valley Resource

Permit Action: AM2

Permit/Job#: M2001090

PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 7/5/2012

County: Routt

Filename: M090-01a

User: DMC

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 91.30 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Scale house	60L x 12W x 10H (ft)	Bldg. (SN) demo./off-site disposal in approved landfill - Max. 15 mile haul	7,200.00	CF	\$1.06	\$7,639.20
Scale	40'L x 10'W (ft)	Demo/Load/Haul to Milner landfill - 20 mi.	1.00	EA	\$1,786.00	\$1,786.00

Job Hours: 16.00

Subtotal
(unadjusted): \$9,425.20

Total Cost
(adjusted for location): \$8,605.21

PUMPING WORK

Task description: Dewater Phase 1A Pit

Site: River Valley Resource

Permit Action: AM2

Permit/Job#: M2001090

PROJECT IDENTIFICATION

Task #: 02A

State: Colorado

Abbreviation: None

Date: 7/5/2012

County: Routt

Filename: M090-02a

User: DMC

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

	Description	Quantity
Make and Model:	Centrifugal pump - 200M, 10 in.	4
Attachment 1:	Suction pipe - 10 in. diam., 25 ft.	2
Attachment 2:	Discharge pipe - 10 in. D., 25 ft.	2
Labor Unit 1:	Pump operator	1
Horsepower:	70	
Shift Basis:	1 per day	
Weight:	1.95	
	(US Tons)	

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$36.40	NA
Operating Cost/Hour:	\$68.74	100
Operator Cost/Hour:	\$19.42	NA
Total Unit Cost/Hour:	\$124.56	
Total Fleet Cost/Hour:	\$124.56	

PUMPING QUANTITIES

Initial Pond Volume:	306.93		Conversion factor:	325850.5800
Final Pond Volume:	100,013,318.52	gallons		
Total Pond Inflow Surface Area:	75,000	Sq. ft.	Unit inflow rate in gph/sq. ft.:	0.1758
Total Pond Inflow Volume per Hour:	13,185.00	gallons		

Source of estimated volume: Mine map

PUMPING TIME

Maximum Pump Capacity:	200,000	gph/pump
Estimated Suction Head:	25	feet
Estimated Discharge Head:	0	feet
Total Head:	25	feet
CPB Pump Capacity:	93,000	gph/pump
Site Altitude:	7,850	feet
Adjusted Pumping Capacity:	372,000	gph
Initial Unadjusted Pumping Time:	268.85	hours
Inflow during Initial Pumping:	3,544,827	gallons
Net Unadjusted Pumping Time:	278.38	Hours
Altitude Adjustment Factor:	0.9100	(3% rule)
Pump Efficiency Factor:	0.9167	(55 min./hr.)
Total Adjusted Pumping Time:	232.23	hours

JOB TIME AND COST

Total job time: 232.23 Hours

Unit cost: \$0.000279 /Gallon

Total job cost: \$28,926.00

TRUCK/LOADER TEAM WORKTask description: Import backfill materialSite: River Valley ResourcePermit Action: AM2Permit/Job#: M2001090PROJECT IDENTIFICATIONTask #: 03AState: ColoradoAbbreviation: NoneDate: 7/5/2012County: RouttFilename: M090-03aUser: DMCAgency or organization name: DRMSHOURLY EQUIPMENT COSTShift basis: 1 per day

	Equipment Description
Truck Loader Team -Truck:	Generic 12-18 cy, 6x4
-Loader:	CAT 972H
Support Equipment -Load Area:	NA
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

Cost Breakdown:

	Truck/Loader Team		Support Equipment		Maintenance Equipment	
	Truck	Loader	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	100	NA	NA	NA	NA
Ownership cost/hour:	\$14.78	\$36.70	NA	NA	NA	NA
Operating cost/hour:	\$65.18	\$65.54	NA	NA	NA	NA
Ripper op. cost/hour:	NA	\$0.00	NA	NA	NA	NA
Operator cost/hour:	\$22.29	\$38.49	NA	NA	NA	NA
Unit Subtotals:	\$102.25	\$140.73	NA	NA	NA	NA
Number of Units:	4	1	0	0	0	0
Group Subtotals:	Work: \$549.73		Support: \$0.00		Maint: \$0.00	

Total work team cost/hour: \$549.73MATERIAL QUANTITIESInitial volume: 10,000

CCY

Swell factor: 1.000Loose volume: 10,000

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat HandbookMaterial Purchase Cost: \$30.00Total Cost: \$30.00HOURLY PRODUCTIONTruck Capacity:Truck Payload (weight) Basis:Material weight: 2,100

Pounds/LCY

Description: Earth - LoamRated Payload: 50,300

Pounds

Payload Capacity: 23.95

LCY

Truck Bed (volume) Basis:

Struck Volume:	12.00	LCY
Heaped Volume:	18.00	LCY
Average Volume:	15.00	LCY
Adjusted Volume:	18.00	LCY

Final Truck Volume Based on Number of Loader Passes: 16.38 LCY

Loading Tool Capacity

Bucket Size Class: NA

Rated Capacity:	5.600	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	5.460	LCY

Job Condition Corrections:

Site Altitude (ft.): 6850 feet

	Truck	Loader	Source
Altitude Adj:	1.000	1.000	(CAT HB)
Job Efficiency:	0.830	0.830	(CAT HB)

Net Correction: 0.830 0.830

Loading Tool Cycle Time: Number of Loading Tool Passes Required to Fill Truck: 3 passes

Excavators and Front Shovels:

Machine Cycle Time vs. Job Condition Rating: NA
 Selected Value within this Basic Rating: NA

Track Loaders – Material Description: _____

Cycle Time Elements (min.):

Load: NA Maneuver: NA Dump: 0.100

Wheel and Track Loaders - Unadjusted Basic Loader Cycle Time (load, dump, maneuver): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Dumped by truck 0.02	0.020	(Cat HB)
Truck Ownership:	Independently owned trucks 0.04	0.040	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		0.040	minutes
Adjusted Loader Cycle Time:		0.565	minutes
Net Load Time per Truck:		1.230	minutes

Truck Cycle Time:

Truck Exchange Time:	0.50	Minutes	Adjusted for site altitude:	0.500	Minutes
Truck Load Time:	1.230	Minutes	Adjusted for site altitude:	1.230	Minutes
Truck Maneuver and Dump Time:	0.90	Minutes	Adjusted for site altitude:	0.900	Minutes

Truck Travel (Haul & Return) Time:
penetration 1.2

Road Condition: Very hard, smooth, asphalt or concrete, no tire

Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	79200.00	0.00	1.20	1.20	2895	27.491

Haul Time: **27.491** minutes

Return Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	79200.00	0.00	1.20	1.20	2913	27.223

Return Time: **27.223** minutesTotal Truck Cycle Time: **57.344** minutes

Loading Tool unit
 Production 568.09 LCY/Hour Adjusted for job efficiency: 471.52 LCY/Hour
 Truck Unit Production
17.14 LCY/Hour Adjusted for job efficiency: 14.23 LCY/Hour
 Optimal No. of Trucks: 33 Truck(s) Selected Number of Trucks: 4 Truck(s)

Adjusted hourly truck team production: 56.90 LCY/Hour
 Adjusted single truck/loader team production: 56.90 LCY/Hour
 Adjusted multiple truck/loader team production: 56.90 LCY/Hour

JOB TIME AND COSTFleet size: 1 Team(s) Total job time: **175.75** HoursUnit cost: \$9.661 /LCY Total job cost: **\$96,612.69**

WHEEL LOADER – LOAD AND CARRY WORKTask description: Placement of backfillSite: River Valley ResourcePermit Action: AM2Permit/Job#: M2001090**PROJECT IDENTIFICATION**Task #: 03BState: ColoradoAbbreviation: NoneDate: 7/5/2012County: RouttFilename: M090-03bUser: DMCAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 972HAttachment 1: ROPS CabHorsepower: 287Shift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$36.70	NA
Operating Cost/Hour:	\$65.54	100
Operator Cost/Hour:	\$38.49	NA
Total Unit Cost/Hour:	\$140.73	
Total Fleet Cost/Hour:	\$562.93	

MATERIAL QUANTITIESInitial volume: 190,953

CCY

Swell factor: 1.000Loose volume: 190,953

LCY

Source of estimated volume: Ex. LSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.525 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Mixed material 0.02	0.020	(Cat HB)
Stockpile:	Dumped by truck 0.02	0.020	(Cat HB)
Truck Ownership:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Operation:	Constant operation -0.04	-0.040	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		0.000	minutes
Adjusted Basic Cycle Time:		0.525	minutes

Rolling Resistance – Road ConditionsHaul: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Return: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
Haul Route:	500	0.00	5.00	5.00	0.4611	(Cat HB)
Return Route:	500	0.00	5.00	5.00	0.4160	(Cat HB)

Total Travel Time: 0.8771 minutes
 Total Cycle Time: 1.4021 minutes

Load Bucket Capacity

Rated Capacity: 5.60 LCY (heaped)
 Bucket Fill Factor: 0.975 Loose material - mixed moist aggregates (95-100%) 0.975
 Adjusted Capacity: 5.46 LCY

Job Condition Correction Factors

Site Altitude: 7850 feet

		Source
Altitude Adj:	<u>1.00</u>	(CAT HB)
Job Efficiency:	<u>0.83</u>	(1 shift/day)
Net Correction:	<u>0.83</u>	multiplier

Unadjusted Hourly Unit Production: 233.65 LCY/Hour
 Adjusted Hourly Unit Production: 193.93 LCY/Hour
 Adjusted Hourly Fleet Production: 775.73 LCY/Hour

JOB TIME AND COST

Fleet size: 4 Loader(s) Total job time: 246.16 Hours
 Unit cost: \$0.726 /LCY Total job cost: \$138,571.00

BULLDOZER WORKTask description: **Grade backfill material**Site: **River Valley Resource**Permit Action: **AM2**Permit/Job#: **M2001090****PROJECT IDENTIFICATION**Task #: **03C**State: **Colorado**Abbreviation: **None**Date: **7/5/2012**County: **Routt**Filename: **M090-03c**User: **DMC**Agency or organization name: **DRMS****HOURLY EQUIPMENT COST**Basic Machine: **Cat D8T - 8U**Horsepower: **310**Blade Type: **Universal**Attachment: **NA**Shift Basis: **1 per day**Data Source: **(CRG)****Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	\$58.56	NA
Operating Cost/Hour:	\$102.84	100
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.49	NA

Total unit Cost/Hour: **\$199.89**Total Fleet Cost/Hour: **\$199.89****MATERIAL QUANTITIES**Initial Volume: **19,953**Swell factor: **1.000**Loose volume: **19,953 LCY**Source of estimated volume: **10% of total backfill material placed by loader**Source of estimated swell factor: **Cat Handbook****HOURLY PRODUCTION**Average push distance: **50 feet**Unadjusted hourly production: **1,627.0 LCY/hr**Materials consistency description: **Loose stockpile 1.2**Average push gradient: **0 %**Average site altitude: **7,850 feet**Material weight: **2,100 lbs/LCY**Weight description: **Earth - Loam****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:	1.095	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.6544

Adjusted unit production: 1,064.71 LCY/hr

Adjusted fleet production: **1064.71** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)
Unit cost: \$0.188/LCY

Total job time: **18.74** Hours
Total job cost: **\$3,745.95**

REVEGETATION WORKTask description: Reveg. shorelineSite: River Valley ResourcePermit Action: AM2Permit/Job#: M2001090**PROJECT IDENTIFICATION**Task #: 05AState: ColoradoAbbreviation: NoneDate: 7/5/2012County: RouttFilename: M090-05aUser: DMCAgency or organization name: DRMS**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
Chisel plowing {DMG}	\$86.71
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$231.91

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alkali Sacaton	1.00	39.03	\$22.33
Meadow Sedge	1.00	41.69	\$147.50
Slender Wheatgrass - Native	3.00	10.95	\$6.60
Red Top	1.00	114.55	\$6.00
Reedgrass, Canadian (or Blue Joint)	0.50	51.42	\$99.41
Reedgrass, Northern - Native	0.50	51.42	\$67.50
Saltgrass, Inland	1.00	13.86	\$46.00
Timothy, Alpine - Native	1.00	29.84	\$26.50
Basin Wildrye - Trailhead	1.50	6.10	\$9.62
Totals Seed Mix	10.50	358.87	\$431.45

Application

Description	Cost /Acre
Drill seeding {DMG}	\$90.11
Total Seed Application Cost/Acre	\$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:	7.6	Cost /Acre:	\$1,147.36
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,147.36
*Selected Replanting Work Items:	TILLING, SEEDING, MULCHING		

Initial Job Cost:	\$8,719.94
Reseeding Job Cost:	\$2,179.98
Total Job Cost:	\$10,899.92
Job Hours:	8.00

REVEGETATION WORKTask description: Reveg. Hay MeadowsSite: River Valley ResourcePermit Action: AM2Permit/Job#: M2001090**PROJECT IDENTIFICATION**Task #: 05BState: ColoradoAbbreviation: NoneDate: 7/5/2012County: RouttFilename: M090-05bUser: DMCAgency or organization name: DRMS**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
Chisel plowing {DMG}	\$86.71
Weed control spraying (MEANS 31 31 16.13 3100)	\$145.20
Total Tilling Cost/Acre	\$231.91

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Orchardgrass - Paiute	3.50	43.39	\$7.39
Smooth Brome - Lincoln	2.50	8.32	\$3.25
Timothy, Alpine - Native	4.00	119.38	\$106.00
Totals Seed Mix	10.00	171.09	\$116.64

Application

Description	Cost /Acre
Drill seeding {DMG}	\$90.11
Total Seed Application Cost/Acre	\$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
Cottonwood, Narrowleaf	8.7	Container, 1 gallon (MEANS)	\$13.50	\$2.40	\$117.45
Willow, Sandbar	8.7	Container, 1 gallon (MEANS)	\$15.90	\$2.40	\$138.33
Totals Nursery Stock Cost / Acre					\$255.78

JOB TIME AND COST

No. of Acres:	25.2	Cost /Acre:	\$1,088.33
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,088.33
*Selected Replanting Work Items:	TILLING, SEEDING, NURSERY, MULCHING		
Initial Job Cost:	\$27,425.92		
Reseeding Job Cost:	\$6,856.48		
Total Job Cost:	\$34,282.40		
Job Hours:	25.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: Mobilize reclamation crew and equipmentSite: River Valley ResourcePermit Action: AM2Permit/Job#: M2001090**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 7/5/2012County: RouttFilename: M090-06aUser: DMCAgency or organization name: DRMS**EQUIPMENT TRANSPORT RIG COST**Shift basis: 1 per dayCost 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	\$58.56	\$117.55	1	\$176.11	\$117.55	\$250.00
CAT 972H	28.00	\$36.70	\$117.55	4	\$617.01	\$470.20	\$500.00
Centrifugal pump - 200M, 10 in.	1.95	\$7.66	\$88.67	4	\$385.30	\$354.68	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$39.59	\$88.67	1	\$128.26	\$88.67	\$250.00

Subtotals: **\$1,306.68** **\$1,031.10** **\$1,250.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$25.30	1	\$25.30	\$25.30

Subtotals: **\$25.30** **\$25.30**

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>STEAMBOAT SPRINGS</u>	
Total one-way travel distance:	<u>10.00</u>	miles
Average Travel Speed:	<u>35.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$6,449.23</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$14.46</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.29	0.29
Return Time (Hours):	0.29	0.29
Loading Time (Hours):	0.50	NA
Unloading Time (Hours):	0.50	NA
Subtotals:	1.57	0.57

JOB TIME AND COST

Total job time: 3.14 Hours

Total job cost: \$6,463.69