

November 4, 2015

Ed MacArthur  
Alpine Aggregates, LLC  
P.O. Box 880202  
Steamboat Springs, CO 80487



**COLORADO**  
Division of Reclamation,  
Mining and Safety  
Department of Natural Resources

1313 Sherman Street, Room 215  
Denver, CO 80203

***RE: Steamboat Sand and Gravel Pit, Permit No. M-2001-090, Technical Revision (TR-1 )  
Approval***

Dear Mr. MacArthur:

On November 3, 2015 the Division of Reclamation, Mining and Safety (Division) approved the Technical Revision request (TR-1) submitted on November 26, 2015, addressing the following:

*Revising reclamation plan to certify that enough stockpiled material will be present on site to complete reclamation and there will be no need to import material.*

The terms of the TR-1 approved by the Division are hereby incorporated into Permit No. M-2001-090. All other conditions and requirements of the permit remain in full force and effect.

The bond currently held by the Division in the amount of \$422,000 is adequate to achieve final reclamation. Please review the enclosed figures as soon as possible and contact our office if any calculation errors are noted.

If you require additional information, or have questions or concerns, please feel free to contact me. Amy Yeldell at the Division of Reclamation, Mining and Safety, 1313 Sherman St., Room 215, Denver, CO 80203. Direct contact can be made by phone at 970-254-8511 or via email at amy.yeldell@state.co.us

Sincerely,

A handwritten signature in blue ink that reads "Amy Yeldell".

**Amy Yeldell**  
Environmental Protection Specialist  
Department of Natural Resources  
Division of Reclamation, Mining and Safety  
Phone: (970) 254-8511  
Fax: (970) 241-1516

Cc:

Russ Means, Senior EPS / Field Office Supervisor, Grand Junction DRMS  
Betsy Wilbanks, Native Excavating, Permitting and Compliance Officer



COST SUMMARY WORK

Task description: 2015-Update

Site: Pit      Steamboat Sand and Gravel      Permit Action: 2015-Post Inspection      Permit/Job#: M2001090

**PROJECT IDENTIFICATION**

Task #: 001      State: Colorado      Abbreviation: None  
 Date: 8/18/2015      County: Routt      Filename: M090-001  
 User: ACY

Agency or organization name: DRMS

**TASK LIST (DIRECT COSTS)**

| Task                     | Description                                       | Form Used | Fleet Size | Task Hours    | Cost             |
|--------------------------|---|-----------|------------|---------------|------------------|
| 01b                      | Remove scale and scalehouse                       | DEMOLISH  | 1          | 20.00         | \$17,114.73      |
| 02b                      | Dewater Phase 1A Pit                              | PUMPING   | 1          | 232.22        | \$33,944.00      |
| 03b                      | Placement of backfill                             | LOADER    | 4          | 246.15        | \$142,300.00     |
| 04b                      | Grade backfill material                           | DOZER     | 1          | 18.74         | \$3,915.00       |
| 05b                      | Placement of topsoil                              | DOZER     | 1          | 34.96         | \$7,303.00       |
| 06b                      | Reveg. shoreline                                  | REVEGE    | 1          | 16.00         | \$12,907.00      |
| 07b                      | Reveg. Hay Meadows                                | REVEGE    | 1          | 36.00         | \$40,724.00      |
| 08b                      | Mobilize reclamation crew and equipment           | MOBILIZE  | 1          | 3.14          | \$5,676.00       |
| 09b                      | Secondary mobilize reclamation crew and equipment | MOBILIZE  | 1          | 0.57          | \$107.00         |
| <b><u>SUBTOTALS:</u></b> |   |           |            | <b>607.78</b> | <b>\$263,991</b> |

**INDIRECT COSTS**

OVERHEAD AND PROFIT:

|                      |        |         |             |
|----------------------|--------|---------|-------------|
| Liability insurance: | 2.02   | Total = | \$5,332.62  |
| Performance bond:    | 1.05   | Total = | \$2,771.91  |
| Job superintendent:  | 303.89 | Total = | \$22,840.37 |
| Profit:              | 10.00  | Total = | \$26,399.10 |

TOTAL O & P = \$57,344.00

CONTRACT AMOUNT (direct + O & P) = \$321,335.00

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

|  |               |         |                    |
|--|---------------|---------|--------------------|
| Financial warranty processing (legal/related costs): | <u>500.00</u> | Total = | <u>500.00</u>      |
| Engineering work and/or contract/bid preparation:    | <u>7.22</u>   | Total = | <u>\$23,200.39</u> |
| Reclamation management and/or administration:        | <u>5.30</u>   |         | <u>\$17,030.76</u> |

CONTINGENCY: 0.00      Total = \$0.00

TOTAL INDIRECT COST = \$98,075.14

**TOTAL BOND AMOUNT (direct + indirect) = \$362,066.14**

## DEMOLITION WORK

Task description: Remove scale and scalehouse

Site: River Valley Resource

Permit Action: 2015-Post Inspection

Permit/Job#: M2001090

### PROJECT IDENTIFICATION

Task #: 01B

State: Colorado

Abbreviation: None

Date: 8/18/2015

County: Routt

Filename: M090-01b

User: ACY

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 91.30 %

| <b>Structure or Item Description</b> | <b>Dimensions</b>    | <b>Demolition Menu Selection</b>  | <b>Quantity</b> | <b>Unit</b> | <b>Unit Cost</b> | <b>Total Cost</b> |
|--------------------------------------|----------------------|---|-----------------|-------------|------------------|-------------------|
| 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          | \$1.08           | \$7,768.80        |
| Scale                                | 60'L x 15'W (ft)     | Demo/Load/Haul to Milner landfill - 20 mi.                                  | 1.00            | EA          | \$1,786.00       | \$1,786.00        |
| Scale house foundation               | 60L x 12W            | Floor, concrete, demolition only, average reinforcing - 6 in. thick         | 720.00          | SF          | \$1.64           | \$1,180.80        |
| Line power                           | 3000 LF              | Powerline or telephone line, overhead, wood - Single pole                   | 3,000.00        | LF          | \$2.67           | \$8,010.00        |

Job Hours: 20.00

Subtotal  
(unadjusted): \$18,745.60

Total Cost  
(adjusted for location): \$17,114.73

**PUMPING WORK**

Task description: Dewater Phase 1A Pit

Site: River Valley Resource

Permit Action: 2015-Post Inspection

Permit/Job#: M2001090

**PROJECT IDENTIFICATION**

Task #: 02B  
Date: 8/18/2015  
User: ACY

State: Colorado  
County: Routt

Abbreviation: None  
Filename: M090-02b

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. | 4        |
| Attachment 2:   | Discharge pipe - 10 in. D., 25 ft.  | 4        |
| Labor Unit 1:   | Pump operator                       | 1        |
| Horsepower:     | <u>70</u>                           |          |
| Shift Basis:    | <u>1 per day</u>                    |          |
| Weight:         | <u>1.95</u><br>(US Tons)            |          |

**Cost Breakdown:**

|                        |          | Utilization % |
|------------------------|----------|---------------|
| Ownership Cost/Hour:   | \$40.52  | NA            |
| Operating Cost/Hour:   | \$83.16  | 100           |
| Operator Cost/Hour:    | \$22.49  | NA            |
| Total Unit Cost/Hour:  | \$146.17 |               |
| Total Fleet Cost/Hour: | \$146.17 |               |

**PUMPING QUANTITIES**

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

Source of estimated volume: Mine map

**PUMPING TIME**

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

**JOB TIME AND COST**

|                                      |                 |                 |
|--------------------------------------|-----------------|-----------------|
| Total job time:                      | <u>232.23</u>   | Hours           |
| Unit cost: <u>\$0.000328</u> /Gallon | Total job cost: | <u>\$33,944</u> |

WHEEL LOADER – LOAD AND CARRY WORKTask description: Placement of backfillSite: River Valley ResourcePermit Action: AM2Permit/Job#: M2001090PROJECT IDENTIFICATIONTask #: 03BState: ColoradoAbbreviation: NoneDate: 7/5/2012County: RouttFilename: M090-03bUser: DMCAgency or organization name: DRMSHOURLY EQUIPMENT COSTBasic Machine: CAT 972HHorsepower: 287Attachment 1: ROPS CabShift Basis: 1 per dayData Source: (CRG)Cost Breakdown:

|                        |          | Utilization % |
|------------------------|----------|---------------|
| Ownership Cost/Hour:   | \$38.44  | NA            |
| Operating Cost/Hour:   | \$68.95  | 100           |
| Operator Cost/Hour:    | \$37.13  | NA            |
| Total Unit Cost/Hour:  | \$144.52 |               |
| Total Fleet Cost/Hour: | \$578.08 |               |

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 HandbookHOURLY PRODUCTIONLoader 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 5.0Haul and Return Time

|               | Length<br>(feet) | Grade Res.<br>(%) | Rolling<br>Res. (%) | Total Res.<br>(%) | Travel Time<br>(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: | <u>4</u>       | Loader(s) | Total job time: | <u>246.16</u>    | Hours |
| Unit cost:  | <u>\$0.745</u> | /LCY      | Total job cost: | <u>\$142,300</u> |       |

**BULLDOZER WORK**Task description: Grade backfill materialSite: River Valley Resource Permit Action: 2015-Post Inspection Permit/Job#: M2001090**PROJECT IDENTIFICATION**

Task #: 04B State: Colorado Abbreviation: None  
 Date: 11/3/2015 County: Routt Filename: M090-04b  
 User: ACY

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

Total unit Cost/Hour: \$208.90  
 Total Fleet Cost/Hour: \$208.90

**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 loaderSource 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/LCYWeight description: Earth - Loam**Job Condition Correction Factor**

|                       |              | <u>Source</u>        |
|-----------------------|--------------|----------------------|
| Operator Skill:       | <u>0.750</u> | <u>(AVG.)</u>        |
| Material consistency: | <u>1.200</u> | <u>(CAT HB)</u>      |
| Dozing method:        | <u>1.000</u> | <u>(GEN.)</u>        |
| Visibility:           | <u>1.000</u> | <u>(AVG.)</u>        |
| Job efficiency:       | <u>0.830</u> | <u>(1 SHIFT/DAY)</u> |

|                  |       |          |
|------------------|-------|----------|
| 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: \$0.196/LCY

Total job time: 18.74 Hours

Total job cost: **\$3,915**

**BULLDOZER WORK**

Task description: Placement of topsoil

Site: River Valley Resource Permit Action: 2015-Post Inspection Permit/Job#: M2001090

**PROJECT IDENTIFICATION**

Task #: 05B State: Colorado Abbreviation: None  
 Date: 11/3/2015 County: Routt Filename: M090-05b  
 User: ACY

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:  | \$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: \$208.90  
 Total Fleet Cost/Hour: \$208.90

**MATERIAL QUANTITIES**

Initial Volume: 27,985  
 Swell factor: 1.000  
 Loose volume: 27,985 LCY

Source of estimated volume: Ex. L  
 Source of estimated swell factor: Cat Handbook

**HOURLY PRODUCTION**

Average push distance: 100 feet  
 Unadjusted hourly production: 931.6 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %  
 Average site altitude: 7,850 feet

Material weight: 1,600 lbs/LCY

Weight 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: 800.52 LCY/hr

Adjusted fleet production: 800.52 LCY/hr

### JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.261/LCY

Total job time: 34.96 Hours

Total job cost: \$7,303

REVEGETATION WORKTask description: Reveg. shorelineSite: River Valley ResourcePermit Action: 2015-Post InspectionPermit/Job#: M2001090PROJECT IDENTIFICATIONTask #: 06BState: ColoradoAbbreviation: NoneDate: 11/3/2015County: RouttFilename: M090-06bUser: ACYAgency or organization name: DRMSFERTILIZINGMaterials

| Description | Units /<br>Acre | Unit | Cost / Unit   | Cost /Acre    |
|-------------|-----------------|------|---|---------------|
|             |                 |      | \$  | \$            |
|             |                 |      | <b>Total Fertilizer<br/>Materials<br/>Cost/Acre</b> | <b>\$0.00</b> |

Application

| Description                                   | Cost /Acre    |
|---|---------------|
|   | \$            |
| <b>Total Fertilizer Application Cost/Acre</b> | <b>\$0.00</b> |

TILLING

| Description                                    | Cost /Acre      |
|--|-----------------|
| Chisel plowing {DMG}                           | \$88.58         |
| Weed control spraying (MEANS 31 31 16.13 3100) | \$145.20        |
| <b>Total Tilling Cost/Acre</b>                 | <b>\$233.78</b> |

SEEDING

| Seed Mix                            | Rate –<br>PLS<br>LBS /<br>Acre | Seeds<br>per SQ.<br>FT | Cost /Acre |
|-------------------------------------|--------------------------------|------------------------|------------|
| Alkali Sacaton                      | 1.00                           | 39.03                  | \$22.81    |
| Meadow Sedge                        | 1.00                           | 41.69                  | \$150.69   |
| Slender Wheatgrass - Native         | 3.00                           | 10.95                  | \$6.75     |
| Red Top                             | 1.00                           | 114.55                 | \$6.13     |
| Reedgrass, Canadian (or Blue Joint) | 0.50                           | 51.42                  | \$101.55   |
| Reedgrass, Northern - Native        | 0.50                           | 51.42                  | \$68.96    |
| Saltgrass, Inland                   | 1.00                           | 13.86                  | \$46.99    |
| Timothy, Alpine - Native            | 1.00                           | 29.84                  | \$27.07    |
| Basin Wildrye - Trailhead           | 1.50                           | 6.10                   | \$9.83     |



REVEGETATION WORK

Task description: Reveg. Hay Meadows

Site: River Valley Resource Permit Action: 2015-Post Inspection Permit/Job#: M2001090

**PROJECT IDENTIFICATION**

Task #: 07B State: Colorado Abbreviation: None  
 Date: 11/3/2015 County: Routt Filename: M090-07b  
 User: ACY

Agency or organization name: DRMS

**FERTILIZING**

**Materials**

| Description | Units /<br>Acre | Unit | Cost / Unit   | Cost /Acre    |
|-------------|-----------------|------|---|---------------|
|             |                 |      | \$  | \$            |
|             |                 |      | <b>Total Fertilizer<br/>Materials<br/>Cost/Acre</b> | <b>\$0.00</b> |

**Application**

| Description                                   | Cost /Acre    |
|---|---------------|
|   | \$            |
| <b>Total Fertilizer Application Cost/Acre</b> | <b>\$0.00</b> |

**TILLING**

| Description                                    | Cost /Acre      |
|--|-----------------|
| Chisel plowing {DMG}                           | \$88.58         |
| Weed control spraying (MEANS 31 31 16.13 3100) | \$145.20        |
| <b>Total Tilling Cost/Acre</b>                 | <b>\$233.78</b> |

**SEEDING**

| Seed Mix                 | Rate –<br>PLS<br>LBS /<br>Acre | Seeds<br>per SQ.<br>FT | Cost /Acre      |
|--------------------------|--------------------------------|------------------------|-----------------|
| Orchardgrass - Paiute    | 3.50                           | 43.39                  | \$7.56          |
| Smooth Brome - Lincoln   | 2.50                           | 8.32                   | \$3.33          |
| Timothy, Alpine - Native | 4.00                           | 119.38                 | \$108.28        |
| <b>Totals Seed Mix</b>   | <b>10.00</b>                   | <b>171.09</b>          | <b>\$119.17</b> |

**Application**

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



EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: Mobilize reclamation crew and equipmentSite: River Valley ResourcePermit Action: 2015-Post InspectionPermit/Job#: M2001090PROJECT IDENTIFICATIONTask #: 08BState: ColoradoAbbreviation: NoneDate: 11/3/2015County: RouttFilename: M090-08bUser: ACYAgency or organization name: DRMSEQUIPMENT TRANSPORT RIG COSTShift 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:

| <u>Available Rig Capacities</u> | <u>0-25 Tons</u> | <u>26-50 Tons</u> | <u>51+ Tons</u> |
|---------------------------------|------------------|-------------------|-----------------|
| 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:

| <u>Machine Description</u>         | <u>Weight/<br/>Unit<br/>(TONS)</u> | <u>Owner ship<br/>Cost/hr/ unit</u> | <u>Haul Rig<br/>Cost/hr/uni<br/>t</u> | <u>Fleet<br/>Size</u> | <u>Haul Trip<br/>Cost/hr/<br/>fleet</u> | <u>Return Trip<br/>Cost/hr/ fleet</u> | <u>DOT Permit<br/>Cost/ fleet</u> |
|------------------------------------|------------------------------------|-------------------------------------|---------------------------------------|-----------------------|---|---------------------------------------|-----------------------------------|
| 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 -<br>200M, 10 in. | 1.95                               | \$7.66                              | \$88.67                               | 4                     | \$385.30                                | \$354.68                              | \$250.00                          |

Subtotals: **\$1,178.42** **\$942.43** **\$1,000.00**ROADABLE EQUIPMENT:

| <u>Machine Description</u>             | <u>Total Cost/hr/<br/>unit</u> | <u>Fleet Size</u> | <u>Haul Trip<br/>Cost/hr/ fleet</u> | <u>Return Trip<br/>Cost/hr/ fleet</u> |
|--|--------------------------------|-------------------|-------------------------------------|---------------------------------------|
| Light Duty Pickup, 4x4, 1 T.<br>Crew   | \$25.30                        | 1                 | \$25.30                             | \$25.30                               |
| Drill/Broadcast Seeder with<br>Tractor | \$136.29                       | 1                 | \$136.29                            | \$136.29                              |
| Power Mulcher (Reinco M90)             | \$26.19                        | 1                 | \$26.19                             | \$26.19                               |

Subtotals: **\$187.78** **\$187.78**

**EQUIPMENT HAUL DISTANCE and Time**

|  |                      |       |
|--|----------------------|-------|
| Nearest Major City or Town within project area region: | STEAMBOAT<br>SPRINGS |       |
| Total one-way travel distance:                         | <u>10.00</u>         | miles |
| Average Travel Speed:                                  | <u>35.00</u>         | mph   |
| Total Non-Roadable Mob/Demob Cost *                    |                      |       |
| ** two round trips with haul rig:                      | <u>\$5,568.75</u>    |       |
| Total Roadable Mob/Demob Cost **                       |                      |       |
| ** one round trip, no haul rig:                        | <u>\$107.30</u>      |       |

**Transportation Cycle Time:**

|                         | Non-Roadable<br>Equipment | Roadable<br>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: | <u>3.14</u>    | Hours |
| Total job cost: | <u>\$5,676</u> |       |

EQUIPMENT MOBILIZATION/DEMobilIZATIONTask description: Secondary mobilize reclamation crew and equipmentSite: River Valley ResourcePermit Action: 2015-Post InspectionPermit/Job#: M2001090PROJECT IDENTIFICATIONTask #: 09BState: ColoradoAbbreviation: NoneDate: 11/3/2015County: RouttFilename: M090-09bUser: ACYAgency or organization name: DRMSEQUIPMENT TRANSPORT RIG COSTShift 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/<br>Unit<br>(TONS) | Owner ship<br>Cost/hr/ unit | Haul Rig<br>Cost/hr/uni<br>t | Fleet<br>Size | Haul Trip<br>Cost/hr/<br>fleet | Return Trip<br>Cost/hr/ fleet | DOT Permit<br>Cost/ fleet |
|---------------------|---------------------------|-----------------------------|------------------------------|---------------|--------------------------------|-------------------------------|---------------------------|
| Subtotals:          |                           |                             |                              |               |                                |                               |                           |
|                     |                           |                             |                              |               | <b>\$0.00</b>                  | <b>\$0.00</b>                 | <b>\$0.00</b>             |

ROADABLE EQUIPMENT:

| Machine Description                    | Total Cost/hr/<br>unit | Fleet Size | Haul Trip<br>Cost/hr/ fleet | Return Trip<br>Cost/hr/ fleet |
|--|------------------------|------------|-----------------------------|-------------------------------|
| Light Duty Pickup, 4x4, 1 T.<br>Crew   | \$25.30                | 1          | \$25.30                     | \$25.30                       |
| Drill/Broadcast Seeder with<br>Tractor | \$136.29               | 1          | \$136.29                    | \$136.29                      |
| Power Mulcher (Reinco M90)             | \$26.19                | 1          | \$26.19                     | \$26.19                       |
| Subtotals:                             |                        |            |                             |                               |
|  |                        |            | <b>\$187.78</b>             | <b>\$187.78</b>               |

**EQUIPMENT HAUL DISTANCE and Time**

|  |                              |       |
|--|------------------------------|-------|
| Nearest Major City or Town within project area region: | <b>STEAMBOAT<br/>SPRINGS</b> |       |
| 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>\$0.00</u>                |       |
| ** two round trips with haul rig:                      |                              |       |
| Total Roadable Mob/Demob Cost **                       | <u>\$107.30</u>              |       |
| ** one round trip, no haul rig:                        |                              |       |

**Transportation Cycle Time:**

|                         | Non-<br>Roadable<br>Equipment | Roadable<br>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: | <u>0.57</u>  | Hours |
| Total job cost: | <u>\$107</u> |       |