



STATE OF  
COLORADO

Simmons - DNR, Leigh <leigh.simmons@state.co.us>

## M1980085, Vagneur Site, SI-1

Simmons - DNR, Leigh <leigh.simmons@state.co.us>

Wed, Jul 31, 2024 at 2:58 PM

To: Jim Doody <Jim.Doody@peakreadymix.com>

Cc: Jon Mueller <Jon.Mueller@kilgorecompanies.com>, Bryan Jorgensen <Bryan.Jorgensen@kilgorecompanies.com>, Sara Stevenson-Benn - DNR <sara.stevenson-benn@state.co.us>, Amy Eschberger - DNR <amy.eschberger@state.co.us>

All,

Please find attached the Division's letter initiating Surety Increase No. 1 (SI-1) for the Vagneur Site in Pitkin County.

Let me know if you have any questions,  
Leigh

Leigh Simmons  
Environmental Protection Specialist



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

P 720.220.1180

1313 Sherman Street, Room 215, Denver, CO 80203

[leigh.simmons@state.co.us](mailto:leigh.simmons@state.co.us) | <https://drms.colorado.gov>

On Wed, Jul 31, 2024 at 2:32 PM Simmons - DNR, Leigh <[leigh.simmons@state.co.us](mailto:leigh.simmons@state.co.us)> wrote:

Thanks for your reply Jim.

There is no rush on this. Now I have your concurrence I'll go ahead and initiate a Surety Increase permitting action, you'll receive a formal letter that will outline the process.

Leigh Simmons  
Environmental Protection Specialist



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On Wed, Jul 31, 2024 at 2:25 PM Jim Doody <[Jim.Doody@peakreadymix.com](mailto:Jim.Doody@peakreadymix.com)> wrote:

Hi Leigh –

Regarding the surety increase at the Vagneur Pit we will be increasing the bond to \$1,168,937.00. We are requesting an extension date of August 9<sup>th</sup>, 2024. We have no officer in our Colorado office that can sign for that amount. I will need to send it to our Kilgore office in Salt Lake City, UT. for an appropriate signature.

Thank you for your consideration.

Best regards.

Jim

Jim Doody

Environmental Manager

Elam Construction

970-712-6634

*Ordinary People Doing Extraordinary Things!*



**M1980085\_SI1.pdf**

751K



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

July 31, 2024

Scott Reynolds  
Elam Construction, Inc.  
556 Struthers Ave  
Grand Junction, CO 81501-3826

**Re: Vagneur Site - File No. M-1980-085  
Elam Construction, Inc.  
Surety Increase (SI-1)  
Surety Increase following June 14, 2024 inspection**

Dear Scott Reynolds:

On July 31, 2024 the Division of Reclamation, Mining and Safety increased the current Financial Warranty for this permit to \$1,168,937.00, in accordance with Rule 4.2.1 of the Rules and Regulations. This is an increase of \$364,408.00.

The site-wide Reclamation Cost Estimate (RCE) was re-evaluated using current unit costs following the June 14, 2024 inspection. Elam construction concurred with the updated RCE by email on July 31, 2024.

Please see the June 14, 2024 inspection report for details regarding why this surety increase is required.

On July 31, 2024, the Division ordered amendment of the current Financial Warranty or submittal of a new Financial Warranty reflecting the increase, within 60 days.

Please make arrangements with Sara M. Stevenson-Benn at the Division's Denver office for submittal of the financial warranty. Any other questions regarding completion, execution and/or submittal of financial warranty forms should also be directed to Sara M. Stevenson-Benn by telephone at (303) 866-3567, or by email at Sara.stevenson-benn@state.co.us.

The Permittee for this site may be scheduled for a Formal Board Hearing for possible revocation of the permit if the amount of any increased Financial Warranty has not been provided by September 29, 2024.

Bond Held:	\$804,529.00
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Prior Liability:	\$804,529.00
Change in Liability:	\$364,408.00
Revised Liability:	\$1,168,937.00
Prior Permit Acreage:	105.00
Change in Permit Acreage:	0.00
Revised Permit Acreage:	105.00
Prior Affected Acreage:	70.60
Change in Affected Acreage:	0.00
Revised Affected Acreage:	70.60

If you have any questions, please contact me by telephone at (720) 220-1180, or by email at Leigh.Simmons@state.co.us.

Sincerely,



Leigh D. Simmons  
Environmental Protection Specialist

cc: John R. Elam

M-GR-04

## COST SUMMARY WORK

Task description: \_\_\_\_\_

Site: Vagneur Site Permit Action: 2024Inspection\_CostUpdate Permit/Job#: M1980085

### PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None  
Date: 7/2/2024 County: Pitkin Filename: M085-000  
User: LDS

Agency or organization name: DRMS

### TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
01a	Demolition and disposal of structures	DEMOLISH	1	120.00	\$176,558
02a	Reduce slopes in Phase 1 area (cut/fill)	DOZER	2	194.64	\$125,199
04a	Backfill slopes in Phase 2 area	SCRAPER1	2	66.18	\$197,834
05a	Grade slopes in Phase 2 area	DOZER	2	16.35	\$10,514
06a	Replace topsoil over affected area	SCRAPER1	2	29.91	\$89,416
07a	Rip contour furrows on final slopes in Phase 2 area	RIPPER	1	7.53	\$2,593
08a	Revegetate affected area	REVEGE	1	51.00	\$222,441
09a	Interseed sagebrush after grass is established	REVEGE	1	51.00	\$122,817
10a	Mobilize reclamation crew and equipment	MOBILIZE	1	5.27	\$17,800
<b><u>SUBTOTALS:</u></b>				<b>541.88</b>	<b>\$965,172</b>

### INDIRECT COSTS

#### OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$19,496
Performance bond:	1.05	Total =	\$10,134
Job superintendent:	270.94	Total =	\$21,477
Profit:	10.00	Total =	\$96,517

TOTAL O & P = \$147,625

CONTRACT AMOUNT (direct + O & P) = \$1,112,797

#### LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	<u>\$500</u>	Total =	<u>\$500</u>
Engineering work and/or contract/bid preparation:	<u>0.00</u>	Total =	<u>\$0</u>
Reclamation management and/or administration:	<u>5.00</u>		<u>\$55,640</u>

CONTINGENCY: 0.00 Total = \$0

TOTAL INDIRECT COST = \$203,765

**TOTAL BOND AMOUNT (direct + indirect) = \$1,168,937**

## DEMOLITION WORK

Task description: Demolition and disposal of structures

Site: Vagneur Site

Permit Action: 2024Inspection\_CostUpdate

Permit/Job#: M1980085

### PROJECT IDENTIFICATION

Task #: 01A

State: Colorado

Abbreviation: None

Date: 7/2/2024

County: Pitkin

Filename: 085-01a

User: LDS

Agency or organization name: DRMS

### UNIT COSTS

Location adjustment: 95.90 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Concrete plant	50' x 140' x 20'	Bldg. (MN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	140,000.00	CF	\$0.33	\$46,004.00
Concrete plant foundation	50' x 140'	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul	8,700.00	SF	\$1.54	\$13,415.40
Office area	50' x 175' x 10'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	87,500.00	CF	\$0.24	\$21,297.50
Office area slab	175' x 50'	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	8,750.00	SF	\$1.16	\$10,119.38
Truck scale	150' x 20'	Demo. and on-site disposal in existing pit, 1.0 ft. x 2 ft. - Max. 10,000 ft. haul	340.00	LF	\$4.63	\$1,572.87
Fuel containment walls	60' x 25' x 5'	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul	850.00	SF	\$3.73	\$3,172.88
Fuel containment slab	60' x 25'	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	1,500.00	SF	\$1.16	\$1,734.75
Canvas building with steel frame	60' x 35' x avg. 10'	Bldg. (SN) demo./on-site disposal in existing pit or cut - Max. 10,000 ft. haul	21,000.00	CF	\$0.24	\$5,111.40
Canvas building asphalt slab	60' x 35' x 3"	Pavement, bituminous, demolition only - 3 in. thick	233.00	SY	\$5.28	\$1,230.24
Load and haul above slab to asphalt pit	60' x 35' x 3"	Load/haul/dump demolished materials/debris into pit - Max. 1,000 ft. haul	58.00	CY	\$1.06	\$61.60
Unprocessed recycled asphalt/concrete	15,000 c.y. max	Push demolished materials/rubble/debris into pit - Max. 200 ft. push	15,000.00	CY	\$3.32	\$49,830.00
Shop structure	60' x 50' x 20'	Bldg. (SN) demo./on-	60,000.00	CF	\$0.24	\$14,604.00

		site disposal in existing pit or cut - Max. 10,000 ft. haul				
Shop pad	60' x 50'	Demo. and on-site disposal in existing pit, 8 in. thick - Max. 10,000 ft. haul	3,000.00	SF	\$1.54	\$4,626.00
Concrete truck washout pit	40' x 15'	Demo. and on-site disposal in existing pit, 6 in. thick - Max. 10,000 ft. haul	600.00	SF	\$1.16	\$693.90
Powerlines, est. 300' apart	3000'	Utility Poles, Wood 35' - 45' high (each pole)	10.00	EA	\$325.00	\$3,250.00
5,900 gal diesel tank	5,900 gal	Haul tank to certified salvage dump - 6,000 to 8,000 gal. tank	1.00	EA	\$880.00	\$880.00
10,000 gal diesel tanks	10,000 gal	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	2.00	EA	\$1,050.00	\$2,100.00
4,000 gal diesel tank	4,000 gal	Haul tank to certified salvage dump - 3,000 to 5,000 gal. tank	1.00	EA	\$760.00	\$760.00
55 gal oil drums	55 gal	Solid pickup - 55 gal. drums	9.00	EA	\$240.00	\$2,160.00
10,000 gal water storage tank	10,000 gal	Haul tank to certified salvage dump - 9,000 to 12,000 gal. tank	1.00	EA	\$1,050.00	\$1,050.00
Septic Tank, pump	12,000 gal	Remove sludge, water, and rem. product from tank - 9,000 to 12,000 gal.	1.00	EA	\$432.00	\$432.00

**Job Hours:** 120.00

**Subtotal**  
**(unadjusted):** \$184,105.92

**Total Cost**  
**(adjusted for location):** \$176,557.58

**BULLDOZER WORK**Task description: Reduce slopes in Phase 1 area (cut/fill)Site: Vagneur SitePermit Action: 2024Inspection\_CostUpdatePermit/Job#: M1980085**PROJECT IDENTIFICATION**Task #: 02AState: ColoradoAbbreviation: NoneDate: 7/2/2024County: PitkinFilename: 085-02aUser: LDSAgency 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:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$38.59	NA

Total unit Cost/Hour: \$321.62Total Fleet Cost/Hour: \$643.23**MATERIAL QUANTITIES**Initial Volume: 187,042Swell factor: 1.000Loose volume: 187,042 LCYSource of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 75 feetUnadjusted hourly production: 1,017.1 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: -15 %Average site altitude: 7,500 feetMaterial weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**Job Condition Correction Factor**

		<u>Source</u>
Operator Skill:	0.750	(AVG.)
Material consistency:	0.900	(CAT HB))
Dozing method:	1.000	(GEN.)
Visibility:	1.000	(AVG.)



Job efficiency:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	1.329	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4724

Adjusted unit production: 480.48 LCY/hr

Adjusted fleet production: **960.96** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.669/LCY

Total job time: **194.64** Hours

Total job cost: **\$125,199**

**SCRAPER TEAM WORK**Task description: **Backfill slopes in Phase 2 area**Site: **Vagneur Site**Permit Action: 2024Inspection\_CostUpdatePermit/Job#: M1980085**PROJECT IDENTIFICATION**Task #: 04AState: ColoradoAbbreviation: NoneDate: 7/2/2024County: PitkinFilename: 085-04aUser: LDSAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G
-Dozer:	NA
Support Equipment -Load Area:	CAT 972H
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

**Cost Breakdown:****Scraper Work Team****Support Equipment****Maintenance Equipment**

	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	100	NA	NA	NA
Ownership cost/hour:	\$329.66	NA	\$62.43	NA	NA	NA
Operating cost/hour:	\$347.48	NA	\$57.98	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	NA	NA	NA
Ripper op. cost/hour:	NA	NA	\$0.00	NA	NA	NA
Operator cost/hour:	\$30.90	NA	\$36.85	NA	NA	NA
Unit Subtotals:	\$708.04	NA	\$157.26	NA	NA	NA
Number of Units:	4	0	1	0	0	0
Group Subtotals:	Work: \$2,832.16		Support: \$157.26		Maint:	\$0.00

Total work team cost/hour: **\$2,989.42****MATERIAL QUANTITIES**Initial volume: 173,333

CCY

Swell factor: 1.000Loose volume: **173,333**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Scraper Bowl (volume) Basis:**

Material weight:	<u>2,900 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Decomposed rock - 50% Rock, 50% Earth</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>28.14 LCY</u>	Adjusted Capacity:	<b><u>28.14</u></b>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 7500 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	1867	0.40

Haul Time: 0.40 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	2795	0.34

Return Time: 0.34 minutesTotal Scraper team cycle time: 2.14 minutesAdjusted for job conditions: 654.80 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,309.60 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 2,619.19 LCY/HourUnadjusted unit production/hour: 788.91 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 2 Team(s)Total job time: 66.18 HoursUnit cost: \$1.141 /LCYTotal job cost: \$197,834

**BULLDOZER WORK**Task description: Grade slopes in Phase 2 areaSite: Vagneur Site Permit Action: 2024Inspection\_CostUpdate Permit/Job#: M1980085**PROJECT IDENTIFICATION**

Task #: 05A State: Colorado Abbreviation: None  
 Date: 7/2/2024 County: Pitkin Filename: 085-05a  
 User: LDS

Agency or organization name: DRMS**HOURLY EQUIPMENT COST**

Basic Machine: Cat D8T - 8SU  
 Horsepower: 310  
 Blade Type: Semi-Universal  
 Attachment: NA  
 Shift Basis: 1 per day  
 Data Source: (CRG)

**Cost Breakdown:**

		<u>Utilization %</u>
Ownership Cost/Hour:	<u>\$173.32</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$109.71</u>	<u>100</u>
Ripper own. Cost/Hour:	<u>\$0.00</u>	<u>NA</u>
Ripper op. Cost/Hour:	<u>\$0.00</u>	<u>0</u>
Operator Cost/Hour:	<u>\$38.59</u>	<u>NA</u>

Total unit Cost/Hour: \$321.62  
 Total Fleet Cost/Hour: \$643.23

**MATERIAL QUANTITIES**

Initial Volume: 14,444  
 Swell factor: 1.000  
 Loose volume: 14,444 LCY

Source of estimated volume: Division of Reclamation, Mining & Safety  
 Source of estimated swell factor: Cat Handbook

**HOURLY PRODUCTION**

Average push distance: 50 feet  
 Unadjusted hourly production: 1,400.0 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 15 %  
 Average site altitude: 7,500 feet

Material weight: 2,900 lbs/LCYWeight description: Decomposed rock - 50% Rock, 50% Earth**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:	0.830	(1 SHIFT/DAY)
Spoil pile:	0.800	(FND-RF)
Push gradient:	0.666	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.793	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.3156

Adjusted unit production: 441.84 LCY/hr

Adjusted fleet production: **883.68** LCY/hr

### **JOB TIME AND COST**

Fleet size: 2 Dozer(s)

Unit cost: \$0.728/LCY

Total job time: **16.35** Hours

Total job cost: **\$10,514**

**SCRAPER TEAM WORK**Task description: **Replace topsoil over affected area**Site: **Vagneur Site**Permit Action: 2024Inspection\_CostUpdatePermit/Job#: M1980085**PROJECT IDENTIFICATION**Task #: 06AState: ColoradoAbbreviation: NoneDate: 7/2/2024County: PitkinFilename: 085-06aUser: LDSAgency or organization name: DRMS**HOURLY EQUIPMENT**COSTShift basis: 1 per day

Equipment Description	
-Scraper:	Cat 637G
-Dozer:	NA
Support Equipment -Load Area:	CAT 972H
-Dump Area:	NA
Road Maintenance -Motor Grader:	NA
-Water Truck:	NA

**Cost Breakdown:**

	Scraper Work Team		Support Equipment		Maintenance Equipment	
	Scraper	Dozer	Load Area	Dump Area	Motor Grader	Water Truck
%Utilization-machine:	100	NA	100	NA	NA	NA
Ownership cost/hour:	\$329.66	NA	\$62.43	NA	NA	NA
Operating cost/hour:	\$347.48	NA	\$57.98	NA	NA	NA
%Utilization-ripper:	NA	NA	NA	NA	NA	NA
Ripper own. cost/hour:	NA	NA	\$0.00	NA	NA	NA
Ripper op. cost/hour:	NA	NA	\$0.00	NA	NA	NA
Operator cost/hour:	\$30.90	NA	\$36.85	NA	NA	NA
Unit Subtotals:	\$708.04	NA	\$157.26	NA	NA	NA
Number of Units:	4	0	1	0	0	0
Group Subtotals:	Work:	\$2,832.16	Support:	\$157.26	Maint:	\$0.00

Total work team cost/hour: **\$2,989.42****MATERIAL QUANTITIES**Initial volume: 82,280

CCY

Swell factor: 1.000Loose volume: **82,280**

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Scraper Bowl (volume) Basis:

Material weight:	<u>1,600 lbs/LCY</u>	Struck Volume:	<u>24.00</u>	LCY
Material description:	<u>Top Soil</u>	Heaped Volume:	<u>34.00</u>	LCY
Rated Payload:	<u>81,600 pounds</u>	Average Volume:	<u>29.00</u>	LCY
Payload Capacity:	<u>51.00 LCY</u>	Adjusted Capacity:	<b><u>29.00</u></b>	LCY

Cycle Time:Scraper Loading Time: 0.80 MinutesManeuver and Spread Time: 0.60 MinutesJob Condition Correction:

Site Altitude: 7500 feet

	Scraper	Push Dozer	Source
Altitude Adj:	1.000	NA	(CAT HB)
Job Efficiency:	0.830	NA	(CAT HB)
Net Correction:	0.830	NA	

Travel Time:Road Condition: Rutted dirt, little maintenance, no water, 2" tire penetration 5.0Haul Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	1867	0.36

Haul Time: 0.36 minutesReturn Route:

Seg #	Haul Distance (Ft)	Grade (%)	Roll. Res (%)	Total Res (%)	Velocity (fpm)	Travel Time (min)
1	500.00	0.00	5.00	5.00	2795	0.34

Return Time: 0.34 minutesTotal Scraper team cycle time: 2.10 minutesAdjusted for job conditions: 687.71 LCY/HourSelected Number of Scrapers: 2 Scraper(s)Adjusted single scraper team (unit) hourly production: 1,375.43 LCY/HourAdjusted multiple scraper team (fleet) hourly production: 2,750.86 LCY/HourUnadjusted unit production/hour: 828.57 LCY/Hour

Optimal Number of Scrapers per push dozer: \_\_\_\_\_

**JOB TIME AND COST**Fleet size: 2 Team(s)Total job time: 29.91 HoursUnit cost: \$1.087 /LCYTotal job cost: \$89,416

## BULLDOZER RIPPING WORK

Task description: Rip contour furrows on final slopes in Phase 2 area

Site: Vagneur Site Permit Action: 2024Inspection\_CostUpdate Permit/Job#: M1980085

### PROJECT IDENTIFICATION

Task #: 07A State: Colorado Abbreviation: None  
Date: 7/2/2024 County: Pitkin Filename: 085-07a  
User: LDS

Agency or organization name: DRMS

### HOURLY EQUIPMENT COST

Basic Machine: Cat D8T - 8SU Horsepower: 310  
Ripper Attachment: 3-Shank Ripper Shift Basis: 1 per day  
Data Source: (CRG)

#### Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	\$173.32	NA
Operating Cost/Hour:	\$109.71	100
Ripper Ownership Cost/Hour:	\$14.53	NA
Ripper Operating Cost/Hour:	\$7.95	100
Operator Cost/Hour:	\$38.59	NA
Total Unit Cost/Hour:	\$344.10	
Total Fleet Cost/Hour:	<b>\$344.10</b>	

### MATERIAL QUANTITIES

Selected estimating method: Area

#### Alternate Methods:

Seismic: NA Bank Volume: NA BCY NA  
Area: 4.40 acres Rip Depth (ft): 1.00 Volume: 7,099 BCY or CCY

Source of estimated quantity: DRMS

### HOURLY PRODUCTION

#### Seismic:

Seismic Velocity: NA feet/second

#### Area:

Average Ripping Depth: 2.56 feet/pass  
Average Ripping Width: 7.08 feet/pass  
Average Ripping Length: 100.00 feet/pass  
Average Dozer Speed: 88.00 feet/minute  
Average Maneuver Time: 0.25 minutes/pass  
Production per unit area: 0.703 acres/hour

#### Job Condition Correction Factors

Unadjusted Hourly Unit Production: 0.703 Acres/hr  
Site Altitude: 7,500 feet  
Altitude Adj: 1.00 (CAT HB)  
Job Efficiency: 0.83 (1 shift/day)  
Net Correction: 0.83 multiplier

Adjusted Hourly Unit Production: 0.58 Acres/hr  
Adjusted Hourly Fleet Production: **0.58** Acres/hr

### JOB TIME AND COST

Fleet size: 1 Grader(s) Total job time: **7.54** Hours

Unit cost: \$589.369 Per acre Total job cost: **\$2,593**



**REVEGETATION WORK**Task description: Revegetate affected areaSite: Vagneur SitePermit Action: 2024Inspection\_CostUpdatePermit/Job#: M1980085**PROJECT IDENTIFICATION**Task #: 08A  
Date: 7/2/2024  
User: LDSState: Colorado  
County: PitkinAbbreviation: None  
Filename: 085-08aAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$117.61
Weed control spraying (MEANS 31 31 16.13 3100)	\$338.80
<b>Total Tilling Cost/Acre</b>	<b>\$456.41</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Indian Ricegrass - Native	9.00	29.13	\$155.63
Mountain Brome - Bromar	13.00	20.89	\$78.23
Slender Wheatgrass - Native	5.00	18.25	\$35.32
Thickspike Wheatgrass - Critana	5.00	17.68	\$40.74
Rabbitbrush, Rubber	7.00	104.29	\$583.78
Western Wheatgrass - Native	5.00	12.63	\$45.03
Needlegrass, Green - Lodorm	13.00	54.02	\$112.39
Serviceberry	7.00	12.86	\$763.31

<b>Totals Seed Mix</b>	64.00	269.74	<b>\$1,814.42</b>
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## Application

Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$236.64
<b>Total Seed Application Cost/Acre</b>	<b>\$236.64</b>

## MULCHING and MISCELLANEOUS

## Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	1.50	TON	\$492.78	\$739.17
<b>Total Mulch Materials Cost/Acre</b>				<b>\$739.17</b>

## Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$85.37
Power mulcher (MEANS 32 91 13.16 0350)	\$157.25
<b>Total Mulch Application Cost/Acre</b>	<b>\$242.63</b>

## 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:	<u>51</u>	Cost /Acre:	<u>\$3,489.27</u>
Estimated Failure Rate:	<u>25%</u>	Cost /Acre*:	<u>\$3,489.27</u>
*Selected Replanting Work Items:	<u>TILLING,SEEDING,MULCHING</u>		
Initial Job Cost:	<u><b>\$177,952.77</b></u>		
Reseeding Job Cost:	<u><b>\$44,488.19</b></u>		
Total Job Cost:	<u><b>\$222,441</b></u>		
Job Hours:	<b>51.00</b>		

**REVEGETATION WORK**Task description: Interseed sagebrush after grass is establishedSite: Vagneur SitePermit Action: 2024Inspection\_CostUpdatePermit/Job#: M1980085**PROJECT IDENTIFICATION**Task #: 09AState: ColoradoAbbreviation: NoneDate: 7/2/2024County: PitkinFilename: 085-09aUser: LDSAgency or organization name: DRMS**FERTILIZING****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
			<b>Total Fertilizer Materials 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
	\$
<b>Total Tilling Cost/Acre</b>	<b>\$0.00</b>

**SEEDING**

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Sagebrush, Mountain or Big	20.00	1,056.01	\$1,653.98
<b>Totals Seed Mix</b>	20.00	1,056.01	<b>\$1,653.98</b>

**Application**

Description	Cost /Acre
Broadcast seeding [DMG]	\$272.56

<b>Total Seed Application Cost/Acre</b>	<b>\$272.56</b>
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**MULCHING and MISCELLANEOUS****Materials**

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
			\$	\$
<b>Total Mulch Materials Cost/Acre</b>				<b>\$0.00</b>

**Application**

Description	Cost /Acre
	\$
<b>Total Mulch Application Cost/Acre</b>	<b>\$0.00</b>

**NURSERY STOCK PLANTING**

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

**JOB TIME AND COST**

No. of Acres:	51	Cost /Acre:	\$1,926.54
Estimated Failure Rate:	25%	Cost /Acre*:	\$1,926.54
*Selected Replanting Work Items:	SEEDING		
Initial Job Cost:	\$98,253.54		
Reseeding Job Cost:	\$24,563.39		
Total Job Cost:	\$122,817		
Job Hours:	51.00		

**EQUIPMENT MOBILIZATION/DEMOBILIZATION**Task description: **Mobilize reclamation crew and equipment**Site: **Vagneur Site**Permit Action: **2024Inspection\_CostUpdate**Permit/Job#: **M1980085****PROJECT IDENTIFICATION**

Task #: **10A** State: **Colorado** Abbreviation: **None**  
 Date: **7/2/2024** County: **Pitkin** Filename: **085-10a**  
 User: **LDS**

Agency or organization name: **DRMS****EQUIPMENT TRANSPORT RIG COST**

Shift basis: **1 per day**  
 Cost Data Source: **CRG Data**

Truck 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:**

<b>Available Rig Capacities</b>	<b>0-25 Tons</b>	<b>26-50 Tons</b>	<b>51+ Tons</b>
Ownership Cost/Hour:	\$10.44	\$22.18	\$23.94
Operating Cost/Hour:	\$26.48	\$54.55	\$55.65
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$59.44	\$122.78	\$125.64

**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 - 8SU	53.08	\$187.85	\$125.64	2	\$626.98	\$251.28	\$500.00
Cat 637G	57.28	\$329.66	\$125.64	4	\$1,821.20	\$502.56	\$1,000.00
CAT 972H	28.00	\$62.43	\$122.78	2	\$370.42	\$245.56	\$500.00
Drill/Broadcast Seeder with Tractor	25.00	\$41.02	\$59.44	1	\$100.46	\$59.44	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$27.21	\$59.44	1	\$86.65	\$59.44	\$250.00

Subtotals: **\$3,005.71** **\$1,118.28** **\$2,500.00****ROADABLE EQUIPMENT:**

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Light Duty Pickup, 4x4, 1 T. Crew	\$24.60	1	\$24.60	\$24.60

Subtotals: **\$24.60** **\$24.60**

**EQUIPMENT HAUL DISTANCE and Time**

Nearest Major City or Town within project area region:	<u>GLENWOOD SPRINGS</u>	
Total one-way travel distance:	<u>45.00</u>	miles
Average Travel Speed:	<u>55.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$17,759.77</u>
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    \*\* two round trips with haul rig:

Total Roadable Mob/Demob Cost **	<u>\$40.25</u>
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    \*\* one round trip, no haul rig:

**Transportation Cycle Time:**

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.82</u>	<u>0.82</u>
Return Time (Hours):	<u>0.82</u>	<u>0.82</u>
Loading Time (Hours):	<u>0.50</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.50</u>	<u>NA</u>
Subtotals:	<u>2.64</u>	<u>1.64</u>

**JOB TIME AND COST**

Total job time:	<u>5.27</u>	Hours
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Total job cost:	<u>\$17,800</u>
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