

COST SUMMARY WORK

Task description: Cost Summary of Reclamation Tasks

Site: London Mine Permit Action: New Permit Application Permit/Job#: M2023015

PROJECT IDENTIFICATION

Task #: 000 State: Colorado Abbreviation: None
Date: 11/14/2023 County: Park Filename: M015-000
User: ERR

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Off-site Disposal of Mineralized Fines	DEMOLISH	1	500.00	\$128,084
002	General Grading of Central Extension Stockpile Area	DOZER	1	3.93	\$1,676
003	Replace Topsoil on Central Extension Stockpile Area	DOZER	1	0.71	\$302
004	General Grading of South London Stockpile Area	DOZER	1	12.99	\$5,543
005	Replace Topsoil on South London Stockpile Area	DOZER	1	2.34	\$997
006	Revegetate Central Extension & South London Stockpile Areas	REVEGE	1	10.00	\$7,550
007	Mob/Demob of Reclamation Equipment	MOBILIZE	1	4.11	\$5,185
<u>SUBTOTALS:</u>				534.08	\$149,337

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$3,017
Performance bond:	1.05	Total =	\$1,568
Job superintendent:	34.08	Total =	\$2,218
Profit:	10.00	Total =	\$14,934

TOTAL O & P = \$21,736

CONTRACT AMOUNT (direct + O & P) = \$171,073

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	\$0	Total =	\$0
Engineering work and/or contract/bid preparation:	0.00	Total =	\$0
Reclamation management and/or administration:	5.00		\$8,554

CONTINGENCY: 3.00 Total = \$4,480

TOTAL INDIRECT COST = \$34,770

TOTAL (direct + indirect) = \$184,107

TOTAL BOND AMOUNT (rounded) = \$184,500

DEMOLITION WORK

Task description: Off-site Disposal of Mineralized Fines

Site: London Mine Permit Action: New Permit Application Permit/Job#: M2023015

PROJECT IDENTIFICATION

Task #: 001 State: Colorado Abbreviation: None
Date: 11/14/2023 11:57:36 AM County: Park Filename: M015-001
User: ERR

Agency or organization name: DRMS

UNIT COSTS

Location adjustment: 100.00 %

Structure or Item Description	Dimensions	Demolition Menu Selection	Quantity	Unit	Unit Cost	Total Cost
Load Mineralized Fines	2,000 CY x 447 LCY/hr	CAT 950H	4.50	EA	\$129.83	\$584.24
Haul Mineralized Fines to Penrose Landfill	\$0.25/ton-mile	USER PROVIDED ITEM	90.00	MI	\$750.00	\$67,500.00
Disposal Fees (Twin Enviro Penrose)	3,000 Tons	USER PROVIDED ITEM	3,000.00	TN	\$20.00	\$60,000.00

Job Hours: 500.00 Subtotal (unadjusted): \$128,084.24 Total Cost (adjusted for location): \$128,084.24

BULLDOZER WORKTask description: General Grading of Central Extension Stockpile AreaSite: London MinePermit Action: New Permit
ApplicationPermit/Job#: M2023015**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 11/8/2023County: ParkFilename: M015-002User: ERRAgency 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:	\$241.38	NA
Operating Cost/Hour:	\$143.92	100
Ripper own. Cost/Hour:	\$0.00	NA
Ripper op. Cost/Hour:	\$0.00	0
Operator Cost/Hour:	\$41.30	NA

Total unit Cost/Hour: \$426.60Total Fleet Cost/Hour: **\$426.60****MATERIAL QUANTITIES**Initial Volume: 2,098Swell factor: 1.060Loose volume: **2,224 LCY**Source of estimated volume: 12" average over 1.3 acresSource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**Average push distance: 50 feetUnadjusted hourly production: 1,400.0 LCY/hrMaterials consistency description: Compacted fill or embankment 0.9Average push gradient: 0 %Average site altitude: 11,300 feetMaterial weight: 2,550 lbs/LCYWeight description: Gravel - Dry**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:	1.000	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4043

Adjusted unit production: 566.02 LCY/hr

Adjusted fleet production: **566.02** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.754/LCY

Total job time: **3.93** Hours

Total job cost: **\$1,676**

BULLDOZER WORKTask description: **Replace Topsoil on Central Extension Stockpile Area**Site: **London Mine**Permit Action: **New Permit
Application**Permit/Job#: **M2023015****PROJECT IDENTIFICATION**Task #: **003**State: **Colorado**Abbreviation: **None**Date: **11/8/2023**County: **Park**Filename: **M015-003**User: **ERR**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>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</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>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour: **\$426.60**Total Fleet Cost/Hour: **\$426.60****MATERIAL QUANTITIES**Initial Volume: **525**Swell factor: **1.215**Loose volume: **638 LCY**Source of estimated volume: **4" over 1.3 acres**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: **Compacted fill or embankment 0.9**Average push gradient: **0 %**Average site altitude: **11,300 feet**Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****Job Condition Correction Factor**

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

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: 0.6445

Adjusted unit production: 902.30 LCY/hr

Adjusted fleet production: **902.3** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.473/LCY

Total job time: **0.71** Hours

Total job cost: **\$302**

BULLDOZER WORKTask description: **General Grading of South London Stockpile Area**Site: **London Mine**Permit Action: **New Permit
Application**Permit/Job#: **M2023015****PROJECT IDENTIFICATION**Task #: **004**State: **Colorado**Abbreviation: **None**Date: **11/8/2023**County: **Park**Filename: **M015-004**User: **ERR**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>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</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>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour: **\$426.60**Total Fleet Cost/Hour: **\$426.60****MATERIAL QUANTITIES**Initial Volume: **6,938**Swell factor: **1.060**Loose volume: **7,354 LCY**Source of estimated volume: **12" average over 4.3 acres**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: **Compacted fill or embankment 0.9**Average push gradient: **0 %**Average site altitude: **12,000 feet**Material weight: **2,550 lbs/LCY**Weight description: **Gravel - Dry****Job Condition Correction Factor**

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

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:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4043

Adjusted unit production: 566.02 LCY/hr

Adjusted fleet production: **566.02** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.754/LCY

Total job time: **12.99** Hours

Total job cost: **\$5,543**

BULLDOZER WORKTask description: **Replace Topsoil on South London Stockpile Area**Site: **London Mine**Permit Action: **New Permit
Application**Permit/Job#: **M2023015****PROJECT IDENTIFICATION**Task #: **005**State: **Colorado**Abbreviation: **None**Date: **11/8/2023**County: **Park**Filename: **M015-005**User: **ERR**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>\$241.38</u>	<u>NA</u>
Operating Cost/Hour:	<u>\$143.92</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>\$41.30</u>	<u>NA</u>

Total unit Cost/Hour: **\$426.60**Total Fleet Cost/Hour: **\$426.60****MATERIAL QUANTITIES**Initial Volume: **1,735**Swell factor: **1.215**Loose volume: **2,108 LCY**Source of estimated volume: **4" over 4.3 acres**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: **Compacted fill or embankment 0.9**Average push gradient: **0 %**Average site altitude: **12,000 feet**Material weight: **1,600 lbs/LCY**Weight description: **Top Soil****Job Condition Correction Factor**

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

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: 0.6445

Adjusted unit production: 902.30 LCY/hr

Adjusted fleet production: **902.3** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: \$0.473/LCY

Total job time: **2.34** Hours

Total job cost: **\$997**

REVEGETATION WORKTask description: Revegetate Central Extension & South London Stockpile Areas

Site: London Mine Permit Action: New Permit Application Permit/Job#: M2023015

PROJECT IDENTIFICATION

Task #: 006 State: Colorado Abbreviation: None
 Date: 11/8/2023 County: Park Filename: M015-006
 User: ERR

Agency 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}	\$100.40
Total Tilling Cost/Acre	\$100.40

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Alpine Bluegrass	0.50	11.48	\$7.13
Sandberg Bluegrass - VNS	0.50	10.62	\$4.20
Columbine, Colorado	0.40	3.34	\$62.00
Spike Muhly	0.20	7.35	\$1.94
Timothy, Alpine - Native	0.50	14.92	\$12.13
Tufted Hairgrass	0.40	22.96	\$4.41
Yarrow, White	0.06	3.82	\$2.40
		74.47	\$94.20

Totals Seed Mix	2.56		
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Application

Application	
Description	Cost /Acre
Drill Seeding (DRMS Survey Cost)	\$232.00
Total Seed Application Cost/Acre	\$232.00

MULCHING and MISCELLANEOUS

Materials

Description	Units / Acre	Unit	Cost / Unit	Cost /Acre
Straw, delivered {MEANS 31 25 14.16 1200}	1.00	TON	\$429.79	\$429.79
Total Mulch Materials Cost/Acre				\$429.79

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$74.46
Power mulcher (MEANS 32 91 13.16 0350)	\$147.67
Total Mulch Application Cost/Acre	\$222.13

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>5.6</u>	Cost /Acre:	<u>\$1,078.52</u>
Estimated Failure Rate:	<u>25%</u>	Cost /Acre*:	<u>\$1,078.52</u>
*Selected Replanting Work Items:	<u>TILLING,SEEDING,MULCHING</u>		

Initial Job Cost:	\$6,039.71
Reseeding Job Cost:	\$1,509.93
Total Job Cost:	\$7,550
Job Hours:	10.00

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Mob/Demob of Reclamation Equipment**

Site: **London Mine** Permit Action: **New Permit Application** Permit/Job#: **M2023015**

PROJECT IDENTIFICATION

Task #: **007** State: **Colorado** Abbreviation: **None**
 Date: **11/8/2023** County: **Park** Filename: **M015-007**
 User: **ERR**

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:**

Available Rig Capacities	0-25 Tons	26-50 Tons	51+ Tons
Ownership Cost/Hour:	\$20.26	\$36.04	\$47.05
Operating Cost/Hour:	\$39.51	\$76.08	\$82.85
Operator Cost/Hour:	\$22.52	\$22.52	\$22.52
Helper Cost/Hour:	\$0.00	\$23.53	\$23.53
Total Unit Cost/Hour:	\$82.29	\$158.17	\$175.95

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	47.71	\$241.38	\$158.17	1	\$399.55	\$158.17	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$6.73	\$82.29	2	\$178.04	\$164.58	\$250.00
Power Mulcher (Bowie LD-90)	6.00	\$25.94	\$82.29	2	\$216.46	\$164.58	\$500.00
Subtotals:					\$794.05	\$487.33	\$1,000.00

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	\$127.92	2	\$255.84	\$255.84
Subtotals:			\$255.84	\$255.84

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>COLORADO SPRINGS</u>	
Total one-way travel distance:	<u>35.00</u>	miles
Average Travel Speed:	<u>45.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$4,787.31</u>
'* two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$397.97</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	<u>0.78</u>	<u>0.78</u>
Return Time (Hours):	<u>0.78</u>	<u>0.78</u>
Loading Time (Hours):	<u>0.25</u>	<u>NA</u>
Unloading Time (Hours):	<u>0.25</u>	<u>NA</u>
Subtotals:	<u>2.06</u>	<u>1.56</u>

JOB TIME AND COST

Total job time: 4.11 Hours

Total job cost: \$5,185