

COST SUMMARY WORK

Task description: Cost Summary

Site: Goldpark King No. 1 -
Prospecting Plan, 2017

Permit Action: 2017 Bond Calculation

Permit/Job#: P2017011

PROJECT IDENTIFICATION

Task #: 000
Date: 9/20/2017
User: MAC

State: Colorado
County: Park

Abbreviation: None
Filename: P011-000

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
001	Backfilling trenches	LOADER	1	8.38	\$715.00
002	Replace topsoil	LOADER	1	13.70	\$1,169.00
003	Revegetating affected areas	REVEGE	1	8.00	\$864.00
004	Equipment Mobilization	MOBILIZE	1	3.56	\$1,705.00
<u>SUBTOTALS:</u>				33.64	\$4,453

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	\$89.95
Performance bond:	1.05	Total =	\$46.76
Job superintendent:	0.00	Total =	\$0.00
Profit:	10.00	Total =	\$445.30

TOTAL O & P = \$582.01

CONTRACT AMOUNT (direct + O & P) = \$5,035.01

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	<u>0.00</u>	Total =	<u>0.00</u>
Engineering work and/or contract/bid preparation:	<u>0.00</u>	Total =	<u>\$0.00</u>
Reclamation management and/or administration:	<u>5.00</u>		<u>\$251.75</u>

CONTINGENCY: 0.00 Total = \$0.00

TOTAL INDIRECT COST = \$833.76

TOTAL BOND AMOUNT (direct + indirect) = \$5,286.76

TOTAL BOND AMOUNT (rounded up) = \$5,290.00

WHEEL LOADER – LOAD AND CARRY WORKTask description: **Backfilling trenches**Site: **Goldpark King No. 1 -
Prospecting Plan, 2017**

Permit Action:

2017 Bond Calculation

Permit/Job#: P2017011

PROJECT IDENTIFICATIONTask #: 001
Date: 9/20/2017
User: MACState: Colorado
County: ParkAbbreviation: None
Filename: P011-001

Agency or organization name: DRMS

HOURLY EQUIPMENT COSTBasic Machine: CAT 450E
Attachment 1: ROPS CabHorsepower: 101
Shift Basis: 1 per day
Data Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$20.08	NA
Operating Cost/Hour:	\$24.04	100
Operator Cost/Hour:	\$41.20	NA
Total Unit Cost/Hour:	\$85.32	
Total Fleet Cost/Hour:	\$85.32	

MATERIAL QUANTITIESInitial volume: 1,000 CCY
Loose volume: 1,000 LCY
Swell factor: 1.000Source of estimated volume: Division of Reclamation, Mining & Safety
Source of estimated swell factor: Cat Handbook**HOURLY PRODUCTION**

Loader Cycle Time: Unadjusted Basic Cycle Time (load, dump, maneuver): 0.475 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	Material 1/8" to 3/4" diameter -0.02	-0.020	(Cat HB)
Stockpile:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Truck Ownership:	Independently owned trucks 0.04	0.040	(Cat HB)
Operation:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Dump Target:	Nominal target 0.00	0.000	(Cat HB)
Net Cycle Time Adjustment:		0.020	minutes
Adjusted Basic Cycle Time:		0.495	minutes

Rolling Resistance – Road ConditionsHaul: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0
Return: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
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Haul Route:	20	0.00	4.00	4.00	0.0127	(Cat HB)
Return Route:	20	0.00	4.00	4.00	0.0127	(Cat HB)

Total Travel Time: 0.0254 minutes

Total Cycle Time: **0.5204** minutesLoad Bucket Capacity

Rated Capacity:	1.50	LCY (heaped)
Bucket Fill Factor:	0.875	Loose material - 1/2" to 3/4" (85 - 90%) 0.875
Adjusted Capacity:	1.31	LCY

Job Condition Correction FactorsSite Altitude: 10000 feet

Altitude Adj:	0.95	Source (CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.79	multiplier

Unadjusted Hourly Unit Production:	151.33	LCY/Hour
Adjusted Hourly Unit Production:	119.32	LCY/Hour
Adjusted Hourly Fleet Production:	119.32	LCY/Hour

JOB TIME AND COST

Fleet size:	1	Loader(s)	Total job time:	8.38	Hours
Unit cost:	\$0.715	/LCY	Total job cost:	\$715	

WHEEL LOADER – LOAD AND CARRY WORKTask description: **Replace topsoil**Site: **Goldpark King No. 1 -
Prospecting Plan, 2017**

Permit Action:

2017 Bond CalculationPermit/Job#: P2017011**PROJECT IDENTIFICATION**Task #: 002State: ColoradoAbbreviation: NoneDate: 9/20/2017County: ParkFilename: P011-002User: MACAgency or organization name: DRMS**HOURLY EQUIPMENT COST**Basic Machine: CAT 450EHorsepower: 101Attachment 1: ROPS CabShift Basis: 1 per dayData Source: (CRG)**Cost Breakdown:**

		Utilization %
Ownership Cost/Hour:	\$20.08	NA
Operating Cost/Hour:	\$24.04	100
Operator Cost/Hour:	\$41.20	NA
Total Unit Cost/Hour:	\$85.32	
Total Fleet Cost/Hour:	\$85.32	

MATERIAL QUANTITIESInitial volume: 1,613

CCY

Swell factor: 1.000Loose volume: 1,613

LCY

Source of estimated volume: Division of Reclamation, Mining & SafetySource of estimated swell factor: Cat Handbook**HOURLY PRODUCTION****Loader Cycle Time:**Unadjusted Basic Cycle Time (load, dump,
maneuver):0.475 minutes

Cycle Time Factors		Factor (min.)	Source
Material:	No adjustment - factor not applicable 0.00	0.000	(Cat HB)
Stockpile:	No adjustment - factor not applicable 0.00	0.000	(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:		0.000	minutes
Adjusted Basic Cycle Time:		0.475	minutes

Rolling Resistance – Road ConditionsHaul: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0Return: Rutted dirt, little maintenance, no water, 1" tire penetration 4.0**Haul and Return Time**

	Length (feet)	Grade Res. (%)	Rolling Res. (%)	Total Res. (%)	Travel Time (minutes)	Source
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Haul Route:	100	0.00	4.00	4.00	0.0635	(Cat HB)
Return Route:	100	0.00	4.00	4.00	0.0635	(Cat HB)

Total Travel Time: 0.1269 minutes

Total Cycle Time: **0.6019** minutesLoad Bucket Capacity

Rated Capacity:	1.50	LCY (heaped)
Bucket Fill Factor:	0.975	Loose material - mixed moist aggregates (95-100%) 0.975
Adjusted Capacity:	1.46	LCY

Job Condition Correction FactorsSite Altitude: 10000 feet

Altitude Adj:	0.95	Source (CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.79	multiplier

Unadjusted Hourly Unit Production: 145.78 LCY/Hour

Adjusted Hourly Unit Production: 114.95 LCY/Hour

Adjusted Hourly Fleet Production: **114.95** LCY/Hour**JOB TIME AND COST**Fleet size: 1 Loader(s) Total job time: **14.03** HoursUnit cost: \$0.742 /LCY Total job cost: **\$1,197**

REVEGETATION WORKTask description: Revegetating affected areasSite: Goldpark King No. 1 -
Prospecting Plan, 2017

Permit Action:

2017 Bond CalculationPermit/Job#: P2017011**PROJECT IDENTIFICATION**Task #: 003State: ColoradoAbbreviation: NoneDate: 9/20/2017County: ParkFilename: P011-003User: MACAgency 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
Disc harrowing, 6" deep (MEANS 32 91 13.23 6100)	\$106.29
Total Tilling Cost/Acre	\$106.29

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Rye, Annual Tetraploid - Barmultra	5.00	21.81	\$8.00
Switchgrass - Blackwell	1.25	11.16	\$11.98
Big Bluestem - Native	1.50	4.48	\$15.38
Blue Grama - Native	1.25	20.40	\$18.13
Sand Dropseed	0.25	29.84	\$2.71
Mountain Brome - Bromar	2.50	4.02	\$10.88
Sideoats Grama - Vaughn	1.50	4.92	\$15.00
Slender Wheatgrass - Native	3.75	13.69	\$10.58

Totals Seed Mix	17.00	110.32	\$92.64
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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
Hay, delivered {MEANS 31 25 14.16 1200}	2.00	TON	\$261.00	\$522.00
Total Mulch Materials Cost/Acre				\$522.00

Application

Description	Cost /Acre
Crimping, with tractor {DMG survey data}	\$66.02
Total Mulch Application Cost/Acre	\$66.02

NURSERY STOCK PLANTING

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

JOB TIME AND COST

No. of Acres:	2	Cost /Acre:	\$1,018.95
Estimated Failure Rate:	20%	Cost /Acre*:	\$324.64
*Selected Replanting Work Items:	SEEDING		
Initial Job Cost:	\$2,037.90		
Reseeding Job Cost:	\$129.86		
Total Job Cost:	\$2,168		
Job Hours:	8.00		

EQUIPMENT MOBILIZATION/DEMOBILIZATIONTask description: **Equipment Mobilization**Site: **Goldpark King No. 1 -
Prospecting Plan, 2017**

Permit Action:

2017 Bond Calculation

Permit/Job#: P2017011

PROJECT IDENTIFICATION

Task #: 004

State: Colorado

Abbreviation: None

Date: 9/20/2017

County: Park

Filename: P011-004

User: MAC

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:	\$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 450E	9.80	\$20.08	\$88.67	1	\$108.75	\$88.67	\$250.00
Drill/Broadcast Seeder with Tractor	25.00	\$12.22	\$88.67	1	\$100.89	\$88.67	\$250.00
Subtotals:					\$209.64	\$177.34	\$500.00

ROADABLE EQUIPMENT:

Machine Description	Total Cost/hr/ unit	Fleet Size	Haul Trip Cost/hr/ fleet	Return Trip Cost/hr/ fleet
Subtotals:			\$0.00	\$0.00

EQUIPMENT HAUL DISTANCE and Time

Nearest Major City or Town within project area region:	<u>BRECKENRIDGE</u>	
Total one-way travel distance:	<u>32.00</u>	miles
Average Travel Speed:	<u>50.00</u>	mph

Total Non-Roadable Mob/Demob Cost *	<u>\$1,704.97</u>
** two round trips with haul rig:	
Total Roadable Mob/Demob Cost **	<u>\$0.00</u>
** one round trip, no haul rig:	

Transportation Cycle Time:

	Non-Roadable Equipment	Roadable Equipment
Haul Time (Hours):	0.64	0.64
Return Time (Hours):	0.64	0.64
Loading Time (Hours):	0.25	NA
Unloading Time (Hours):	0.25	NA
Subtotals:	1.78	1.28

JOB TIME AND COST

Total job time:	<u>3.56</u>	Hours
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Total job cost:	<u>\$1,705</u>
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