COST SUMMARY WORK

Task description:

Site: **Hansen Uranium Project** Permit Action: MD-02 - 15 extra drill holes Permit/Job#: P2009025

PROJECT IDENTIFICATION

Task #: M20 State: Colorado Abbreviation: None
Date: 10/2/2012 County: Fremont Filename: P025-M20
User: TC1

Agency or organization name: DRMS

TASK LIST (DIRECT COSTS)

Task	Description	Form Used	Fleet Size	Task Hours	Cost
M21	Recontour drill pads	DOZER	1	6.95	$883.99
M22	Seed pads & roads	REVEGE	1	0.00	$298.60
M23	Recontour roads	DOZER	1	5.65	$718.05
M24	Backfill mud pits	EXCAVATE	1	1.92	$156.00
M26	Well Abandonment	NA	15	0.00	$53,487.00
		SUBTOTALS:		**14.52**	**$ $55,543.64**

INDIRECT COSTS

OVERHEAD AND PROFIT:

Liability insurance:	2.02	Total =	$1,121.98
Performance bond:	1.05	Total =	$583.21
Job superintendent:	0.00	Total =	$0.00
Profit:	10.00	Total =	$5,554.36
		TOTAL O & P =	$7,259.55
		CONTRACT AMOUNT (direct + O & P) =	$62,803.19

LEGAL - ENGINEERING - PROJECT MANAGEMENT:

Financial warranty processing (legal/related costs):	0.00	Total =	0.00
Engineering work and/or contract/bid preparation:	0.00	Total =	$0.00
Reclamation management and/or administration:	0.00		$0.00
CONTINGENCY:	0.00	Total =	$0.00
		TOTAL INDIRECT COST =	$7,259.55
		TOTAL BOND AMOUNT (direct + indirect) =	**$62,803.19**

BULLDOZER WORK

Task description: **Recontour drill pads**

Site: **Hansen Uranium Project** Permit Action: MD-02 - 15 extra drill holes Permit/Job#: P2009025

PROJECT IDENTIFICATION

Task #:	M21	State:	Colorado	Abbreviation:	None
Date:	10/2/2012	County:	Fremont	Filename:	P025-M21
User:	TC1				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine:	Cat D6T
Horsepower:	185
Blade Type:	Semi-Universal
Attachment:	NA
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$31.46	NA
Operating Cost/Hour:	$57.18	100
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.49	NA

Total unit Cost/Hour: $127.14
Total Fleet Cost/Hour: **$127.14**

MATERIAL QUANTITIES

Initial Volume:	1,333
Swell factor:	1.250
Loose volume:	**1,666** 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: 444.6 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 0 %
Average site altitude: 8,300 feet

Material weight: 2,550 lbs/LCY

Weight description: Earth - Dry packed

Job Condition Correction Factor		Source
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:	0.902	(CAT HB)
Blade type:	CBTCF	CBTCFS

Net correction: CNetCorrection

Adjusted unit production: CAUP LCY/hr

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

JOB TIME AND COST

Fleet size: CFL Dozer(s)

Unit cost: CUnitCost/LCY

Total job time: **CTJT** Hours

Total job cost: **CTJC**

REVEGETATION WORK

Task description: **Seed pads & roads**

Site: **Hansen Uranium Project** Permit Action: MD-02 - 15 extra drill holes Permit/Job#: P2009025

PROJECT IDENTIFICATION

Task #: M22 State: Colorado Abbreviation: None
Date: 10/2/2012 County: Fremont Filename: P025-M22
User: TC1

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}	$86.71
Total Tilling Cost/Acre	**$86.71**

SEEDING

Seed Mix	Rate – PLS LBS / Acre	Seeds per SQ. FT	Cost /Acre
Blue Grama - Native	0.10	1.63	$1.01
Sideoats Grama - Vaughn	0.50	1.64	$5.50
Streambank Wheatgrass - Sodar	0.80	2.61	$3.30
Mahogany, Mountain	0.10	0.14	$4.53
Needlegrass, Green - Lodorm	1.80	7.48	$9.50
Totals Seed Mix	3.30	13.50	**$23.85**

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
			$	$
Total Mulch Materials Cost/Acre				**$0.00**

Application

Description	Cost /Acre
	$
Total Mulch Application Cost/Acre	**$0.00**

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: 1.24
Estimated Failure Rate: 20%
*Selected Replanting Work Items: TILLING,SEEDING

Cost /Acre: $200.67
Cost /Acre*: $200.67

Initial Job Cost: **$248.83**
Reseeding Job Cost: **$49.77**
Total Job Cost: **$298.60**
Job Hours: **0.00**

BULLDOZER WORK

Task description: **Recontour roads**

Site: **Hansen Uranium Project** Permit Action: MD-02 - 15 extra drill holes Permit/Job#: P2009025

PROJECT IDENTIFICATION

Task #:	M23	State:	Colorado	Abbreviation:	None
Date:	10/2/2012	County:	Fremont	Filename:	P025-M23
User:	TC1				

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine:	Cat D6T
Horsepower:	185
Blade Type:	Semi-Universal
Attachment:	NA
Shift Basis:	1 per day
Data Source:	(CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$31.46	NA
Operating Cost/Hour:	$57.18	100
Ripper op. Cost/Hour:	$0.00	0
Operator Cost/Hour:	$38.49	NA

Total unit Cost/Hour: $127.14
Total Fleet Cost/Hour: **$127.14**

MATERIAL QUANTITIES

Initial Volume:	667
Swell factor:	1.250
Loose volume:	**834** LCY

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

HOURLY PRODUCTION

Average push distance: 100 feet
Unadjusted hourly production: 303.3 LCY/hr

Materials consistency description: Loose stockpile 1.2

Average push gradient: 5 %
Average site altitude: 8,300 feet

Material weight: 2,550 lbs/LCY

Weight description: Earth - Dry packed

Job Condition Correction Factor		Source
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:	0.903	(CAT HB)
Altitude:	1.000	(CAT HB)
Material Weight:	0.902	(CAT HB)
Blade type:	1.000	(PAT)

Net correction: 0.4867

Adjusted unit production: 147.62 LCY/hr

Adjusted fleet production: **147.62** LCY/hr

JOB TIME AND COST

Fleet size: 1 Dozer(s)

Unit cost: $0.861/LCY

Total job time: **5.65** Hours

Total job cost: **$718.05**

HYDRAULIC EXCAVATOR WORK

Task description: **Backfill mud pits**

Site: **Hansen Uranium Project** Permit Action: MD-02 - 15 extra drill holes Permit/Job#: P2009025

PROJECT IDENTIFICATION

Task #: M24 State: Colorado Abbreviation: None
Date: 10/2/2012 County: Fremont Filename: P025-M24
User: TC1

Agency or organization name: DRMS

HOURLY EQUIPMENT COST

Basic Machine: Cat 311D LRR 8'-6"Stick
Attachment 1: ROPS Cab

Horsepower: 80
Weight (MT): 12.74
Shift Basis: 1 per day
Data Source: (CRG)

Cost Breakdown:

		Utilization %
Ownership Cost/Hour:	$17.58	NA
Operating Cost/Hour:	$24.41	95
Operator Cost/Hour:	$38.67	NA
Total Unit Cost/Hour:	$80.67	

Total Fleet Cost/Hour: $80.67

MATERIAL QUANTITIES

Initial volume: 333 CCY Swell factor: 1.230
Loose volume: **410** LCY

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

HOURLY PRODUCTION

Excavator Cycle Time (load bucket, swing loaded, dump bucket, swing empty):

Basic Job Condition Description: EXCELLENT
Secondary Job Condition within Basic Description: EXCELLENT
Cycle Time Value: 0.150 minutes

Load Bucket Capacity

Bucket Size Class: Medium

Rated Capacity: 0.68 LCY (heaped)
Bucket Fill Factor: 1.100 Other - rock/dirt mixtures (100-120%) 1.100
Adjusted Capacity: **0.75** LCY

Job Condition Correction Factors

Site Altitude: 8300 feet

		Source
Altitude Adj:	0.90	(CAT HB)
Job Efficiency:	0.83	(1 shift/day)
Net Correction:	0.75	multiplier

Unadjusted Hourly Unit Production: 299.20 LCY/Hour
Adjusted Hourly Unit Production: 223.50 LCY/Hour
Adjusted Hourly Fleet Production: **223.50** LCY/Hour

JOB TIME AND COST

Fleet size: 1 Excavator Total job time: **1.93** Hours

Unit cost: $0.361 /LCY Total job cost: **$156.00**

BOREHOLE SEALING WORK

MD-02 - 15 extra drill holes

Task #: **M26**
Mine: **Hansen Project**
Permit no.: **P-2009-025**
Permitting action: **MD-02**

Date: 8/6/12
Prepared by: **TC1**

Hole	Hole (Casing) diam. (in)	Total depth (ft)	Hole volume (cf)	# Holes	Cwt of bulk cement (assuming 94 lbs of cement per 1.18 cf of hole, that is 100 lbs of cement fills 1.25 cf)	Cement cost per cwt (CIRCES)	Cement total cost	Rig setup time per hole (hr)	Rig time to fill hole (hrs/hole)	Total rig time (setup + fill) per hole (hr)	Rig w/ crew hourly rate (Circes, Reed drill, 9.0")	Total rig cost	2,500 gal water truck w/driver hourly rate (Circes)	Water truck w/ driver cost (rig fill time x truck rate)	Octoplug (Circes, $19.57 per in. diam.)	Cut surface casing & mark (Circes, $10.9/lf)	% Liab.	Total cost before bond release or increment obligation	Total cost
Shallow Monitoring Wells (0 - 460ft)	6	460	90	6	72	$10.90	$788	1.50	0.90	2.40	$193.22	$464	$63.70	$58	$117	$17	100%	$8,664	$8,664
Deep Monitoring Wells (500 - 900ft)	9	900	398	9	318	$10.90	$3,467	1.50	3.98	5.48	$193.22	$1,058	$63.70	$253	$176	$26	100%	$44,823	$44,823
										63.70	rig hours					Grand Total			$53,487
										/ 1 rigs									
										63.70	project hours								