ATTACHMENT C

COST ESTIMATES FOR RECLAMATION OF WHITE MESA FACILITY IN BLANDING, UTAH

Cost Summary

WHITE MESA MILL RECLAMATION COST ESTIMATE
September 2011
Revision 5.0

Mill Decommissioning		$1,973,302
Cell 1		$1,565,949
Cell 2		$1,266,066
Cell 3		$1,334,075
Cell 4A		$1,499,804
Cell 4B		$1,343,529
Miscellaneous		$3,637,667
Subtotal Direct Costs		$12,620,391
Profit Allowance	10.00%	$1,262,039
Contingency	15.00%	$1,893,059
Licensing & Bonding	2.00%	$252,408
UDEQ Contract Administration	4.00%	$504,816
Contractors Equipment Floater		$82,250
Automobile and General Liability Insurance		$284,600
Long Term Care Fund		$809,376
Total Reclamation		$17,708,939
Revised Bond Amount		$17,708,939

Mill Decommissioning

MILL DECOMMISSIONING

Mill Building Demolition

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	640	$10,736
Laborers	hrs	$12.51	320	$4,002
Small Tools	hrs	$1.35	960	$1,296
Cat 770 Haul Truck	hrs	$95.11	640	$60,872
Truck Drivers	hrs	$18.16	640	$11,623
Cat 988 Loader	hrs	$134.11	160	$21,458
Cat 988 Loader Operator	hrs	$17.21	160	$2,754
Cat 365 Excavator	hrs	$130.25	160	$20,840
Cat 365 Excavator Operator	hrs	$20.65	160	$3,304
PC 300 w/metal Shears	hrs	$147.18	160	$23,548
PC 300 Operator	hrs	$20.65	160	$3,304
60 Ton Crane	hrs	$103.61	160	$16,577
60 Ton Crane Operator	hrs	$15.76	160	$2,522
30 Ton Crane	hrs	$65.24	80	$5,219
30 Ton Crane Operator	hrs	$15.76	80	$1,261
Equipment Maintenance (Butler)	hrs	$18.46	1,360	$25,102
Concrete Removal	sf	$3.30	37,500	$123,750

Total Mill Building Demolition **$338,170**

Ore Feed Demolition

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	64	$1,074
Laborers	hrs	$12.51	32	$400
Small Tools	hrs	$1.35	96	$130
Cat 770 Haul Truck	hrs	$95.11	64	$6,087
Truck Drivers	hrs	$18.16	64	$1,162
Cat 988 Loader	hrs	$134.11	16	$2,146
Cat 988 Loader Operator	hrs	$17.21	16	$275
Cat 365 Excavator	hrs	$130.25	16	$2,084
Cat 365 Excavator Operator	hrs	$20.65	16	$330
PC 300 w/metal Shears	hrs	$147.18	16	$2,355
PC 300 Operator	hrs	$20.65	16	$330
30 Ton Crane	hrs	$65.24	0	$0
30 Ton Crane Operator	hrs	$15.76	0	$0
Equipment Maintenance (Butler)	hrs	$18.46	112	$2,067

Total Ore Feed Demolition **$18,441**

SX Building Demolition

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	320	$5,368
Laborers	hrs	$12.51	160	$2,001
Small Tools	hrs	$1.35	480	$648
Cat 770 Haul Truck	hrs	$95.11	320	$30,436
Truck Drivers	hrs	$18.16	320	$5,812
Cat 988 Loader	hrs	$134.11	80	$10,729
Cat 988 Loader Operator	hrs	$17.21	80	$1,377
Cat 365 Excavator	hrs	$130.25	80	$10,420
Cat 365 Excavator Operator	hrs	$20.65	80	$1,652
PC 300 w/metal Shears	hrs	$147.18	80	$11,774
PC 300 Operator	hrs	$20.65	80	$1,652
60 Ton Crane	hrs	$103.61	0	$0
60 Ton Crane Operator	hrs	$15.76	0	$0
30 Ton Crane	hrs	$65.24	0	$0
30 Ton Crane Operator	hrs	$15.76	0	$0
Equipment Maintenance (Butler)	hrs	$18.46	560	$10,336
Concrete Removal	sf	$3.30	55,970	$184,701

Total SX Building Demolition **$276,906**

CCD Circuit Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	120	$2,013
Laborers	hrs	$12.51	60	$750
Small Tools	hrs	$1.35	180	$243
Cat 770 Haul Truck	hrs	$95.11	120	$11,414
Truck Drivers	hrs	$18.16	120	$2,179
Cat 988 Loader	hrs	$134.11	30	$4,023
Cat 988 Loader Operator	hrs	$17.21	30	$516
Cat 365 Excavator	hrs	$130.25	30	$3,908
Cat 365 Excavator Operator	hrs	$20.65	30	$620
PC 300 w/metal Shears	hrs	$147.18	30	$4,415
PC 300 Operator	hrs	$20.65	30	$620
60 Ton Crane	hrs	$103.61	30	$3,108
60 Ton Crane Operator	hrs	$15.76	30	$473
30 Ton Crane	hrs	$65.24	15	$979
30 Ton Crane Operator	hrs	$15.76	15	$236
Equipment Maintenance (Butler)	hrs	$18.46	255	$4,707
Concrete Removal	sf	$3.30	15,000	$49,500

Total CCD Circuit Removal **$89,704**

Sample Plant Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	32	$537
Laborers	hrs	$12.51	16	$200
Small Tools	hrs	$1.35	48	$65
Cat 770 Haul Truck	hrs	$95.11	32	$3,044
Truck Drivers	hrs	$18.16	32	$581
Cat 988 Loader	hrs	$134.11	8	$1,073
Cat 988 Loader Operator	hrs	$17.21	8	$138
Cat 365 Excavator	hrs	$130.25	8	$1,042
Cat 365 Excavator Operator	hrs	$20.65	8	$165
PC 300 w/metal Shears	hrs	$147.18	8	$1,177
PC 300 Operator	hrs	$20.65	8	$165
30 Ton Crane	hrs	$65.24	0	$0
30 Ton Crane Operator	hrs	$15.76	0	$0
Equipment Maintenance (Butler)	hrs	$18.46	56	$1,034
Concrete Removal	sf	$3.30	4,200	$13,860

Total Sample Plant Removal **$23,081**

Temporary Storage Building Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Laborers	hrs	$12.51	8	$100
Small Tools	hrs	$1.35	8	$11
Cat 770 Haul Truck	hrs	$95.11	2	$190
Truck Drivers	hrs	$18.16	2	$36
Cat 988 Loader	hrs	$134.11	2	$268
Cat 988 Loader Operator	hrs	$17.21	2	$34
Equipment Maintenance (Butler)	hrs	$18.46	4	$74
Concrete Removal	sf	$3.30	600	$1,980

Total Temporary Storage Building Removal **$2,694**

Truck Shop Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	32	$537
Laborers	hrs	$12.51	16	$200
Small Tools	hrs	$1.35	48	$65
Cat 770 Haul Truck	hrs	$95.11	24	$2,283
Truck Drivers	hrs	$18.16	24	$436
Cat 988 Loader	hrs	$134.11	8	$1,073
Cat 988 Loader Operator	hrs	$17.21	8	$138
Cat 365 Excavator	hrs	$130.25	8	$1,042
Cat 365 Excavator Operator	hrs	$20.65	8	$165
PC 300 w/metal Shears	hrs	$147.18	8	$1,177
PC 300 Operator	hrs	$20.65	8	$165
30 Ton Crane	hrs	$134.11	0	$0
30 Ton Crane Operator	hrs	$17.21	0	$0
Equipment Maintenance (Butler)	hrs	$18.46	48	$886
Concrete Removal	sf	$3.30	4,200	$13,860

Total Truck Shop Removal **$22,027**

Boiler Demolition

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	160	$2,684
Laborers	hrs	$12.51	80	$1,000
Small Tools	hrs	$1.35	240	$324
Cat 770 Haul Truck	hrs	$95.11	160	$15,218
Truck Drivers	hrs	$18.16	160	$2,906
Cat 988 Loader	hrs	$134.11	40	$5,364
Cat 988 Loader Operator	hrs	$17.21	40	$689
Cat 365 Excavator	hrs	$130.25	40	$5,210
Cat 365 Excavator Operator	hrs	$20.65	40	$826
PC 300 w/metal Shears	hrs	$147.18	40	$5,887
PC 300 Operator	hrs	$20.65	40	$826
60 Ton Crane	hrs	$103.61	0	$0
60 Ton Crane Operator	hrs	$15.76	0	$0
30 Ton Crane	hrs	$65.24	0	$0
30 Ton Crane Operator	hrs	$15.76	0	$0
Equipment Maintenance (Butler)	hrs	$18.46	280	$5,168
Concrete Removal	sf	$3.30	2,900	$9,570

Total Boiler Demolition **$55,673**

Vanadium Oxidation Circuit Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	64	$1,074
Laborers	hrs	$12.51	32	$400
Small Tools	hrs	$1.35	96	$130
Cat 770 Haul Truck	hrs	$95.11	64	$6,087
Truck Drivers	hrs	$18.16	64	$1,162
Cat 988 Loader	hrs	$134.11	16	$2,146
Cat 988 Loader Operator	hrs	$17.21	16	$275
Cat 365 Excavator	hrs	$130.25	16	$2,084
Cat 365 Excavator Operator	hrs	$20.65	16	$330
PC 300 w/metal Shears	hrs	$147.18	16	$2,355
PC 300 Operator	hrs	$20.65	16	$330
60 Ton Crane	hrs	$103.61	0	$0
60 Ton Crane Operator	hrs	$15.76	0	$0
30 Ton Crane	hrs	$65.24	0	$0
30 Ton Crane Operator	hrs	$15.76	0	$0
Equipment Maintenance (Butler)	hrs	$18.46	112	$2,067
Concrete Removal	sf	$3.30	1,200	$3,960

Total Vanadium Oxidation Circuit Removal **$22,401**

Main Shop/Warehouse Demolition

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	128	$2,147
Laborers	hrs	$12.51	64	$800
Small Tools	hrs	$1.35	192	$259
Cat 770 Haul Truck	hrs	$95.11	128	$12,174
Truck Drivers	hrs	$18.16	128	$2,325
Cat 988 Loader	hrs	$134.11	32	$4,292
Cat 988 Loader Operator	hrs	$17.21	32	$551
Cat 365 Excavator	hrs	$130.25	32	$4,168
Cat 365 Excavator Operator	hrs	$20.65	32	$661
PC 300 w/metal Shears	hrs	$147.18	32	$4,710
PC 300 Operator	hrs	$20.65	32	$661
Equipment Maintenance (Butler)	hrs	$18.46	224	$4,134
Concrete Removal	sf	$3.30	19,300	$63,690

Total Main Shop/Warehouse Demolition **$100,572**

Decon Pads (2) Demolition

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	64	$1,074
Laborers	hrs	$12.51	32	$400
Small Tools	hrs	$1.35	96	$130
Cat 770 Haul Truck	hrs	$95.11	64	$6,087
Truck Drivers	hrs	$18.16	64	$1,162
Cat 988 Loader	hrs	$134.11	16	$2,146
Cat 988 Loader Operator	hrs	$17.21	16	$275
Cat 365 Excavator	hrs	$130.25	16	$2,084
Cat 365 Excavator Operator	hrs	$20.65	16	$330
PC 300 w/metal Shears	hrs	$147.18	16	$2,355
PC 300 Operator	hrs	$20.65	16	$330
Equipment Maintenance (Butler)	hrs	$18.46	112	$2,067
Concrete Removal	sf	$3.30	1,350	$4,455

Total Decon Pads (2) Demolition **$22,896**

Office Building Demolition

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	96	$1,610
Laborers	hrs	$12.51	48	$600
Small Tools	hrs	$1.35	144	$194
Cat 770 Haul Truck	hrs	$95.11	96	$9,131
Truck Drivers	hrs	$18.16	96	$1,743
Cat 988 Loader	hrs	$134.11	24	$3,219
Cat 988 Loader Operator	hrs	$17.21	24	$413
Cat 365 Excavator	hrs	$130.25	24	$3,126
Cat 365 Excavator Operator	hrs	$20.65	24	$496
PC 300 w/metal Shears	hrs	$147.18	24	$3,532
PC 300 Operator	hrs	$20.65	24	$496
Equipment Maintenance (Butler)	hrs	$18.46	168	$3,101
Concrete Removal	sf	$1.25	12,100	$15,125

Total Office Building Demolition **$42,787**

Septic Tanks and Drain Fields

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	0	$0
Laborers	hrs	$12.51	16	$200
Small Tools	hrs	$1.35	32	$43
Cat 770 Haul Truck	hrs	$95.11	16	$1,522
Truck Drivers	hrs	$18.16	16	$291
Cat 988 Loader	hrs	$134.11	8	$1,073
Cat 988 Loader Operator	hrs	$17.21	8	$138
Cat 365 Excavator	hrs	$130.25	8	$1,042
Cat 365 Excavator Operator	hrs	$20.65	8	$165
PC 300 w/metal Shears	hrs	$147.18	0	$0
PC 300 Operator	hrs	$20.65	0	$0
Equipment Maintenance (Butler)	hrs	$18.46	32	$591

Total Septic Tanks and Drain Fields **$5,064**

Misc. Tankage & Spare Parts Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	48	$805
Laborers	hrs	$12.51	24	$300
Small Tools	hrs	$1.35	72	$97
Cat 770 Haul Truck	hrs	$95.11	48	$4,565
Truck Drivers	hrs	$18.16	48	$872
Cat 988 Loader	hrs	$134.11	12	$1,609
Cat 988 Loader Operator	hrs	$17.21	12	$207
Cat 365 Excavator	hrs	$130.25	12	$1,563
Cat 365 Excavator Operator	hrs	$20.65	12	$248
PC 300 w/metal Shears	hrs	$147.18	12	$1,766
PC 300 Operator	hrs	$20.65	12	$248
Equipment Maintenance (Butler)	hrs	$18.46	84	$1,550

Total Misc. Tankage & Spare Parts Removal **$13,831**

Alternate Feed Circuit and Reagent Storage Building

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Mechanics	hrs	$16.77	50	$839
Laborers	hrs	$12.51	50	$625
Small Tools	hrs	$1.35	96	$130
Cat 770 Haul Truck	hrs	$95.11	50	$4,756
Truck Drivers	hrs	$18.16	50	$908
Cat 988 Loader	hrs	$134.11	34	$4,560
Cat 988 Loader Operator	hrs	$17.21	34	$585
Cat 365 Excavator	hrs	$130.25	34	$4,429
Cat 365 Excavator Operator	hrs	$20.65	34	$702
PC 300 w/metal Shears	hrs	$147.18	52	$7,653
PC 300 Operator	hrs	$20.65	52	$1,074
Equipment Maintenance (Butler)	hrs	$18.46	170	$3,138
Concrete Removal	sf	$3.30	3,500	$11,550

Total Alternate Feed Circuit and Reagent Storage Building **$40,948**

Mill Yard Decontamination

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	238	$50,064
Cat 637 Scraper Operator	hrs	$19.31	238	$4,595
Cat 988 Loader	hrs	$134.11	60	$8,047
Cat 988 Loader Operator	hrs	$17.21	60	$1,033
Cat D8N Dozer With Ripper	hrs	$95.82	60	$5,749
Cat D8N Dozer Operator	hrs	$20.65	60	$1,239
Cat D7 Dozer	hrs	$81.27	60	$4,876
Cat D7 Dozer Operator	hrs	$20.65	60	$1,239
Cat 651 Waterwagon	hrs	$113.30	60	$6,798
Cat 651 Waterwagon Operator	hrs	$18.16	60	$1,090
Cat 14G Motorgrader	hrs	$71.34	60	$4,280
Cat 14G Motorgrader Operator	hrs	$20.62	60	$1,237
Equipment Maintenance (Butler)	hrs	$18.46	538	$9,930

Total Mill Yard Decontamination **$100,177**

Ore Storage Pad Decontamination

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	142	$29,870
Cat 637 Scraper Operator	hrs	$19.31	142	$2,742
Cat 988 Loader	hrs	$134.11	36	$4,828
Cat 988 Loader Operator	hrs	$17.21	36	$620
Cat D8N Dozer With Ripper	hrs	$95.82	36	$3,449
Cat D8N Dozer Operator	hrs	$20.65	36	$743
Cat D7 Dozer	hrs	$81.27	36	$2,926
Cat D7 Dozer Operator	hrs	$20.65	36	$743
Cat 651 Waterwagon	hrs	$113.30	36	$4,079
Cat 651 Waterwagon Operator	hrs	$18.16	36	$654
Cat 14G Motorgrader	hrs	$71.34	36	$2,568
Cat 14G Motorgrader Operator	hrs	$20.62	36	$742
Equipment Maintenance (Butler)	hrs	$18.46	322	$5,943

Total Ore Storage Pad Decontamination **$59,908**

MILL DECOMMISSIONING

Equipment Storage Area Cleanup

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	47	$9,887
Cat 637 Scraper Operator	hrs	$19.31	47	$907
Cat 988 Loader	hrs	$134.11	12	$1,609
Cat 988 Loader Operator	hrs	$17.21	12	$207
Cat D8N Dozer With Ripper	hrs	$95.82	12	$1,150
Cat D8N Dozer Operator	hrs	$20.65	12	$248
Cat D7 Dozer	hrs	$81.27	12	$975
Cat D7 Dozer Operator	hrs	$20.65	12	$248
Cat 651 Waterwagon	hrs	$113.30	12	$1,360
Cat 651 Waterwagon Operator	hrs	$18.16	12	$218
Cat 14G Motorgrader	hrs	$71.34	12	$856
Cat 14G Motorgrader Operator	hrs	$20.62	12	$247
Equipment Maintenance (Butler)	hrs	$18.46	107	$1,975

Total Equipment Storage Area Cleanup **$19,887**

Revegetate Mill Yard & Ore Pad

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	195	$41,019
Cat 637 Scraper Operator	hrs	$19.31	195	$3,765
Cat 988 Loader	hrs	$134.11	0	$0
Cat 988 Loader Operator	hrs	$17.21	0	$0
Cat D8N Dozer With Ripper	hrs	$95.82	49	$4,695
Cat D8N Dozer Operator	hrs	$20.65	49	$1,012
Cat D7 Dozer	hrs	$81.27	49	$3,982
Cat D7 Dozer Operator	hrs	$20.65	49	$1,012
Cat 651 Waterwagon	hrs	$113.30	49	$5,552
Cat 651 Waterwagon Operator	hrs	$18.16	49	$890
Cat 14G Motorgrader	hrs	$71.34	49	$3,495
Cat 14G Motorgrader Operator	hrs	$20.62	49	$1,010
Seed Mix	Acre	$322.50	50	$16,125
Equipment Maintenance (Butler)	hrs	$18.46	391	$7,217

Total Revegetate Mill Yard & Ore Pad **$89,774**

Total Demolition and Decontamination **$1,344,939**

CLEANUP OF WINDBLOWN CONTAMINATION

Scoping Survey

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Soil Samples	each	$50.00	100	$5,000
Survey Crew	hrs	$16.14	752	$12,140
Sample Crew	hrs	$16.14	1,312	$21,181

Total Scoping Survey **$38,322**

Characterization Survey

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Soil Samples	each	$50.00	472	$23,600
Sample Crew	hrs	$16.14	1,136	$18,340

Total Characterization Survey **$41,940**

Final Status Survey

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Soil Samples	each	$50.00	300	$15,000
Sample Crew	hrs	$16.14	3,552	$57,344

Total Final Status Survey **$72,344**

Windblown Cleanup

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	680	$143,039
Cat 637 Scraper Operator	hrs	$19.31	680	$13,129
Cat D8N Dozer With Ripper	hrs	$95.82	170	$16,289
Cat D8N Dozer Operator	hrs	$20.65	170	$3,511
Cat D7 Dozer	hrs	$81.27	170	$13,817
Cat D7 Dozer Operator	hrs	$20.65	170	$3,511
Cat 14G Motorgrader	hrs	$71.34	170	$12,127
Cat 14G Motorgrader Operator	hrs	$20.62	170	$3,506
Soil Samples	each	$50.00	500	$25,000
Survey Crew	hrs	$16.14	163	$2,632
Sample Crew	hrs	$16.14	83	$1,340
Equipment Maintenance (Butler)	hrs	$18.46	1,190	$21,964

Total Windblown Cleanup **$259,864**

Quality Control

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Quality Control Contractor	hrs	$62.00	2,080	**$128,960**

Total Quality Control **$128,960**

Total Cleanup Windblown Contamination **$541,430**

Conventional Ore Disposal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 770 Haul Truck (3)	hrs	$95.11	117	$11,143
Truck Drivers (3)	hrs	$18.16	117	$2,128
Cat 988 Loader	hrs	$134.11	39	$5,237
Cat 988 Loader Operator	hrs	$17.21	39	$672
Cat 651 Waterwagon	hrs	$113.30	39	$4,425
Cat 651 Waterwagon Operator	hrs	$18.16	39	$709
Cat 14G Motorgrader	hrs	$71.34	25	$1,783
Cat 14G Motorgrader Operator	hrs	$20.62	25	$516
Equipment Maintenance (Butler)	hrs	$18.46	220	$4,065

Total Conventional Ore Disposal **$30,679**

Total Quantity 22,963 Cubic Yards*
196 Cubic Yards per Truck per hour
117 Truck Hours

* 31,000 tons maximum projected for December 2011
Loose (in-truck)material unit weight assumed to be 100 lb/cubic

Alternate Feed Disposal

Cabot and FMRI Material

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 770 Haul Truck (3)	hrs	$95.11	67	$6,406
Truck Drivers (3)	hrs	$18.16	67	$1,223
Cat 988 Loader	hrs	$134.11	22	$3,011
Cat 988 Loader Operator	hrs	$17.21	22	$386
Cat 651 Waterwagon	hrs	$113.30	22	$2,544
Cat 651 Waterwagon Operator	hrs	$18.16	22	$408
Cat 14G Motorgrader	hrs	$71.34	10	$713
Cat 14G Motorgrader Operator	hrs	$20.62	10	$206
Equipment Maintenance (Butler)	hrs	$18.46	122	$2,257

Total Cabot & FMRI Material **$17,155**

Total Quantity 13,201 Cubic Yards* (as of 01/31/2011)
196 Cubic Yards per Truck per hour
67 Truck Hours

* Includes Linde, Cabot and FMRI

Cameco Barrels and Honeywell Barrels

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Equipment Operators	hrs	$18.16	306	$5,564
Flat Bed Trailer and Tractor*	hrs	$55.00	306	$16,851
Fork Lift (2)	hrs	$18.00	613	$11,030
Equipment Maintenance (Butler)	hrs	$18.46	306	$5,655

Total Cameco and honeywell Barrels **$39,100**

* includes operator

30,638 Barrels (as of 01/31/2011)
40 Barrels per load
0.4 Hours per load
306 Truck Hours

	Tons	lbs. per barrel	No. Drums
CaF2	1,083	727	2,978
Calcined	2,622	320	16,388
Regen	337	406	1,660
KF	1,484	309	9,605
UF4	2	547	7
	5,528		30,638

Sub-Total Alternate Feed Disposal **$56,254**

TOTAL MILL DECOMMISSIONING **$1,973,302**

Mill Decommissioning

Reviewed 09/22/11

1) Removal of contaminated material from Mill Yard

Assume:

-- 18 inches (1.5 feet) will have to be removed
-- Area (from CAD takeoff) = 1,643,453 sq. feet
37.7 acres

(1,643,453 square feet X 1.5 feet) / 27 = 91,303 cubic yards

Use 92,000 cubic yards

Use Haul Route 14 = 388 cubic yards per hour

(92,000 CY / 388 CY/hour) = 238 machine hours

2) Removal of contaminated material from Ore Pad

Assume:

-- 18 inches (1.5 feet) will have to be removed
-- Area (from CAD takeoff) = 976,780 sq. feet
22.4 acres

(967,780 square feet X 1.5 feet) / 27 = 54,266 cubic yards

Use 55,000 cubic yards

Use Haul Route 14 = 388 cubic yards per hour

(55,000 CY / 388 CY/hour) = 142 machine hours

3) Removal of contaminated material Equipment Storage Area

Assume:

-- 18 inches (1.5 feet) will have to be removed
-- Area assumed = 314,500 sq. feet
7.2 acres

(314,500 square feet X 1.5 feet) / 27 = 17,472 cubic yards

Use 18,000 cubic yards

Use Haul Route 14 = 388 cubic yards per hour

(18,000 CY / 388 CY/hour) = 47 machine hours

Mill Decommissioning (con't)

4) Demolition Equipment

-- Kamatsu PL400 (or Cat equivalent) with LaBounty Sheers (hydraulic)
-- Cat 365 Trackhoe with Grapples
-- Cat 769 Rock Trucks (4 each)
-- Cat 988 Loader (1 each)

5) Demolition Crew

-- Heavy Equipment Operators - PC400, Cat 365, Cat 988
-- Dust Control - 2 Laborers
-- Mechanics - Cut debris to reduce/avoid oversize and voids - 4 each
-- Truck Drivers - 4 each

6) Tool and Expendable Allowance, covering the following items:

-- Safety gear and supplies
-- Hand tools
-- Bottled Gases and Torches
-- Allow $1.30 per man-hour for all but Heavy Equipment Operators and Truck Drivers

7) Demolition Time Estimates

-- Mill Building	20 Days
-- Ore Bin	2 Days
-- SX Building	10 Days
-- CCD, Pre-Leach, Claricone	5 Days
-- Sample Plant	1 Day
-- Boiler House	5 Days
-- Vanadium EMF/Ox	2 Days
-- Shop/Warehouse	4 Days
-- Office/Lab Building	3 Days
-- Misc. & Bone Yard	4 Days
-- Decon Pads (2)	2 Days

8) Foundation Demolition

-- Assume area of structure times $3.30 per square foot
-- Areas by building as follows:

	Area, sq ft	$ Cost
Mill Building	37,500	$123,750
SX Building	55,970	$184,701
CCD, Pre-Leach, Claricone	15,000	$ 49,500
Shop/Warehouse	19,300	$ 63,690
Office*	12,100	$ 15,125
Sample Plant	4,200	$ 13,860
Vanadium EMF/Ox	1,200	$ 3,960
Boiler house	2,900	$ 9,570
Decon Pads	1,350	$ 4,455

-- Labor at $2.75, Equipment at $0.55
-- * Labor at $0.70, Equipment at $0.55

Mill Decommissioning (con't)

9) Revegetation

Assume:

-- Mill Yard Area		1,643,453	sq. feet
-- Ore Pad Area		976,780	sq. feet
-- Equipment Storage Area		314,500	sq. feet
	Total:	2,934,733	sq. feet

-- Place 6 inches of Topsoil
-- Cat 637 Scraper, Haul Route #4

[2,934,733] sq.feet x 0.5 feet] / [27 cubic feet / cubic Yard] 54,347 cu yds

Use 54,400 cu yds

Use Haul Route 15 279 CY/hour

54,400 / 279 cu yds per hour = 195 Scraper hours

MILL DECOMMISSIONING

WIND BLOWN CONTAMINATION

1) Scoping Survey

- INITIAL SURVEY WILL BE CONDUCTED ON A AREA TO BE determined But for this estimate it is defined as an area approximated by a perimeter 1000 feet outside of the RESTRICTED AREA BOUNDRIES This is CONSERVATIVE SINCE WIND BLOWN CONTAMINATION WOULD most likely be found DOWN WIND of the SITE, which is on the East side of the restricted area

- AREA DETERMINED by CAD. = 38,728,000 ft²

AREA Requiring WIND BLOWN SURVEY is

TOTAL AREA –	38,728,000 ft²
CELL 4A	1,909,000 ft²
Cell 3	3,234,000 ft²
Cell 2	2,987,000 ft²
Cell 1	2,576,000 ft²
MILL YARD	1,643,000 ft²
ORE STORAGE PAD	977,000 ft²
	25,402,000 ft²

- ASSUME PLACEMENT OF STANDARD NRC/EPA 10 x 10 meter grid (1076
- ASSUME Scoping SURVEY Completed by SCANNING WITH NAI meter Held CLOSE TO Ground while traveling at ± 0.5 m/sec as per GUIDANCE IN NUREG 5849.

- SURVEY CREW of 2 Capable of SETTING 500 grid POINTS per Day

$$\frac{25,402,000\ ft^2}{1076\ ft^2} = 23,600 \text{ Grid POINTS}$$

$$\frac{23,600 \text{ POINTS}}{500 \text{ POINTS/DAY}} \cong 47 \text{ DAYS}$$

2 men x 8 hrs x 47 Days = **752 man hrs** – SURVEY

- SCANNING CREW CONSISTS of 2 men –

- COVERAGE 0.5 m/sec x 60 sec/min x 8 hrs/day = 14,400 m

ASSUME .8 eff. factor

14,400 m/day x .8 = 11,520 m/day

Wind Blown Contamination - Scoping Survey

- Assume 30 meter Path for each 10 x 10 grid to cover 10% of surface area (per NUREG 5849)

Crew can scan $\frac{11,520 \text{ m/day}}{30 \text{ m/grid}} = 384 \text{ Grids/day}$

$\therefore \frac{23,600 \text{ Grids}}{384 \text{ Grids/day}} \cong 62 \text{ Day to Complete initial Scan}$

$62 \text{ Days} \times 2 \text{ men} \times 8 \frac{\text{hrs}}{\text{day}} = \boxed{992 \text{ man hrs}}$

- Assume map production + Data Reduction take Scanning Crew an additional 20 Days to Complete

$20 \text{ Days} \times 2 \text{ men} \times 8 \text{ hrs/day} = \boxed{320 \text{ man Hrs}}$

Total Scanning Man hrs = $\boxed{1312}$

- Scoping Survey will require 100 Confirmatory Soil Samples at a Cost of $ 50.00 /each (Unit + Ra 226)
- Samples can be taken at same time as Scanning takes place.

2) Characterization Survey -

Survey of areas identified as affected areas by Scop. Survey

- Assume:
  - 20% of Area will require additional Sampling
  - Probing will be use, 4 probe sites /grid (Bore, Cement)
  - Soil Samples will be required on 10% of Grid Samples
    - Samples will be for Unit + Ra 226
    - Cost/Sample = $50 (Lab)

$\frac{25,402,000 \text{ ft}^2}{1076 \text{ ft}^2/\text{grid}} = 23,608 \text{ Grids} \times .2 = 4722 \text{ Grids}$

- Crew can cover 100 Grids/day probing
- Crew can take 25 Soil Samples/day

Probing takes $\frac{4722 \text{ Grids}}{100 \text{ Grids/day}} \cong \boxed{47 \text{ Days}}$

$47 \times 2 \times 8 = \boxed{752 \text{ hrs}}$

WINDBLOWN CONTAMINATION – CHARACTERIZATION SURVEY:

Soil Samples are 10% of Probe grids

$4721 \times .10 = 472$ Soil Samples

$\frac{472 \text{ Samples}}{25 \text{ Samples/day}} \cong 19 \text{ days} \times 8 \text{hrs} \times 2 = \boxed{304 \text{ man hrs}}$

Map Preparation + Data Reduction time estimate 5 days:

$5 \text{ days} \times 2 \text{ mo} \times 8 \text{ hrs} = \boxed{80 \text{ man hrs}}$

TOTAL HRS = 1136 man hrs

3) REMEDIATION CONTROL SURVEY

- Provided by QA/QC Contractor

4) FINAL STATUS SURVEY

- IN ORDER TO GAIN FINAL RELEASE, WILL REQUIRE 4 GAMMA ESTIMATES PER EACH 100 m^2 GRID SQUARE IN THE AFFECTED AREA (20% of Area)
- 200 RANDOM SOIL SAMPLES WILL BE GATHERED FROM THE UNAFFECTED AREAS (80% of Area)
- WILL REQUIRE 100 CONFIRMATORY SAMPLES FOR THE AFFECTED AREA

Therefore:

$25{,}402 \div 1076 \text{ ft}^2/100\text{m}^2$	=	23,607 GRIDS TOTAL
$23{,}607 \times 0.20$	=	4,721 GRIDS AFFECTED
$4{,}721 \times 4$	=	18,886 GAMMA ESTIMATES.

- CREW CAN TAKE 100 PROBE SAMPLES/DAY
  ∴ $18886 \div 100 = 188.8$ days 190 days
- CREW CAN TAKE 25 SOIL SAMPLES/DAY
  ∴ $[200 + 100] \div 25 = 12$ days.
- ASSUME 20 additional DAYS FOR DATA REDUCTION & REPORT GENERATION

E/PROJECT..... Date..... Calc by..... Sheet..... of.

MILL DECOMISSIONING
WIND BLOWN CONTAMINATION (Cont)

5) CLEAN-UP.

- ASSUME 20% OF AREA SURVEYED REQUIRES CORRECTIVE ACTION
- 6' OF SOIL WILL BE STRIPPED

Therefore $25{,}402\ M^2 \times 0.20 \times 0.5\ Ft = 2{,}540{,}000\ ft^3$

$\approx 94{,}080\ yd^3$

say $\boxed{94{,}100\ yd^3}$

- AS IT IS NOT KNOWN WHAT AREAS MAY BE CONTAMINATED, ASSUME THE USE OF 637 HAUL ROUTE #6 TO BE CONSERVATIVE
- BECAUSE OF THE POTENTIAL FOR IRREGULAR & DISCONNECTED AREAS, EFFICIENCY WILL BE ONLY 50% OF REGULAR 637 EFFICIENCY.

Therefore $277\ yd^3/hr \times 0.50 = 138.5\ yd^3/hr$

say $\boxed{138\ yd^3/hr}$

Therefore $94{,}100\ yd^3 \div 138\ yd^3/hr = 681$ scraper hours

say $\boxed{680\ hours}$

DENISON MINES

WMM Inventory Accounting Summary
January 2011

WMM ALTERNATE FEED RECEIPTS

FOR THE MONTH ENDING January 31, 2011

Dry Tons Received

	January	February	March	April	May	June	July	August	September	October	November	December	Total YTD Received
Cabot	488												488
CaF2	-												-
Calcined Product- Cameco	273												273
Fansteel/FMRI	-												-
KF Product- Cameco	29												29
Regen Product- Cameco	13												13
UF4 Material- Cameco	-												-
	803	-	-	-	-	-	-	-	-	-	-	-	803

WMM 11e2 Material Receipts

FOR THE MONTH ENDING January 31, 2011

	January	February	March	April	May	June	July	August	September	October	November	December	Total YTD Received
Crow Butte- Cameco	-												-
Mestena	65												65
Smith Ranch- Cameco	-												-
South Texas Mining Venture	-												-
URI	-												-
	65	-	-	-	-	-	-	-	-	-	-	-	65

WMM ALTERNATE FEED Ending Inventory

FOR THE MONTH ENDING January 31, 2011

	2011 Beginning Balance	2011 YTD Received	2011 YTD Tons Fed	2011 Adjustments	Ending Material Balance	Average U3O8 Grade
Cabot	6,157	488	-	-	6,645	0.3-0.6% content
CaF2- Honeywell	1,083	-	-	-	1,083	0.5 -3.0% content
Calcined Product- Cameco	2,349	273	-	-	2,621	4.5% content
Fansteel/FMRI	11,177	-	-	-	11,177	0.25-0.5% content
KF Product- Cameco	1,455	29	-	-	1,485	1% content
Regen Product- Cameco	324	13	-	-	337	7-8.0% content
UF4 Material- Cameco	2	-	-	-	2	65-70% content
	22,547	803	-		23,350	

INVOICE

CARHART FEED & SEED, INC.
P.O. BOX 55
DOVE, CREEK, CO 81324

(970) 677-2233

SOLD TO:

INTUSO
DENISON MINES (USA) CORP.
1050 17TH STREET
SUITE 950
DENVER, CO. 80265

INVOICE NUMBER	311190
INVOICE DATE	03.30.09
SALESPERSON NO.	2
DUE DATE	04.11.09
DISCOUNT DATE	03.30.09
PAGE	1
Time	11:49 AM

ITEM NUMBER	DESCRIPTION	QUANTITY	PRICE		EXTENSION
05-999-999	GRASS SEED MIX	114.53	20.7900		2381.02
17-999-999	FREIGHT	1.00	49.7500		49.75
SUNDAY MINE COMPLEX					

SUBTOTAL		SALES TAX	INVOICE TOTAL	AMOUNT PAID	BALANCE	CHANGE DUE
2430.83			2430.83		2430.83	

DENISON MINES (USA) CORP.

37238

Vendor ID	Name	Payment Number	Cheque Date	Document Number
CAR004	Carhart Feed and Seed	00000000000009491	4/17/2009	0037238

Our Voucher Number	Date	Amount	Amount Paid	Discount	Net Amount Paid
311190	3/30/2009	$2,430.83	$2,430.83	$0.00	$2,430.83
311687	4/7/2009	$9.47	$9.47	$0.00	$9.47
		$2,440.30	$2,440.30	$0.00	$2,440.30

Harold Roberts

From: Christy Woodward
Sent: Thursday, June 25, 2009 3:45 PM
To: Harold Roberts
Subject: Seed

Dean

On average, we have been paying $21 per pound of seed and apply it at $15 lbs per acre (also an average).

Christy Woodward
Environmental Coordinator

t: (303) 389-4136 | c: (303) 549-9722 | f: (303) 389-4125
1050 17th Street, Suite 950, Denver, CO 80265

DENISON MINES (USA) CORP
www.denisonmines.com

Cell 1

RECLAMATION OF CELL 1

Dewatering of Cell 1

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Dewatering of Cell 1	hrs	$0.48	62,400	**$30,000**

Total Dewatering of Cell 1 **$30,000**

Crystal Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 770 Truck	hrs	$95.11	2,157	$205,159
Truck Drivers	hrs	$16.67	2,157	$35,966
Cat 988 Loader	hrs	$134.11	539	$72,286
Cat 988 Loader Operator	hrs	$17.21	539	$9,278
Cat D8N Dozer With Ripper	hrs	$95.82	539	$51,646
Cat D8N Dozer Operator	hrs	$20.65	539	$11,132
Cat 365 Excavator	hrs	$130.25	539	$70,206
Cat 365 Excavator Operator	hrs	$20.65	539	$11,132
Cat 651 Waterwagon	hrs	$113.30	539	$61,068
Cat 651 Waterwagon Operator	hrs	$18.16	539	$9,789
Cat 14G Motorgrader	hrs	$71.34	539	$38,450
Cat 14G Motorgrader Operator	hrs	$20.62	539	$11,115
Equipment Maintenance (Butler)	hrs	$18.46	4,852	$89,554

Total Crystal Removal **$676,779**

Contaminated Materials Removal

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	386	$81,196
Cat 637 Scraper Operator	hrs	$19.31	386	$7,453
Cat D8N Dozer With Ripper	hrs	$95.82	97	$9,294
Cat D8N Dozer Operator	hrs	$20.65	97	$2,003
Cat 825C Compactor	hrs	$97.64	97	$9,471
Cat 825C Compactor Operator	hrs	$14.22	97	$1,379
Cat 651 Waterwagon	hrs	$113.30	97	$10,990
Cat 651 Waterwagon Operator	hrs	$18.16	97	$1,762
Cat 14G Motorgrader	hrs	$71.34	97	$6,920
Cat 14G Motorgrader Operator	hrs	$20.62	97	$2,000
Equipment Maintenance (Butler)	hrs	$18.46	774	$14,286

Total Contaminated Materials Removal **$146,754**

Topsoil Application

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	82	$17,249
Cat 637 Scraper Operator	hrs	$19.31	82	$1,583
Cat D8N Dozer With Ripper	hrs	$95.82	40	$3,833
Cat D8N Dozer Operator	hrs	$20.65	40	$826
Cat 651 Waterwagon	hrs	$113.30	40	$4,532
Cat 651 Waterwagon Operator	hrs	$18.16	40	$726
Cat 14G Motorgrader	hrs	$71.34	40	$2,853
Cat 14G Motorgrader Operator	hrs	$20.62	40	$825
Equipment Maintenance (Butler)	hrs	$18.46	202	$3,728

Total Topsoil Application **$36,156**

RECLAMATION OF CELL 1

Construct Channel

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	8	$1,683
Cat 637 Scraper Operator	hrs	$19.31	8	$154
Cat 770 Truck	hrs	$95.11	148	$14,051
Truck Drivers	hrs	$16.67	148	$2,463
Cat 988 Loader	hrs	$134.11	37	$4,953
Cat 988 Loader Operator	hrs	$17.21	37	$636
Drilling & Blasting Contractor	BCY	$2.69	13,000	$34,950
Cat 14G Motorgrader	hrs	$71.34	37	$2,635
Cat 14G Motorgrader Operator	hrs	$20.62	37	$762
Cat D8N Dozer With Ripper	hrs	$95.82	39	$3,730
Cat D8N Dozer Operator	hrs	$20.65	39	$804
Equipment Maintenance (Butler)	hrs	$18.46	269	$4,956

Total Construct Channel **$71,777**

Place Clay Liner

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	0	$0
Cat 637 Scraper Operators	hrs	$19.31	0	$0
Cat 825 Compactor	hrs	$97.64	60	$5,859
Cat 825 Compactor Operator	hrs	$14.22	60	$853
Cat D8N Dozer With Ripper	hrs	$95.82	60	$5,749
Cat D8N Dozer Operator	hrs	$20.65	60	$1,239
Cat D7 Dozer	hrs	$81.27	0	$0
Cat D7 Dozer Operator	hrs	$20.65	0	$0
Cat 651 Waterwagon	hrs	$113.30	60	$6,798
Cat 651 Waterwagon Operator	hrs	$18.16	60	$1,090
Cat 980 Loader	hrs	$93.97	60	$5,638
Cat 980 Loader Operator	hrs	$17.21	60	$1,033
5000 Gallon Water Truck	hrs	$65.95	30	$1,978
5000 Gallon Water Truck Operator	hrs	$18.16	30	$545
Highway Trucks	hrs	$83.33	435	$36,247
Truck Drivers	hrs	$16.67	435	$7,253
Cat 14G Motorgrader	hrs	$71.34	85	$6,063
Cat 14G Motorgrader Operator	hrs	$20.62	85	$1,753
Equipment Maintenance (Butler)	hrs	$18.46	355	$6,552

Total Place Clay Liner **$88,650**

Place Radon Attenuation and Grading Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	150	$31,553
Cat 637 Scraper Operators	hrs	$19.31	150	$2,896
Cat D8N Dozer With Ripper	hrs	$81.27	38	$3,088
Cat D8N Dozer Operator	hrs	$20.65	38	$785
Cat D7 Dozer	hrs	$71.34	38	$2,711
Cat D7 Dozer Operator	hrs	$20.65	38	$785
Cat 14G Motorgrader	hrs	$71.34	38	$2,711
Cat 14G Motorgrader Operator	hrs	$20.62	38	$784
Equipment Maintenance (Butler)	hrs	$18.46	264	$4,873

Total Place Radon Attenuation and Grading Layer **$50,185**

RECLAMATION OF CELL 1

Place Compacted Radon Attenuation Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	176	$37,022
Cat 637 Scraper Operators	hrs	$19.31	176	$3,398
Cat 825 Compactor	hrs	$97.64	44	$4,296
Cat 825 Compactor Operator	hrs	$14.22	44	$626
Cat D8N Dozer With Ripper	hrs	$95.82	44	$4,216
Cat D8N Dozer Operator	hrs	$20.65	44	$909
Cat D7 Dozer	hrs	$81.27	44	$3,576
Cat D7 Dozer Operator	hrs	$20.65	44	$909
Cat 651 Waterwagon	hrs	$113.30	44	$4,985
Cat 651 Waterwagon Operator	hrs	$18.16	44	$799
Cat 14G Motorgrader	hrs	$71.34	44	$3,139
Cat 14G Motorgrader Operator	hrs	$20.62	44	$907
Equipment Maintenance (Butler)	hrs	$18.46	396	$7,309

Total Place Compacted Radon Attenuation Layer **$72,091**

Place Water Storage Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	172	$36,181
Cat 637 Scraper Operators	hrs	$19.31	172	$3,321
Cat D8N Dozer With Ripper	hrs	$95.82	43	$4,120
Cat D8N Dozer Operator	hrs	$20.65	43	$888
Cat D7 Dozer	hrs	$81.27	43	$3,495
Cat D7 Dozer Operator	hrs	$20.65	43	$888
Cat 14G Motorgrader	hrs	$71.34	43	$3,067
Cat 14G Motorgrader Operator	hrs	$20.62	43	$887
Equipment Maintenance (Butler)	hrs	$18.46	301	$5,556

Total Place Water Storage Layer **$58,402**

RECLAMATION OF CELL 1

Place Erosion Protection Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	15	$3,155
Cat 637 Scraper Operators	hrs	$19.31	15	$290
Cat D8N Dozer With Ripper	hrs	$95.82	5	$479
Cat D8N Dozer Operator	hrs	$20.65	5	$103
Cat D7 Dozer	hrs	$81.27	5	$406
Cat D7 Dozer Operator	hrs	$20.65	5	$103
Cat 14G Motorgrader	hrs	$71.34	15	$1,070
Cat 14G Motorgrader Operator	hrs	$20.62	15	$309
Rock Mulch Cost Delivered	CY	$12.77	2,000	$25,532
Equipment Maintenance (Butler)	hrs	$18.46	40	$738

Total Place Erosion Protection Layer **$32,186**

Place Compacted Outslope Fill

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	86	$18,090
Cat 637 Scraper Operators	hrs	$19.31	86	$1,660
Cat 825 Compactor	hrs	$97.64	22	$2,148
Cat 825 Compactor Operator	hrs	$14.22	22	$313
Cat D8N Dozer With Ripper	hrs	$81.27	22	$1,788
Cat D8N Dozer Operator	hrs	$20.65	22	$454
Cat D7 Dozer	hrs	$81.27	22	$1,788
Cat D7 Dozer Operator	hrs	$20.65	22	$454
Cat 651 Waterwagon	hrs	$113.30	22	$2,493
Cat 651 Waterwagon Operator	hrs	$18.16	22	$400
Cat 14G Motorgrader	hrs	$71.34	22	$1,569
Cat 14G Motorgrader Operator	hrs	$20.62	22	$454
Equipment Maintenance (Butler)	hrs	$18.46	196	$3,618

Total Place Compacted Outslope Fill **$35,229**

Rock Armor and Rip Rap Bedding Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat D7 Dozer	hrs	$81.27	70	$5,689
Cat D7 Dozer Operator	hrs	$20.65	70	$1,446
Cat 651 Waterwagon	hrs	$113.30	70	$7,931
Cat 651 Waterwagon Operator	hrs	$18.16	70	$1,271
Cat 14G Motorgrader	hrs	$71.34	70	$4,993
Cat 14G Motorgrader Operator	hrs	$20.62	70	$1,444
Rock Cost Delivered	CY	$12.77	15,000	$191,489
Equipment Maintenance (Butler)	hrs	$18.46	210	$3,876

Total Place Rock Armor and Rip Rap Bedding Layer **$218,139**

Quality Control

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Quality Control Contractor	hrs	$62.00	800	**$49,600**

Total Quality Control **$49,600**

TOTAL RECLAMATION OF CELL 1 **$1,565,949**

Notes and Assumptions:

- Quality control contractor is assumed to be necessary for duration of material placement plus 20% for reporting.
- To blend topsoil and rock mulch in the Erosion Protection Layer, it is assumed that materials will be windrowed and "bladed" three times by motograder.
- Assume trucks can haul rock away at 4 round trips per hour, 22 CY per trip

Volume Calculation - Cell 1

Updated 09/23/11

1) Area of Cell 1 - 656,664 sq ft = 15.07 acres

2) Assumptions

- All volumes are presented in bank cubic yards (BCY) unless otherwise noted

* Indicates volume is presented as in-place (compacted) volume

- Rock for rip rap armor, rip rap bedding layer and rock mulch will come from an off-site gravel source one (1) mile north of Blanding. Rock will be produced through screening, stockpiled and trucked to the site at the time of use. Belly dump trucks will dump gravel in windrows on the top and sides of the Cell.

- Assume rock swell factor of 1.5

- Assume rock is hauled away in highway rucks

3) Radon Attenuation and Grading Layer remaining to be placed

Random fill placed at 80% relative compaction = 57,226 cubic yards

Use 58,000 cubic yards

4) Compacted Radon Attenuation Layer

Random fill placed at 95% relative compaction = 67,955 cubic yards

Use 68,000 cubic yards

5) Water Storage/Biointrusion/Frost Protection/Radon Attenuation Layer

Random fill placed at 85% relative compaction = 85,123 cubic yards

Use 86,000 cubic yards

6) Erosion Protection Layer

Topsoil mixed with 25% gravel placed at 85% relative compaction = 7,927 cubic yards

Use 8,000 cubic yards

7) Cell 1 North Outslope

Average height 18 feet
Length 2,450 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 324 square feet

(324 square feet X 2,450 linear feet) = 793,800 cubic feet/ 27 = 32,859 cubic yards

Use 32,900 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 45 square feet

(65 square feet X 2,450 linear feet) = 110,250 cubic feet/ 27 = 4,083 cubic yards *

Use 4,100 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 82 square feet

(118 square feet X 2,450 linear feet) = 200,900 cubic feet/ 27 = 7,441 cubic yards *

Use 7,500 cubic yards *

C) Rip Rap Apron at toe of slope

Rip Rap Apron wraps around perimerter of Cell 1. Length = 2,910 feet
Width = 10 feet

a) Rip Rap Armor

Thickness = 2 feet

(2 ft X 10 ft X 2,910 ft) = 58,200 cubic feet/ 27 = 2,156 cubic yards *

Use 2,200 cubic yards *

Total North Outslope Rip Rap Bedding Layer 4,100 cubic yards *
Total North Outslope Rip Rap Armor 9,700 cubic yards *

8) Removal of Contaminated Material

Volume as determined in hand calculations 95,500 cubic yards

Volume Summary - Cell 1

	Radon Attenuation and Grading Layer (CY)	Compacted Radon Attenuation Layer (CY)	Water Storage Layer (CY)	Compacted Outslope Fill (CY)	**Total Random Fill (CY)**	Erosion Protection Layer (CY) *	Rip Rap Bedding Layer (CY) *	Rip Rap Armor (CY) *	Contaminated Material (CY)
Top of Cell	58,000	68,000	86,000	0	**212,000**	8,000	0	0	
North Outslope	0	0	0	32,900	**32,900**	0	4,100	9,700	
Other	0	0	0	0	**0**	0	0	0	95,500
Totals	58,000	68,000	86,000	33,000	245,000	8,000	5,000	10,000	96,000

Cell 1 Reclamation

Cat 637 Resource Requirements

	Volume (CY)	Route	CY/hr	%	Equip. Hr.
Radon Attenuation and Grading Layer					
Tailings Surface	58,000	7	388	100%	150
Compacted Radon Attenuation Layer					
Tailings Surface	68,000	7	388	100%	176
Water Storage Layer					
Tailings Surface	86,000	7	388	100%	222
Compacted Outslope Fill					
Outslopes	33,000	7	388	100%	86
Erosion Protection Layer [1]					
Tailings Surface	6,000	13	410	100%	15
Contaminated Material Removal					
Cell 1	96,000	16	249	100%	386

[1] Volume includes topsoil only (does not include rock mulch)

[2] Rock mulch, rip rap armor, and rip rap bedding layer will be hauled using highway trucks

Rock Mulch, Rip Rap Armor, and Rip Rap Bedding Layer
Production Cell 1

17,000 cubic yards (CY)

38 CY per hour times 8 trucks

304 CY per hour delivered

Assume 25% extra time for spreading, loading and screen wait

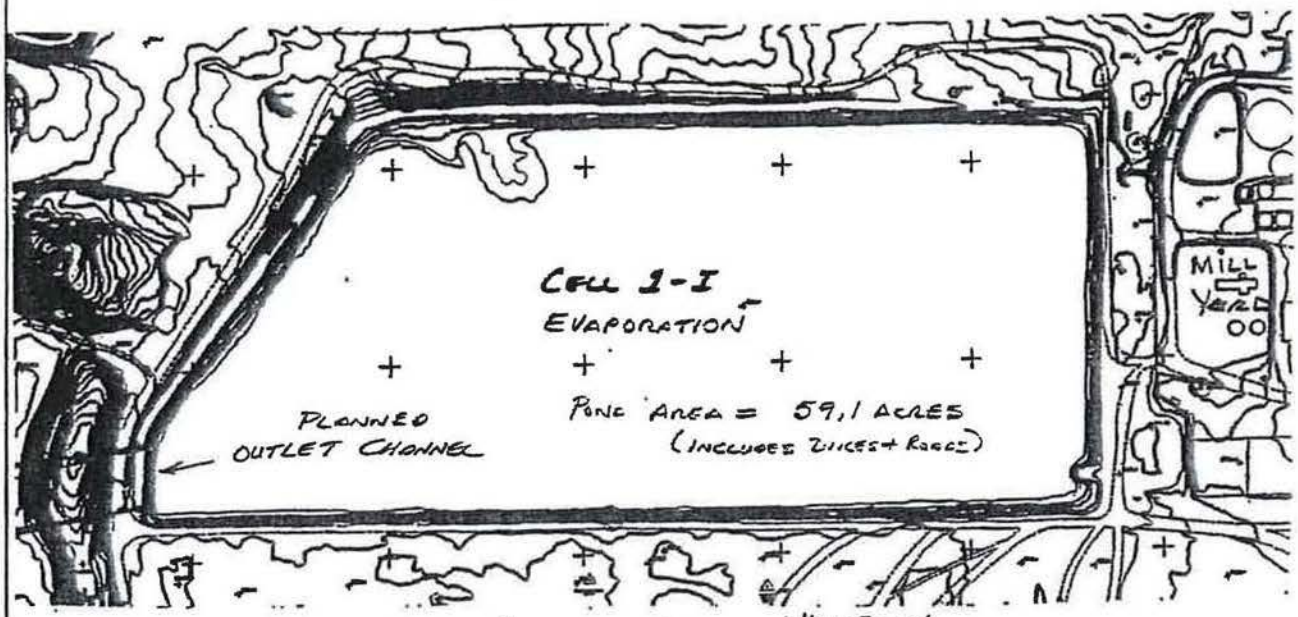
304 / 1.25 243.2 CY per hour 70 Hours

Cell 1 Discharge Channel

Soil to be Removed:	2,080	BCY	=	2,210	LCY
				Use	3,000 cubic yards
Rock to be Removed:	8,540	BCY	=	12,810	LCY
				Use	13,000 cubic yards

	Volume (CY)	Route	CY/hr	%	Equip. Hr.
Soil to be Removed:	3,000	7	388	100%	8

CELL 1 VOLUME CALCULATION



CELL 1 – SCALE 1" = 500'

1) CRYSTAL VOLUME + LINER COVER

- CRYSTAL THICKNESS BASED ON MULTIPLE CROSSTHAN OF TOP OF CRYSTAL LAYER AND AREAL MAPPING → ASSUME 3 ft THICK
- SOIL COVER OVER PVC. LINER 1½' by design and as built's
- LINER CRYSTALS AND SOIL COVER all picked up at same time.

$$\text{AREA OF POND} \quad \frac{2,575,703\ ft^2 \times (3ft + 1.5ft)}{27\ ft^2/cy} = 429,283\ cy$$

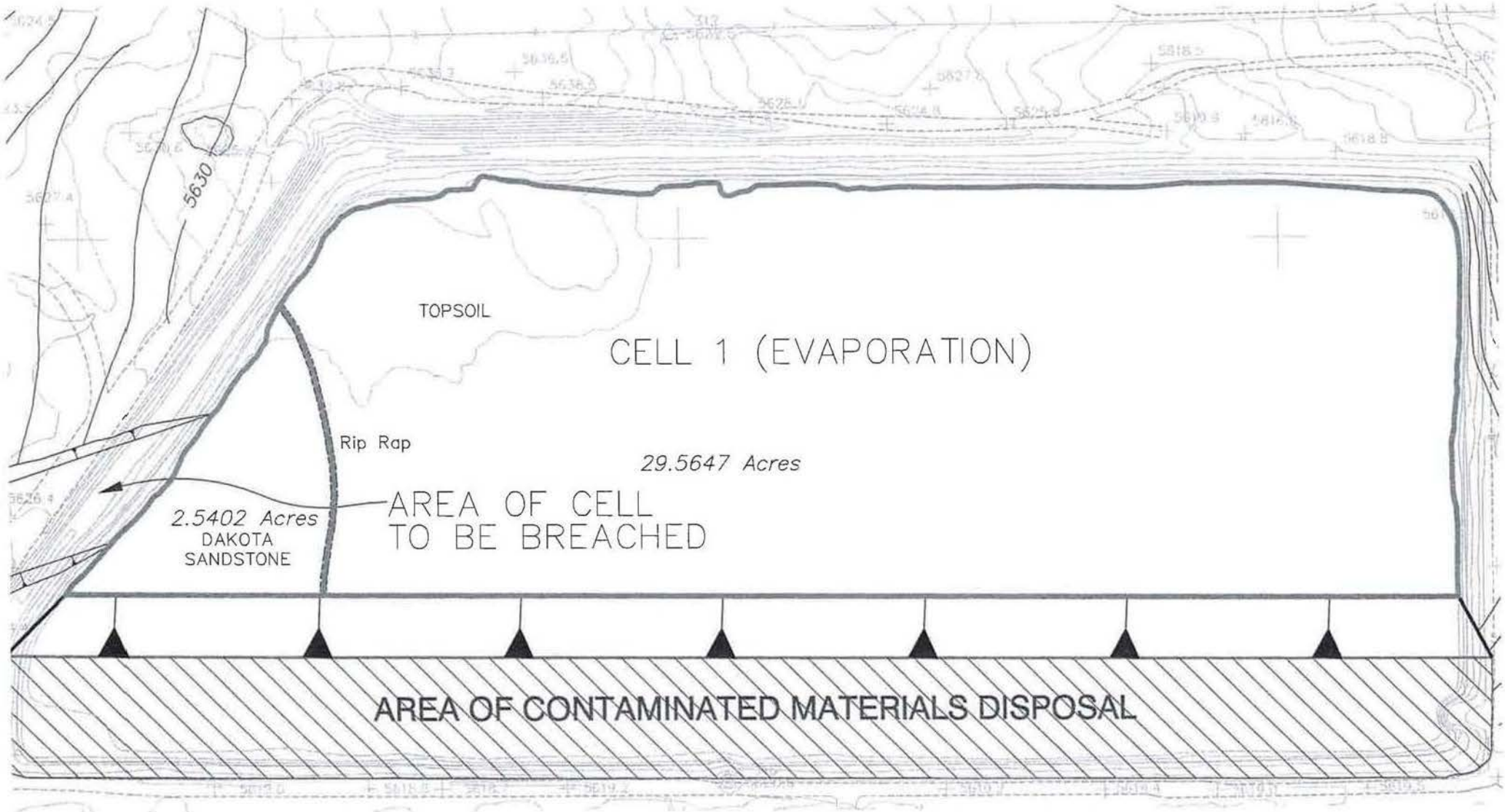
→ **429,300 cy**

2) VOLUME OF CONTAMINATED MATERIAL UNDER LINER

- ASSUME for purposes of this estimate that 1 ft of contaminated material must be removed from under liner for whole cell

$$\frac{2,575,703\ ft^2 \times 1ft}{27\ ft^3/cy} = 95,396\ cy \rightarrow \boxed{95,400\ cy}$$

3) TIME REQUIRED TO HAUL Xyls + LINER COVER. ASSUMING the use of 4-769 TRUCKS, a 27 SL. TRACKHOE, 988 LOADER, ASSUME HAUL ROUTE # 1 for production (199 cy/hr) TRUCK hr)


5630
TOPSOIL
CELL 1 (EVAPORATION)
Rip Rap
29.5647 Acres
AREA OF CELL
TO BE BREACHED
2.5402 Acres
DAKOTA
SANDSTONE
AREA OF CONTAMINATED MATERIALS DISPOSAL

MWH

By SAM Date 9/20/11 Client Dennison Sheet 1 of 2

Chkd. By Description Cell 1 Channel Quantity Estimates Job No. 1009740

Channel Dimensions

Length: 470 ft
Bottom Width: 150 ft
Side Slopes: 3H:1V

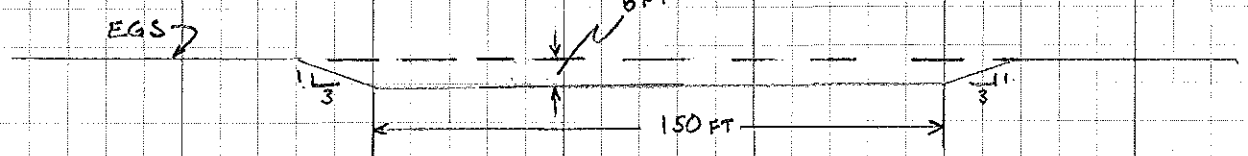
At Sta 0+00: All Excavation in Rock
Depth = 6ft

At Sta 4+70: Depth of Rock Excavation = 15 ft
Channel Depth = 3ft

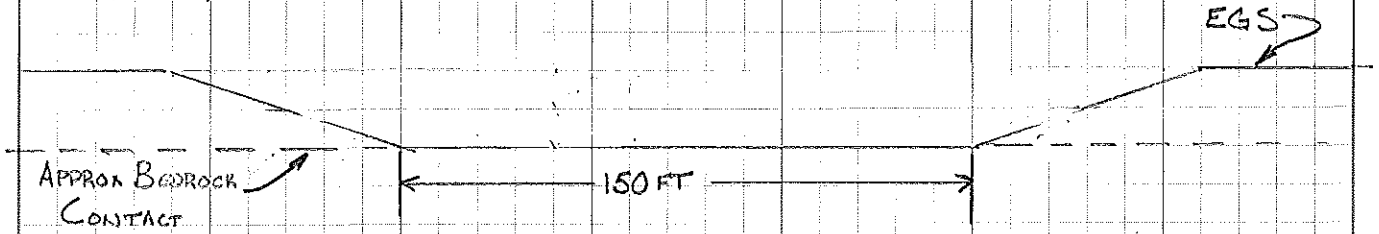
Assume Bedrock Slopes Linearly Between Sta 0+00 and 4+70

Sta 0+00 Cross-Section:

Cross-Sectional Area (Soil): 0 ft²
Cross-Sectional Area (Rock): 1,008 ft²



Sta 4+70 Cross-Section:



Cross-Sectional Area (Soil): 477 ft²
Cross-Sectional Area (Rock): 0 ft²

MWH®

By SAM Date 9/20/11 Client DENISON Sheet 2 of 2

Chkd. By _____ Description CELL 1 CHANNEL QUANTITY ESTIMATE Job No. 1009740

STA 4+70 : CROSS-SECTIONAL AREA : 477 FT^2 (SOIL)
STA 2+35 : CROSS-SECTIONAL AREA : 477 FT^2 (ROCK)
STA 0+00 : CROSS-SECTIONAL AREA : 1,008 FT^2 (ROCK)

VOLUMES:

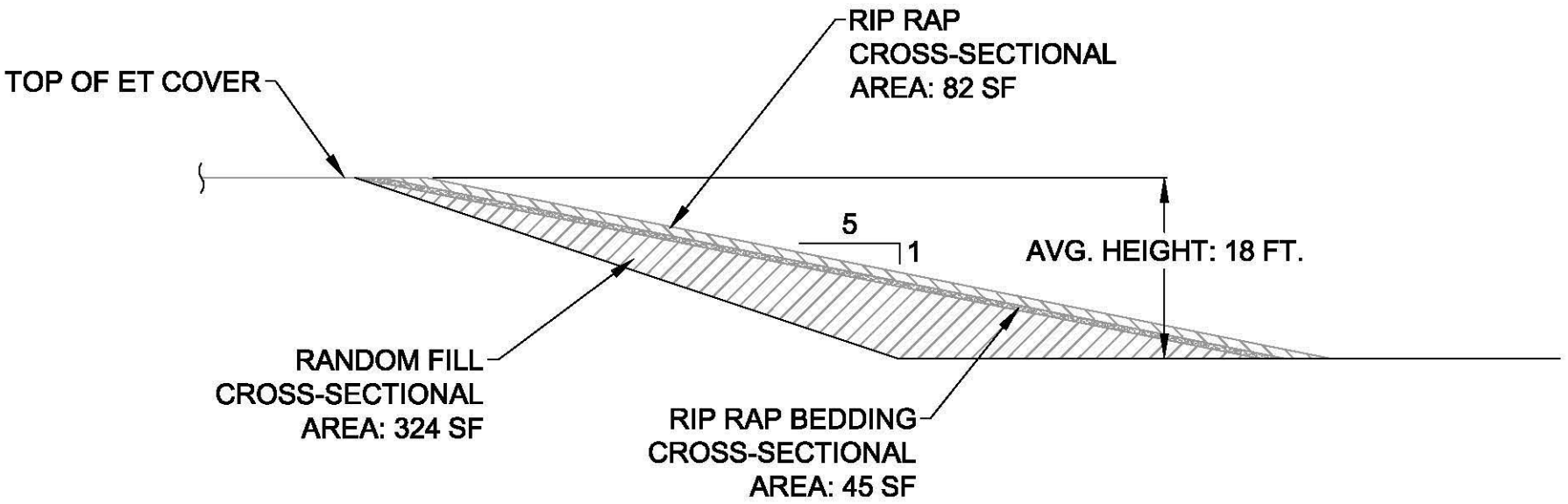
STA 0+00 to 2+35 : $\text{ROCK} = \frac{(1{,}008\ FT^2 + 477\ FT^2)}{2} \cdot (235\ FT) \cdot \left(\frac{1\ yd^3}{27\ FT^3}\right) = 6{,}462.5\ yd^3$

$\text{SOIL} = 0$

STA 2+35 to 4+70 : $\text{ROCK} = \frac{(477\ FT^2 + 0\ FT^2)}{2} \cdot (235\ FT) \cdot \left(\frac{1\ yd^3}{27\ FT^3}\right) = 2{,}075.8\ yd^3$

$\text{SOIL} = \frac{(0\ FT^2 + 477\ FT^2)}{2} \cdot (235\ FT) \cdot \left(\frac{1\ yd^3}{27\ FT^3}\right) = 2{,}075.8\ yd^3$

CELL 1 NORTHERN OUTSLOPE
TYPICAL CROSS-SECTION



DENISON MINES
Denison Mines (USA) Corp

PROJECT: WHITE MESA MILL RECLAMATION

TITLE: SLOPE AREA CALCULATIONS
CELL 1

MWH

DATE: SEP 2011

FILE NAME: 1009740 BORROW

Franklin Drilling & Blasting, Inc.

P.O. Box 2246
Durango, CO 81392
Phone: 970-259-5620
Fax: 970-259-1304
Mobile: 970-259-4167
Email: office@franklinblasting.com

February 18, 2011

Ms. Dawn Gagon
Denison Mines
PO Box 809
Blanding, UT 84511

Re: Spillway Blasting in Blanding, Utah

We received your e-mail request for cost of drilling and blasting a spillway at your Mine site in Blanding, Utah. The information we now have is an area of approximately 150' wide by 1200' long with an average depth of about 10', generating in the neighborhood of 67,000 cubic yards in place.

If this is correct, with a 9 feet by 9 feet pattern our price would be $2.25 per in-bank cubic yard for dry conditions. If water infiltrates into the bore holes and requires wet hole product, we will charge an additional fee. The fee will be the invoice cost of wet hole product delivered, plus 25% mark up to cover additional labor.

This price reflects higher fuel and nitrogen prices today. We do not know how long these prices will remain at these levels, so we will qualify our bid. This bid will be good to October 1, 2011.

Our mobilization for 2 drills and supplies will be $7000. Payable when we mob in and start.

Production rates of about 2000 cubic yards per drill/per day can be expected. With two drills drilling, and a 90% availability rate, that will be about 3600 cubic yards drilled per day. This should amount to about 25 working days.

Please call if you have any further questions.

Regards,

Jeff Franklin/President/Owner

Cell 2

RECLAMATION OF CELL 2

Place Radon Attenuation and Grading Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	879	$184,899
Cat 637 Scraper Operators	hrs	$19.31	879	$16,972
Cat D8N Dozer With Ripper	hrs	$95.82	220	$21,080
Cat D8N Dozer Operator	hrs	$20.65	220	$4,544
Cat D7 Dozer	hrs	$81.27	220	$17,880
Cat D7 Dozer Operator	hrs	$20.65	220	$4,544
Cat 14G Motorgrader	hrs	$71.34	220	$15,694
Cat 14G Motorgrader Operator	hrs	$20.62	220	$4,537
Equipment Maintenance (Butler)	hrs	$18.46	1,539	$28,405

Total Place Radon Attenuation and Grading Layer **$298,554**

Place Compacted Radon Attenuation Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	217	$45,646
Cat 637 Scraper Operators	hrs	$19.31	217	$4,190
Cat 825 Compactor	hrs	$97.64	55	$5,370
Cat 825 Compactor Operator	hrs	$14.22	55	$782
Cat D8N Dozer With Ripper	hrs	$95.82	55	$5,270
Cat D8N Dozer Operator	hrs	$20.65	55	$1,136
Cat D7 Dozer	hrs	$81.27	55	$4,470
Cat D7 Dozer Operator	hrs	$20.65	55	$1,136
Cat 651 Waterwagon	hrs	$113.30	55	$6,231
Cat 651 Waterwagon Operator	hrs	$18.16	55	$999
Cat 14G Motorgrader	hrs	$71.34	55	$3,923
Cat 14G Motorgrader Operator	hrs	$20.62	55	$1,134
Equipment Maintenance (Butler)	hrs	$18.46	492	$9,081

Total Place Compacted Radon Attenuation Layer **$89,369**

Place Water Storage Layer (42")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	1,572	$330,673
Cat 637 Scraper Operators	hrs	$19.31	1,572	$30,352
Cat D8N Dozer With Ripper	hrs	$95.82	393	$37,656
Cat D8N Dozer Operator	hrs	$20.65	393	$8,117
Cat D7 Dozer	hrs	$81.27	393	$31,941
Cat D7 Dozer Operator	hrs	$20.65	393	$8,117
Cat 14G Motorgrader	hrs	$71.34	393	$28,035
Cat 14G Motorgrader Operator	hrs	$20.62	393	$8,105
Equipment Maintenance (Butler)	hrs	$18.46	2,751	$50,775

Total Place Water Storage Layer (42") **$533,770**

RECLAMATION OF CELL 2

Erosion Protection Layer (6")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	213	$44,805
Cat 637 Scraper Operators	hrs	$19.31	213	$4,113
Cat D8N Dozer With Ripper	hrs	$81.27	59	$4,795
Cat D8N Dozer Operator	hrs	$20.65	59	$1,219
Cat D7 Dozer	hrs	$81.27	59	$4,795
Cat D7 Dozer Operator	hrs	$20.65	59	$1,219
Cat 14G Motorgrader	hrs	$71.34	115	$8,204
Cat 14G Motorgrader Operator	hrs	$20.62	115	$2,372
Rock Mulch Cost Delivered	CY	$12.77	5,000	$63,830
Equipment Maintenance (Butler)	hrs	$18.46	446	$8,232

Total Place Upper Random Fill **$143,581**

Place Compacted Outslope Fill

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	37	$7,783
Cat 637 Scraper Operators	hrs	$19.31	37	$714
Cat 825 Compactor	hrs	$97.64	10	$976
Cat 825 Compactor Operator	hrs	$14.22	10	$142
Cat D8N Dozer With Ripper	hrs	$81.27	10	$813
Cat D8N Dozer Operator	hrs	$20.65	10	$207
Cat D7 Dozer	hrs	$81.27	10	$813
Cat D7 Dozer Operator	hrs	$20.65	10	$207
Cat 651 Waterwagon	hrs	$113.30	10	$1,133
Cat 651 Waterwagon Operator	hrs	$18.16	10	$182
Cat 14G Motorgrader	hrs	$71.34	10	$713
Cat 14G Motorgrader Operator	hrs	$20.62	10	$206
Equipment Maintenance (Butler)	hrs	$18.46	87	$1,606

Total Place Compacted Outslope Fill **$15,494**

Rock Armor and Rip Rap Filter

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat D7 Dozer	hrs	$81.27	53	$4,308
Cat D7 Dozer Operator	hrs	$20.65	53	$1,095
Cat 651 Waterwagon	hrs	$113.30	53	$6,005
Cat 651 Waterwagon Operator	hrs	$18.16	53	$963
Cat 14G Motorgrader	hrs	$71.34	53	$3,781
Cat 14G Motorgrader Operator	hrs	$20.62	53	$1,093
Rock Cost Delivered	CY	$12.77	8,000	$102,127
Equipment Maintenance (Butler)	hrs	$18.46	159	$2,935

Total Place Rock Armor and Rip Rap Filter **$122,305**

RECLAMATION OF CELL 2

Quality Control

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Quality Control Contractor	hrs	$62.00	1,016	**$62,992**
Total Quality Control				**$62,992**
TOTAL RECLAMATION OF CELL 2				**$1,266,066**

Notes and Assumptions:

- Quality control contractor is assumed to be necessary for duration of material placement plus 20% for reporting.
- To blend topsoil and rock mulch in the Erosion Protection Layer, it is assumed that materials will be windrowed and "bladed" three times by motograder.

Volume Calculation - Cell 2

Updated 09/15/11

1) Area of Cell 2 - 3,021,700 sq ft = 69.37 acres

2) Assumptions

- All volumes are presented in bank cubic yards (BCY) unless otherwise noted

* Indicates volume is presented as in-place volume

- Rock for rip rap armor, rip rap bedding layer and rock mulch will come from an off-site gravel source one (1) mile north of Blanding. Rock will be produced through screening, stockpiled and trucked to the site at the time of use. Belly dump trucks will dump gravel in windrows on the top and sides of the Cell.

3) Radon Attenuation and Grading Layer remaining to be placed

Random fill placed at 80% relative compaction = 230,748 cubic yards

Use 231,000 cubic yards

4) Compacted Radon Attenuation Layer

Random fill placed at 95% relative compaction = 56,032 cubic yards

Use 57,000 cubic yards

5) Water Storage/Biointrusion/Frost Protection/Radon Attenuation Layer

Random fill placed at 85% relative compaction = 391,703 cubic yards

Use 392,000 cubic yards

6) Erosion Protection Layer

A) Topsoil mixed with 25% gravel placed at 85% relative compaction = 19,429 cubic yards

Use 20,000 cubic yards

B) Topsoil placed at 85% relative compaction = 36,529

Use 37,000 cubic yards

7) Cell 2 West Exterior Slope (Slope #3)

Average height 6 feet
Length 460 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 90 square feet

(90 square feet X 460 linear feet) = 41,400 cubic feet/ 27 = 1,714 cubic yards

Use 1,800 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 15 square feet

(15 square feet X 460 linear feet) = 6,900 cubic feet/ 27 = 256 cubic yards *

Use 300 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 28 square feet

(28 square feet X 460 linear feet) = 12,880 cubic feet/ 27 = 477 cubic yards *

Use 500 cubic yards *

C) Rip Rap Apron at toe of slope

Length = 460 feet
Width = 10 feet

a) Rip Rap Armor

Thickness = 2 feet

(2 ft X 10 ft X 460 ft) = 9,200 cubic feet/ 27 = 341 cubic yards *

Use 400 cubic yards *

Total West Slope Rip Rap Bedding Layer 300 cubic yards *
Total West Slope Rip Rap Armor 900 cubic yards *

8) Cell 2 East Exterior Slope (Slope #4)

Average height 5 feet
Length 1,300 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 63 square feet

(63 square feet X 1,300 linear feet) = 81,900 cubic feet/ 27 = 3,390 cubic yards

Use 3,400 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 13 square feet

(13 square feet X 1,300 linear feet) = 16,900 cubic feet/ 27 = 626 cubic yards *

Use 700 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 23 square feet

(23 square feet X 1,300 linear feet) = 29,900 cubic feet/ 27 = 1,107 cubic yards *

Use 1,200 cubic yards *

C) Rip Rap Apron at toe of slope

Length = 1,300 feet
Width = 10 feet

a) Rip Rap Armor

Thickness = 2 feet

(2 ft X 10 ft X 1,300 ft) = 26,000 cubic feet/ 27 = 963 cubic yards *

Use 1,000 cubic yards *

Total East Slope Rip Rap Bedding Layer 700 cubic yards *
Total East Slope Rip Rap Armor 2,200 cubic yards *

9) Cell 2 North Exterior Slope (Slope #2) Common with Mill Yard

Average height 5 feet
Length 1,000 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 63 square feet

(63 square feet X 1,000 linear feet) = 63,000 cubic feet/ 27 = 2,608 cubic yards

Use 2,700 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 13 square feet

(13 square feet X 1,000 linear feet) = 13,000 cubic feet/ 27 = 481 cubic yards *

Use 500 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 23 square feet

(23 square feet X 1,000 linear feet) = 23,000 cubic feet/ 27 = 852 cubic yards *

Use 900 cubic yards *

C) Rip Rap Apron at toe of slope

Length = 1,000 feet
Width = 10 feet

a) Rip Rap Armor

Thickness = 2 feet

(2 ft X 10 ft X 1,000 ft) = 20,000 cubic feet/ 27 = 741 cubic yards *

Use 800 cubic yards *

Total North Exterior Slope Rip Rap Bedding Layer 500 cubic yards *
Total North Exterior Slope Rip Rap Armor 1,700 cubic yards *

10) Cell 2 North Interior Slope (Slope #1) Common with Cell #1

Average height 3 feet
Length 860 feet

A) Random Fill - Already Included in Top Surface Quantity Estimates

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 9 square feet

(9 square feet X 860 linear feet) = 7,740 cubic feet/ 27 = 287 cubic yards *

Use 300 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 14 square feet

(14 square feet X 860 linear feet) = 12,040 cubic feet/ 27 = 446 cubic yards *

Use 500 cubic yards *

Total North Interior Slope Rip Rap Bedding Layer	300 cubic yards *
Total North Interior Slope Rip Rap Armor	500 cubic yards *

Volume Summary - Cell 2

	Radon Attenuation and Grading Layer (CY)	Compacted Radon Attenuation Layer (CY)	Water Storage Layer (CY)	Compacted Outslope Fill (CY)	**Total Random Fill (CY)**	Erosion Protection Layer (CY) *	Rip Rap Bedding Layer (CY) *	Rip Rap Armor (CY) *
Top of Cell	231,000	57,000	392,000	0	**680,000**	57,000	0	0
North (Slope #1)	0	0	0	0	**0**	0	300	500
North (Slope #2)	0	0	0	2,700	**2,700**	0	500	1,700
West (Slope #3)	0	0	0	1,800	**1,800**	0	300	900
East (Slope #4)	0	0	0	3,400	**3,400**	0	700	2,200
Totals	231,000	57,000	392,000	8,000	**688,000**	57,000	2,000	6,000

Cell 2 Reclamation

Cat 637 Resource Requirements

	Volume (CY)	Route	CY/hr	%	Equip. Hr.
Radon Attenuation and Grading Layer					
Tailings Surface	231,000	5	263	100%	879
Compacted Radon Attenuation Layer					
Tailings Surface	57,000	5	263	100%	217
Water Storage Layer					
Tailings Surface	103,000	5	263	26%	392
Tailings Surface	289,000	6	245	74%	1,180
Compacted Outslope Fill					
Outslopes	8,000	6	245	100%	33
Erosion Protection Layer [1]					
Tailings Surface	52,000	6	245	100%	213

[1] Volume includes topsoil only (does not include rock mulch)
[2] Rock mulch, rip rap armor, and rip rap bedding layer will be hauled using highway trucks

Rock Mulch, Rip Rap Armor, and Rip Rap Bedding Layer Production Cell 2

13,000 cubic yards (CY)

38 CY per hour times 8 trucks

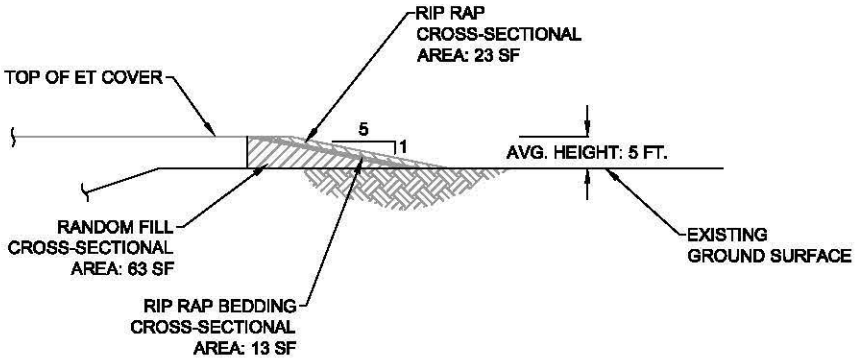
304 CY per hour delivered

Assume 25% extra time for spreading, loading and screen wait

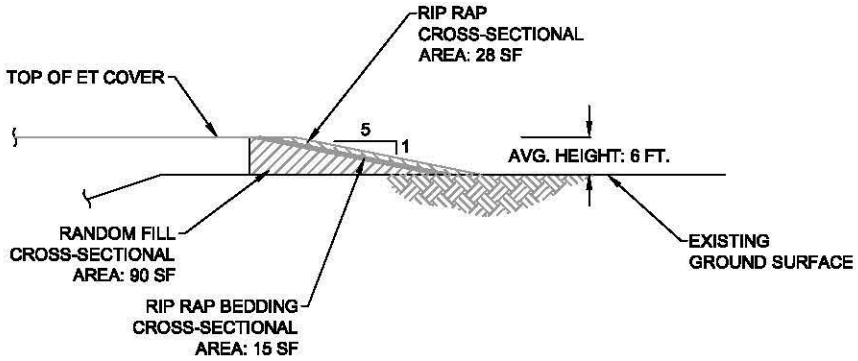
304 / 1.25 243.2 CY per hour 53 Hours

L:\Design-Drafting\Clients-A-H\DENISON MINES\001-Working Drawings\STEVE\1009740 BORROW

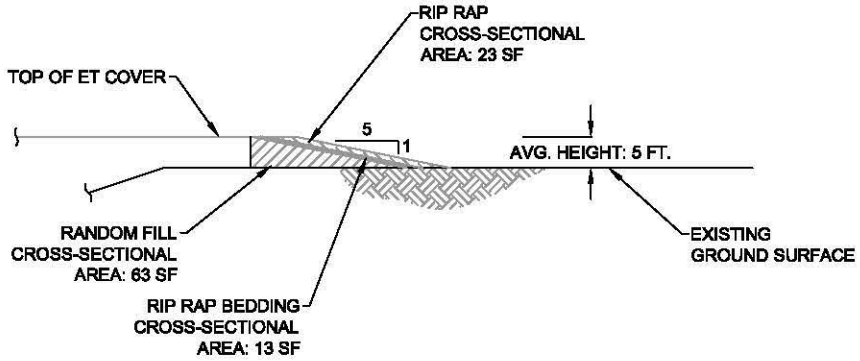
CELL 2 EASTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



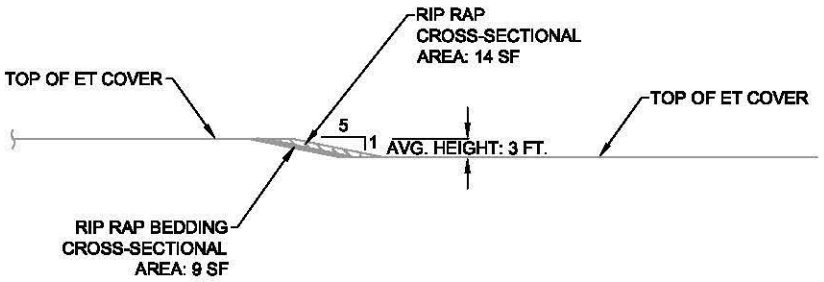
CELL 2 WESTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



CELL 2 NORTHEASTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



CELL 2 NORTH INTERIOR SLOPE COMMON WITH CELL #1 TYPICAL CROSS-SECTION



DENISON MINES
Denison Mines (USA) Corp

PROJECT
WHITE MESA MILL RECLAMATION

TITLE
SLOPE AREA CALCULATIONS
CELL 2

MWH

DATE
SEP 2011

FILE NAME
1009740 BORROW

Cell 3

RECLAMATION OF CELL 3

Dewatering of Cell 3

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Dewatering of Cell 3	hrs	$0.48	62,400	**$30,000**

Total Dewatering of Cell 3 **$30,000**

Place Radon Attenuation and Grading Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	1,821	$383,051
Cat 637 Scraper Operators	hrs	$19.31	1,821	$35,159
Cat D8N Dozer With Ripper	hrs	$95.82	456	$43,693
Cat D8N Dozer Operator	hrs	$20.65	456	$9,418
Cat D7 Dozer	hrs	$81.27	456	$37,061
Cat D7 Dozer Operator	hrs	$20.65	456	$9,418
Cat 14G Motorgrader	hrs	$71.34	456	$32,529
Cat 14G Motorgrader Operator	hrs	$20.62	456	$9,404
Equipment Maintenance (Butler)	hrs	$18.46	3,189	$58,860

Total Place Radon Attenuation and Grading Layer **$618,592**

Place Compacted Radon Attenuation Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	179	$37,653
Cat 637 Scraper Operators	hrs	$19.31	179	$3,456
Cat 825 Compactor	hrs	$97.64	45	$4,394
Cat 825 Compactor Operator	hrs	$14.22	45	$640
Cat D8N Dozer With Ripper	hrs	$95.82	45	$4,312
Cat D8N Dozer Operator	hrs	$20.65	45	$929
Cat D7 Dozer	hrs	$81.27	45	$3,657
Cat D7 Dozer Operator	hrs	$20.65	45	$929
Cat 651 Waterwagon	hrs	$113.30	45	$5,098
Cat 651 Waterwagon Operator	hrs	$18.16	45	$817
Cat 14G Motorgrader	hrs	$71.34	45	$3,210
Cat 14G Motorgrader Operator	hrs	$20.62	45	$928
Equipment Maintenance (Butler)	hrs	$18.46	404	$7,457

Total Place Compacted Radon Attenuation Layer **$73,481**

Place Water Storage Layer (42")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	1,143	$240,432
Cat 637 Scraper Operators	hrs	$19.31	1,143	$22,069
Cat D8N Dozer With Ripper	hrs	$95.82	286	$27,404
Cat D8N Dozer Operator	hrs	$20.65	286	$5,907
Cat D7 Dozer	hrs	$81.27	286	$23,244
Cat D7 Dozer Operator	hrs	$20.65	286	$5,907
Cat 14G Motorgrader	hrs	$71.34	286	$20,402
Cat 14G Motorgrader Operator	hrs	$20.62	286	$5,898
Equipment Maintenance (Butler)	hrs	$18.46	2,001	$36,933

Total Place Water Storage Layer (42") **$388,195**

RECLAMATION OF CELL 3

Erosion Protection Layer (6")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	193	$40,598
Cat 637 Scraper Operators	hrs	$19.31	193	$3,726
Cat D8N Dozer With Ripper	hrs	$81.27	49	$3,982
Cat D8N Dozer Operator	hrs	$20.65	49	$1,012
Cat D7 Dozer	hrs	$81.27	49	$3,982
Cat D7 Dozer Operator	hrs	$20.65	49	$1,012
Cat 14G Motorgrader	hrs	$71.34	49	$3,495
Cat 14G Motorgrader Operator	hrs	$20.62	49	$1,010
Equipment Maintenance (Butler)	hrs	$18.46	340	$6,275

Total Place Upper Random Fill **$65,094**

Place Compacted Outslope Fill

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	20	$4,207
Cat 637 Scraper Operators	hrs	$19.31	20	$386
Cat 825 Compactor	hrs	$97.64	5	$488
Cat 825 Compactor Operator	hrs	$14.22	5	$71
Cat D8N Dozer With Ripper	hrs	$81.27	5	$406
Cat D8N Dozer Operator	hrs	$20.65	5	$103
Cat D7 Dozer	hrs	$81.27	5	$406
Cat D7 Dozer Operator	hrs	$20.65	5	$103
Cat 651 Waterwagon	hrs	$113.30	5	$566
Cat 651 Waterwagon Operator	hrs	$18.16	5	$91
Cat 14G Motorgrader	hrs	$71.34	5	$357
Cat 14G Motorgrader Operator	hrs	$20.62	5	$103
Equipment Maintenance (Butler)	hrs	$18.46	45	$831

Total Place Compacted Outslope Fill **$8,119**

Rock Armor and Rip Rap Filter

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat D7 Dozer	hrs	$81.27	25	$2,032
Cat D7 Dozer Operator	hrs	$20.65	25	$516
Cat 651 Waterwagon	hrs	$113.30	25	$2,832
Cat 651 Waterwagon Operator	hrs	$18.16	25	$454
Cat 14G Motorgrader	hrs	$71.34	25	$1,783
Cat 14G Motorgrader Operator	hrs	$20.62	25	$516
Rock Cost Delivered	CY	$12.77	6,000	$76,595
Equipment Maintenance (Butler)	hrs	$18.46	75	$1,384

Total Place Rock Armor and Rip Rap Filter **$86,113**

RECLAMATION OF CELL 3

Quality Control

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Quality Control Contractor	hrs	$62.00	1,040	**$64,480**
Total Quality Control				**$64,480**
TOTAL RECLAMATION OF CELL 3				**$1,334,075**

Notes and Assumptions:

- Quality control contractor is assumed to be necessary for duration of material placement plus 20% for reporting.
- Erosion Protection Layer for Cell 3 does not require rock mulch.

Volume Calculation - Cell 3

Updated 09/15/11

1) Area of Cell 4A - 3,150,200 sq ft = 72.32 acres

2) Assumptions

- All volumes are presented in bank cubic yards (BCY) unless otherwise noted

* Indicates volume is presented as in-place volume

- Rock for rip rap armor, rip rap bedding layer and rock mulch will come from an off-site gravel source one (1) mile north of Blanding. Rock will be produced through screening, stockpiled and trucked to the site at the time of use. Belly dump trucks will dump gravel in windrows on the top and sides of the Cell.

3) Radon Attenuation and Grading Layer remaining to be placed

Random fill placed at 80% relative compaction = 543,007 cubic yards

Use 544,000 cubic yards

4) Compacted Radon Attenuation Layer

Random fill placed at 95% relative compaction = 63,517 cubic yards

Use 64,000 cubic yards

5) Water Storage/Biointrusion/Frost Protection/Radon Attenuation Layer

Random fill placed at 85% relative compaction = 408,356 cubic yards

Use 409,000 cubic yards

6) Erosion Protection Layer

Topsoil placed at 85% relative compaction = 58,337 cubic yards

Use 59,000 cubic yards

7) Cell 3 North Slope (Slope #8) common with Cell 2

Internal transition slope armored with rip rap and bedding layer.

Average height 3 feet
Length 950 feet

A) Random Fill - none necessary

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 8 square feet

(8 square feet X 950 linear feet) = 7,600 cubic feet/ 27 = 281 cubic yards *

Use 300 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 15 square feet

(15 square feet X 950 linear feet) = 14,250 cubic feet/ 27 = 528 cubic yards *

Use 600 cubic yards *

8) Cell 3 West Exterior Slope (Slope #6)

Average height 7 feet
Length 1,150 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 123 square feet

(123 square feet X 1,150 linear feet) = 141,450 cubic feet/ 27 = 5,855 cubic yards

Use 5,900 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 17 square feet

(17 square feet X 1,150 linear feet) = 19,550 cubic feet/ 27 = 724 cubic yards *

Use 800 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 32 square feet

(32 square feet X 1,150 linear feet) = 36,800 cubic feet/ 27 = 1,363 cubic yards *

Use 1,400 cubic yards *

C) Rip Rap Apron at toe of slope

Length = 1,150 feet
Width = 10 feet

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 0.5 ft X 10 ft = 5 square feet

(5 square feet X 1,150 linear feet) = 5,750 cubic feet/ 27 = 213 cubic yards *

Use 300 cubic yards *

b) Rip Rap Armor

Thickness = 2 feet

(2 ft X 10 ft X 1,150 ft) = 23,000 cubic feet/ 27 = 852 cubic yards *

Use 900 cubic yards *

Total West Slope Rip Rap Bedding Layer 1,100 cubic yards *
Total West Slope Rip Rap Armor 2,300 cubic yards *

8) Cell 3 East Exterior Slope (Slope #9)

Average height 3.5 feet
Length 540 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 31 square feet

(31 square feet X 540 linear feet) = 16,740 cubic feet/ 27 = 693 cubic yards

Use 700 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 9 square feet

(9 square feet X 540 linear feet) = 4,860 cubic feet/ 27 = 180 cubic yards *

Use 200 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 18 square feet

(18 square feet X 540 linear feet) = 9,720 cubic feet/ 27 = 360 cubic yards *

Use 400 cubic yards *

C) Rip Rap Apron at toe of slope

Length = 540 feet
Width = 10 feet

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 0.5 ft X 10 ft = 5 square feet

(5 square feet X 540 linear feet) = 2,700 cubic feet/ 27 = 100 cubic yards *

Use 100 cubic yards *

b) Rip Rap Armor

Thickness = 2 feet

(2 ft X 10 ft X 540 ft) = 10,800 cubic feet/ 27 = 400 cubic yards *

Use 400 cubic yards *

Total East Slope Rip Rap Bedding Layer 300 cubic yards *
Total East Slope Rip Rap Armor 800 cubic yards *

Volume Summary - Cell 3

	Radon Attenuation and Grading Layer (CY)	Compacted Radon Attenuation Layer (CY)	Water Storage Layer (CY)	Compacted Outslope Fill (CY)	**Total Random Fill (CY)**	Erosion Protection Layer (CY) *	Rip Rap Bedding Layer (CY) *	Rip Rap Armor (CY) *
Top of Cell	544,000	64,000	409,000	0	**1,017,000**	59,000	0	0
West (Slope #6)	0	0	0	5,900	**5,900**	0	1,100	2,300
North (Slope #8)	0	0	0	0	**0**	0	300	600
East (Slope #9)	0	0	0	700	**700**	0	300	800
Totals	544,000	64,000	409,000	7,000	**1,024,000**	59,000	2,000	4,000

Cell 3 Reclamation

Cat 637 Resource Requirements

	Volume (CY)	Route	CY/hr	%	Equip. Hr.
Radon Attenuation and Grading Layer					
Tailings Surface	420,000	3	285	77%	1,474
Tailings Surface	124,000	4	358	23%	347
Compacted Radon Attenuation Layer					
Tailings Surface	64,000	4	358	100%	179
Water Storage Layer					
Tailings Surface	409,000	4	358	100%	1,143
Compacted Outslope Fill					
Outslopes	7,000	4	358	100%	20
Erosion Protection Layer [1]					
Tailings Surface	39,000	9	291	66%	134
Tailings Surface	20,000	10	340	34%	59

[1] Erosion Protection Layer for Cell 3 does not require rock mulch
[2] Rip rap armor and rip rap bedding layer will be hauled using highway trucks

Rip Rap Armor and Rip Rap Bedding Layer Production Cell 3

6,000 cubic yards (CY)

38 CY per hour times 8 trucks

304 CY per hour delivered

Assume 25% extra time for spreading, loading and screen wait

304 / 1.25 243.2 CY per hour 25 Hours

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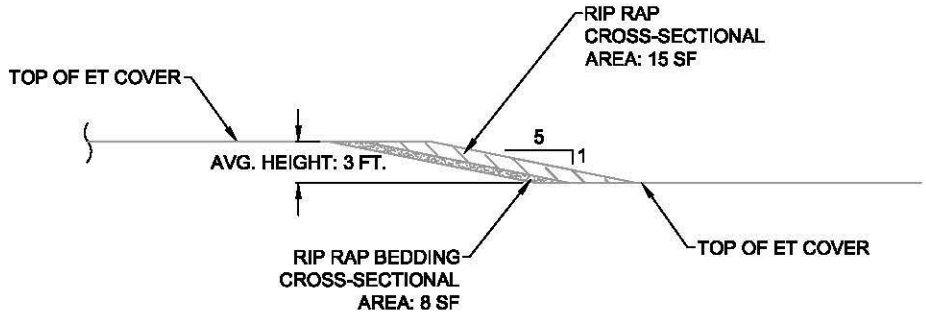
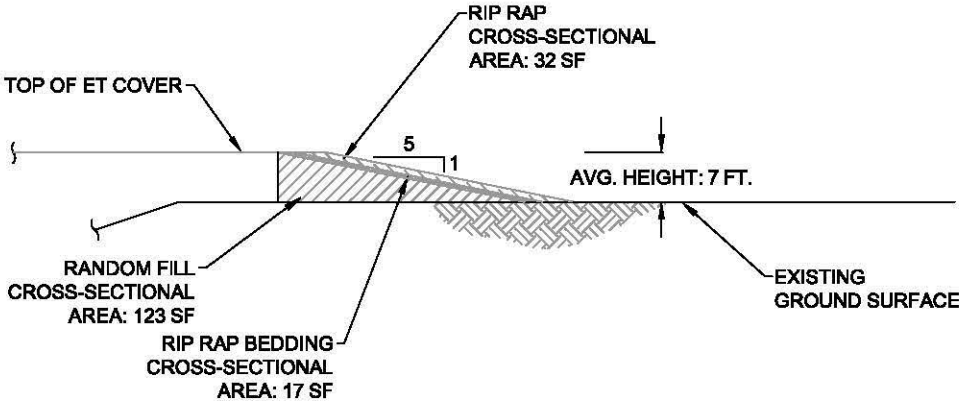
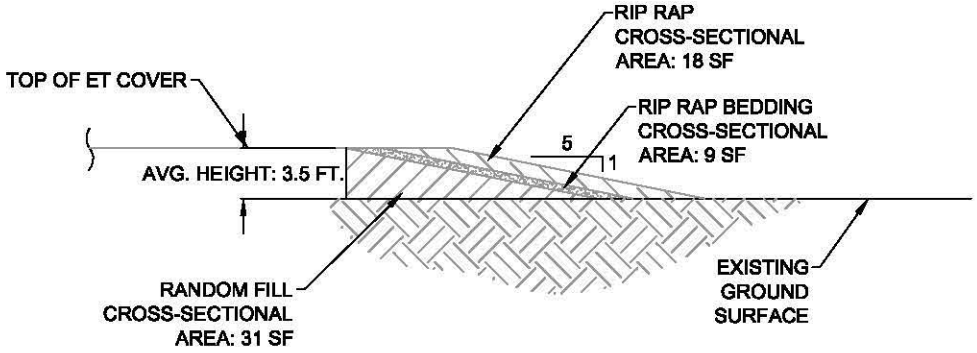
CELL 3 NORTHERN SLOPE COMMON WITH CELL 2 TYPICAL CROSS-SECTION



CELL 3 WESTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



CELL 3 EASTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



DENISON MINES
Denison Mines (USA) Corp

PROJECT
WHITE MESA MILL RECLAMATION

TITLE
SLOPE AREA CALCULATIONS
CELL 3

MWH

DATE
SEP 2011

FILE NAME
1009740 BORROW

Cell 4A

RECLAMATION OF CELL 4A

Dewatering of Cell 4A

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Dewatering of Cell 4A	hrs	$0.48	62,400	**$30,000**

Total Dewatering of Cell 4A **$30,000**

Place Radon Attenuation and Grading Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	522	$109,804
Cat 637 Scraper Operators	hrs	$19.31	522	$10,079
Cat D8N Dozer With Ripper	hrs	$95.82	131	$12,552
Cat D8N Dozer Operator	hrs	$20.65	131	$2,706
Cat D7 Dozer	hrs	$81.27	131	$10,647
Cat D7 Dozer Operator	hrs	$20.65	131	$2,706
Cat 14G Motorgrader	hrs	$71.34	131	$9,345
Cat 14G Motorgrader Operator	hrs	$20.62	131	$2,702
Equipment Maintenance (Butler)	hrs	$18.46	915	$16,888

Total Place Radon Attenuation and Grading Layer **$177,427**

Place Compacted Radon Attenuation Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	634	$133,363
Cat 637 Scraper Operators	hrs	$19.31	634	$12,241
Cat 825 Compactor	hrs	$97.64	159	$15,525
Cat 825 Compactor Operator	hrs	$14.22	159	$2,261
Cat D8N Dozer With Ripper	hrs	$95.82	159	$15,235
Cat D8N Dozer Operator	hrs	$20.65	159	$3,284
Cat D7 Dozer	hrs	$81.27	159	$12,923
Cat D7 Dozer Operator	hrs	$20.65	159	$3,284
Cat 651 Waterwagon	hrs	$113.30	159	$18,014
Cat 651 Waterwagon Operator	hrs	$18.16	159	$2,888
Cat 14G Motorgrader	hrs	$71.34	159	$11,342
Cat 14G Motorgrader Operator	hrs	$20.62	159	$3,279
Equipment Maintenance (Butler)	hrs	$18.46	1,429	$26,375

Total Place Compacted Radon Attenuation Layer **$260,014**

Place Water Storage Layer (42")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	796	$167,440
Cat 637 Scraper Operators	hrs	$19.31	796	$15,369
Cat D8N Dozer With Ripper	hrs	$95.82	199	$19,068
Cat D8N Dozer Operator	hrs	$20.65	199	$4,110
Cat D7 Dozer	hrs	$81.27	199	$16,174
Cat D7 Dozer Operator	hrs	$20.65	199	$4,110
Cat 14G Motorgrader	hrs	$71.34	199	$14,196
Cat 14G Motorgrader Operator	hrs	$20.62	199	$4,104
Equipment Maintenance (Butler)	hrs	$18.46	1,393	$25,711

Total Place Water Storage Layer (42") **$270,280**

RECLAMATION OF CELL 4A

Erosion Protection Layer (6")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	86	$18,090
Cat 637 Scraper Operators	hrs	$19.31	86	$1,660
Cat D8N Dozer With Ripper	hrs	$81.27	29	$2,357
Cat D8N Dozer Operator	hrs	$20.65	29	$599
Cat D7 Dozer	hrs	$81.27	29	$2,357
Cat D7 Dozer Operator	hrs	$20.65	29	$599
Cat 14G Motorgrader	hrs	$71.34	86	$6,135
Cat 14G Motorgrader Operator	hrs	$20.62	86	$1,774
Rock Mulch Cost Delivered	CY	$12.77	9,000	$114,893
Equipment Maintenance (Butler)	hrs	$18.46	230	$4,245

Total Place Upper Random Fill **$152,709**

Place Compacted Outslope Fill

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	364	$76,568
Cat 637 Scraper Operators	hrs	$19.31	364	$7,028
Cat 825 Compactor	hrs	$97.64	91	$8,886
Cat 825 Compactor Operator	hrs	$14.22	91	$1,294
Cat D8N Dozer With Ripper	hrs	$81.27	91	$7,396
Cat D8N Dozer Operator	hrs	$20.65	91	$1,879
Cat D7 Dozer	hrs	$81.27	91	$7,396
Cat D7 Dozer Operator	hrs	$20.65	91	$1,879
Cat 651 Waterwagon	hrs	$113.30	91	$10,310
Cat 651 Waterwagon Operator	hrs	$18.16	91	$1,653
Cat 14G Motorgrader	hrs	$71.34	91	$6,491
Cat 14G Motorgrader Operator	hrs	$20.62	91	$1,877
Equipment Maintenance (Butler)	hrs	$18.46	819	$15,116

Total Place Compacted Outslope Fill **$147,774**

Rock Armor and Rip Rap Filter

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat D7 Dozer	hrs	$81.27	148	$12,029
Cat D7 Dozer Operator	hrs	$20.65	148	$3,057
Cat 651 Waterwagon	hrs	$113.30	148	$16,768
Cat 651 Waterwagon Operator	hrs	$18.16	148	$2,688
Cat 14G Motorgrader	hrs	$71.34	148	$10,558
Cat 14G Motorgrader Operator	hrs	$20.62	148	$3,052
Rock Cost Delivered	CY	$12.77	27,000	$344,680
Equipment Maintenance (Butler)	hrs	$18.46	444	$8,195

Total Place Rock Armor and Rip Rap Filter **$401,026**

RECLAMATION OF CELL 4A

Quality Control

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Quality Control Contractor	hrs	$62.00	977	**$60,574**
Total Quality Control				**$60,574**
TOTAL RECLAMATION OF CELL 4A				**$1,499,804**

Notes and Assumptions:

- Quality control contractor is assumed to be necessary for duration of material placement plus 20% for reporting.
- To blend topsoil and rock mulch in the Erosion Protection Layer, it is assumed that materials will be windrowed and "bladed" three times by motograder.

Volume Calculation - Cell 4A

Updated 09/13/11

1) Area of Cell 4A - 1,857,300 sq ft = 42.64 acres

2) Assumptions

- All volumes are presented in bank cubic yards (BCY) unless otherwise noted

* Indicates volume is presented as in-place volume

- Rock for rip rap armor, rip rap bedding layer and rock mulch will come from an off-site gravel source one (1) mile north of Blanding. Rock will be produced through screening, stockpiled and trucked to the site at the time of use. Belly dump trucks will dump gravel in windrows on the top and sides of the Cell.

3) Radon Attenuation and Grading Layer remaining to be placed
Random fill placed at 80% relative compaction = 157,384 cubic yards

Use 158,000 cubic yards

4) Compacted Radon Attenuation Layer
Random fill placed at 95% relative compaction = 191,494 cubic yards

Use 192,000 cubic yards

5) Water Storage/Biointrusion/Frost Protection/Radon Attenuation Layer
Random fill placed at 85% relative compaction = 240,761 cubic yards

Use 241,000 cubic yards

6) Erosion Protection Layer

Topsoil mixed with 25% gravel placed at 85% relative compaction = 34,394 cubic yards

Use 35,000 cubic yards

7) Cell 4A South Dike, (Slope #1)

Average height 33 feet
Length 1,400 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 1,703 square feet

(1,703 square feet X 1,400 linear feet) = 2,384,200 cubic feet/ 27 = 98,692 cubic yards

Use 98,700 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 82 square feet

(82 square feet X 1,400 linear feet) = 114,800 cubic feet/ 27 = 4,252 cubic yards *

Use 4,300 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 150 square feet

(150 square feet X 1,400 linear feet) = 210,000 cubic feet/ 27 = 7,778 cubic yards *

Use 7,800 cubic yards *

C) Rip Rap Apron at toe of slope

Does not run straight and parallel to slope. Length = 1,600 feet

Width = 19 feet

a) Rip Rap Armor

Thickness = 3.75 feet

(3.75 ft X 19 ft X 1,600 ft) = 114,000 cubic feet/ 27 = 4,222 cubic yards *

Use 4,300 cubic yards *

Total South Dike Rip Rap Bedding Layer 4,300 cubic yards *

Total South Dike Rip Rap Armor 12,100 cubic yards *

8) Cell 4A East Slope (Slope #2)

Average height 17 feet

Length 1,300 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 560 square feet

(560 square feet X 1,300 linear feet) = 728,000 cubic feet/ 27 = 30,135 cubic yards

Use 30,200 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 42 square feet

(42 square feet X 1,300 linear feet) = 54,600 cubic feet/ 27 = 2,022 cubic yards

Use 2,100 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 78 square feet

(78 square feet X 1,300 linear feet) = 101,400 cubic feet/ 27 = 3,756 cubic yards *

Use 3,800 cubic yards *

C) Rip Rap Apron at toe of slope

Length = 1,300 feet

Width = 19 feet

a) Rip Rap Armor

Thickness = 3.75 feet

(3.75 ft X 19 ft X 1,300 ft) = 92,625 cubic feet/ 27 = 3,431 cubic yards *

Use 3,500 cubic yards *

Total East Slope Rip Rap Bedding Layer 2,100 cubic yards *

Total East Slope Rip Rap Armor 7,300 cubic yards *

Volume Summary - Cell 4A

	Radon Attenuation and Grading Layer (CY)	Compacted Radon Attenuation Layer (CY)	Water Storage Layer (CY)	Compacted Outslope Fill (CY)	**Total Random Fill (CY)**	Erosion Protection Layer (CY) *	Rip Rap Bedding Layer (CY) *	Rip Rap Armor (CY) *
Top of Cell	158,000	192,000	241,000	0	**591,000**	35,000	0	0
South (Slope #1)	0	0	0	98,700	**98,700**	0	4,300	12,100
East (Slope #2)	0	0	0	30,200	**30,200**	0	2,100	7,300
Totals	158,000	192,000	241,000	129,000	**720,000**	35,000	7,000	20,000

Cell 4A Reclamation

Cat 637 Resource Requirements

	Volume (CY)	Route	CY/hr	%	Equip. Hr.
Radon Attenuation and Grading Layer					
Tailings Surface	158,000	2	303	100%	522
Compacted Radon Attenuation Layer					
Tailings Surface	192,000	2	303	100%	634
Water Storage Layer					
Tailings Surface	241,000	2	303	100%	796
Compacted Outslope Fill					
Outslopes	129,000	1	358	100%	361
Erosion Protection Layer [1]					
Tailings Surface	27,000	8	317	100%	86

[1] Volume includes topsoil only (does not include rock mulch)
[2] Rock mulch, rip rap armor, and rip rap bedding layer will be hauled using highway trucks

Rock Mulch, Rip Rap Armor, and Rip Rap Bedding Layer Production Cell 4A

36,000 cubic yards (CY)

38 CY per hour times 8 trucks

304 CY per hour delivered

Assume 25% extra time for spreading, loading and screen wait

304 / 1.25 243.2 CY per hour 148 Hours

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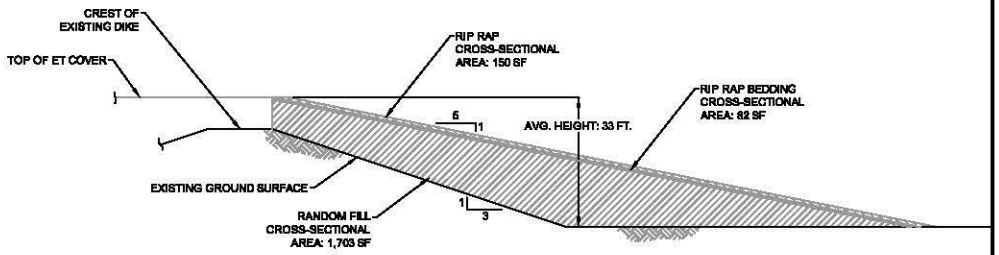
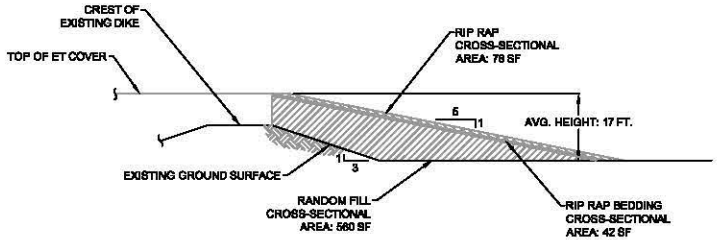
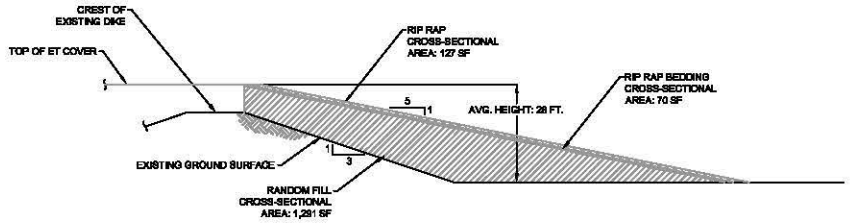
CELL 4A SOUTHERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



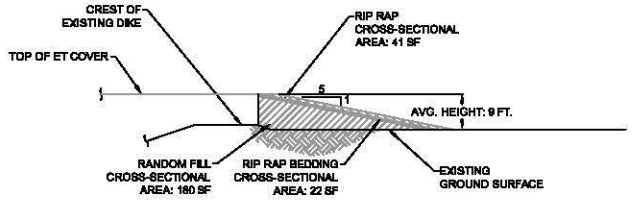
CELL 4A EASTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



CELL 4B SOUTHERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



CELL 4B WESTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



DENISON MINES
Denison Mines (USA) Corp

PROJECT
WHITE MESA MILL RECLAMATION

TITLE
SLOPE AREA CALCULATIONS
CELLS 4A AND 4B

MWH

DATE
SEP 2011

FILE NAME
1009740 BORROW

Cell 4B

RECLAMATION OF CELL 4B

Dewatering of Cell 4B

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Dewatering of Cell 4B	hrs	$0.48	62,400	**$30,000**

Total Dewatering of Cell 4B **$30,000**

Place Radon Attenuation and Grading Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	525	$110,435
Cat 637 Scraper Operators	hrs	$19.31	525	$10,137
Cat D8N Dozer With Ripper	hrs	$95.82	132	$12,648
Cat D8N Dozer Operator	hrs	$20.65	132	$2,726
Cat D7 Dozer	hrs	$81.27	132	$10,728
Cat D7 Dozer Operator	hrs	$20.65	132	$2,726
Cat 14G Motorgrader	hrs	$71.34	132	$9,416
Cat 14G Motorgrader Operator	hrs	$20.62	132	$2,722
Equipment Maintenance (Butler)	hrs	$18.46	921	$16,999

Total Place Radon Attenuation and Grading Layer **$178,537**

Place Compacted Radon Attenuation Layer

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	651	$136,939
Cat 637 Scraper Operators	hrs	$19.31	651	$12,569
Cat 825 Compactor	hrs	$97.64	163	$15,916
Cat 825 Compactor Operator	hrs	$14.22	163	$2,318
Cat D8N Dozer With Ripper	hrs	$95.82	163	$15,618
Cat D8N Dozer Operator	hrs	$20.65	163	$3,366
Cat D7 Dozer	hrs	$81.27	163	$13,248
Cat D7 Dozer Operator	hrs	$20.65	163	$3,366
Cat 651 Waterwagon	hrs	$113.30	163	$18,468
Cat 651 Waterwagon Operator	hrs	$18.16	163	$2,960
Cat 14G Motorgrader	hrs	$71.34	163	$11,628
Cat 14G Motorgrader Operator	hrs	$20.62	163	$3,361
Equipment Maintenance (Butler)	hrs	$18.46	1,466	$27,058

Total Place Compacted Radon Attenuation Layer **$266,816**

Place Water Storage Layer (42")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	812	$170,806
Cat 637 Scraper Operators	hrs	$19.31	812	$15,678
Cat D8N Dozer With Ripper	hrs	$95.82	203	$19,451
Cat D8N Dozer Operator	hrs	$20.65	203	$4,193
Cat D7 Dozer	hrs	$81.27	203	$16,499
Cat D7 Dozer Operator	hrs	$20.65	203	$4,193
Cat 14G Motorgrader	hrs	$71.34	203	$14,481
Cat 14G Motorgrader Operator	hrs	$20.62	203	$4,186
Equipment Maintenance (Butler)	hrs	$18.46	1,421	$26,227

Total Place Water Storage Layer (42") **$275,713**

RECLAMATION OF CELL 4B

Erosion Protection Layer (6")

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	86	$18,090
Cat 637 Scraper Operators	hrs	$19.31	86	$1,660
Cat D8N Dozer With Ripper	hrs	$81.27	29	$2,357
Cat D8N Dozer Operator	hrs	$20.65	29	$599
Cat D7 Dozer	hrs	$81.27	29	$2,357
Cat D7 Dozer Operator	hrs	$20.65	29	$599
Cat 14G Motorgrader	hrs	$71.34	86	$6,135
Cat 14G Motorgrader Operator	hrs	$20.62	86	$1,774
Rock Mulch Cost Delivered	CY	$12.77	9,000	$114,893
Equipment Maintenance (Butler)	hrs	$18.46	230	$4,245

Total Place Upper Random Fill **$152,709**

Place Compacted Outslope Fill

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat 637 Scraper	hrs	$210.35	238	$50,064
Cat 637 Scraper Operators	hrs	$19.31	238	$4,595
Cat 825 Compactor	hrs	$97.64	60	$5,859
Cat 825 Compactor Operator	hrs	$14.22	60	$853
Cat D8N Dozer With Ripper	hrs	$81.27	60	$4,876
Cat D8N Dozer Operator	hrs	$20.65	60	$1,239
Cat D7 Dozer	hrs	$81.27	60	$4,876
Cat D7 Dozer Operator	hrs	$20.65	60	$1,239
Cat 651 Waterwagon	hrs	$113.30	60	$6,798
Cat 651 Waterwagon Operator	hrs	$18.16	60	$1,090
Cat 14G Motorgrader	hrs	$71.34	60	$4,280
Cat 14G Motorgrader Operator	hrs	$20.62	60	$1,237
Equipment Maintenance (Butler)	hrs	$18.46	538	$9,930

Total Place Compacted Outslope Fill **$96,937**

Rock Armor and Rip Rap Filter

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Cat D7 Dozer	hrs	$81.27	115	$9,347
Cat D7 Dozer Operator	hrs	$20.65	115	$2,375
Cat 651 Waterwagon	hrs	$113.30	115	$13,029
Cat 651 Waterwagon Operator	hrs	$18.16	115	$2,089
Cat 14G Motorgrader	hrs	$71.34	115	$8,204
Cat 14G Motorgrader Operator	hrs	$20.62	115	$2,372
Rock Cost Delivered	CY	$12.77	19,000	$242,552
Equipment Maintenance (Butler)	hrs	$18.46	345	$6,368

Total Place Rock Armor and Rip Rap Filter **$286,335**

RECLAMATION OF CELL 4B

Quality Control

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Quality Control Contractor	hrs	$62.00	911	**$56,482**
Total Quality Control				**$56,482**
TOTAL RECLAMATION OF CELL 4B				**$1,343,529**

Notes and Assumptions:

- Quality control contractor is assumed to be necessary for duration of material placement plus 20% for reporting.
- To blend topsoil and rock mulch in the Erosion Protection Layer, it is assumed that materials will be windrowed and "bladed" three times by motograder.

Volume Calculation - Cell 4B

Updated 09/15/11

1) Area of Cell 4A - 1,895,700 sq ft = 43.52 acres

2) Assumptions

- All volumes are presented in bank cubic yards (BCY) unless otherwise noted

* Indicates volume is presented as in-place volume

- Rock for rip rap armor, rip rap bedding layer and rock mulch will come from an off-site gravel source one (1) mile north of Blanding. Rock will be produced through screening, stockpiled and trucked to the site at the time of use. Belly dump trucks will dump gravel in windrows on the top and sides of the Cell.

3) Radon Attenuation and Grading Layer remaining to be placed
Random fill placed at 80% relative compaction = 158,146 cubic yards

Use 159,000 cubic yards

4) Compacted Radon Attenuation Layer
Random fill placed at 95% relative compaction = 196,530 cubic yards

Use 197,000 cubic yards

5) Water Storage/Biointrusion/Frost Protection/Radon Attenuation Layer
Random fill placed at 85% relative compaction = 245,741 cubic yards

Use 246,000 cubic yards

6) Erosion Protection Layer

Topsoil mixed with 25% gravel placed at 85% relative compaction = 35,106 cubic yards

Use 36,000 cubic yards

7) Cell 4B South Dike, (Slope #1)

Average height 28 feet
Length 1,400 feet

A) Random Fill

Placed at 95% relative compaction

Cross-Sectional Area = 1,291 square feet

(1,291 square feet X 1,400 linear feet) = 1,807,400 cubic feet/ 27 = 74,816 cubic yards

Use 74,900 cubic yards

B) Outslope Armoring

a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 70 square feet

(70 square feet X 1,400 linear feet) = 98,000 cubic feet/ 27 = 3,630 cubic yards *

Use 3,700 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 127 square feet

(127 square feet X 1,400 linear feet) = 177,800 cubic feet/ 27 = 6,585 cubic yards *

Use 6,600 cubic yards *

C) Rip Rap Apron at toe of slope

Length = 1,400 feet
Width = 19 feet

a) Rip Rap Armor

Thickness = 3.75 feet

(3.75 ft X 19 ft X 1,400 ft) = 99,750 cubic feet/ 27 = 3,694 cubic yards *

Use 3,700 cubic yards *

Total South Dike Rip Rap Bedding Layer 3,700 cubic yards *
Total South Dike Rip Rap Armor 10,300 cubic yards *

8) Cell 4B West Slope (Slope #3)

Average height 9 feet
Length 1,300 feet

A) Random Fill
Placed at 95% relative compaction
Cross-Sectional Area = 180 square feet

(180 square feet X 1,300 linear feet) = 234,000 cubic feet/ 27 = 9,686 cubic yards
Use 9,700 cubic yards

B) Outslope Armoring
a) Rip Rap Bedding Layer 6" thick

Cross-Sectional Area = 22 square feet

(22 square feet X 1,300 linear feet) = 28,600 cubic feet/ 27 = 1,059 cubic yards *
Use 1,100 cubic yards *

b) Rip Rap Armor 12" thick

Cross-Sectional Area = 41 square feet

(41 square feet X 1,300 linear feet) = 53,300 cubic feet/ 27 = 1,974 cubic yards *
Use 2,000 cubic yards *

C) Rip Rap Apron at toe of slope
Length = 1,300 feet
Width = 10 feet

a) Rip Rap Armor
Thickness = 2 feet

(2 ft X 10 ft X 1,300 ft) = 26,000 cubic feet/ 27 = 963 cubic yards *
Use 1,000 cubic yards *

Total West Slope Rip Rap Bedding Layer 1,100 cubic yards *
Total West Slope Rip Rap Armor 3,000 cubic yards *

Volume Summary - Cell 4B

	Radon Attenuation and Grading Layer (CY)	Compacted Radon Attenuation Layer (CY)	Water Storage Layer (CY)	Compacted Outslope Fill (CY)	**Total Random Fill (CY)**	Erosion Protection Layer (CY) *	Rip Rap Bedding Layer (CY) *	Rip Rap Armor (CY) *
Top of Cell	159,000	197,000	246,000	0	**602,000**	36,000	0	0
South (Slope #1)	0	0	0	74,900	**74,900**	0	3,700	10,300
West (Slope #3)	0	0	0	9,700	**9,700**	0	1,100	3,000
Totals	159,000	197,000	246,000	85,000	**687,000**	36,000	5,000	14,000

Cell 4B Reclamation

Cat 637 Resource Requirements

	Volume (CY)	Route	CY/hr	%	Equip. Hr.
Radon Attenuation and Grading Layer Tailings Surface	159,000	2	303	100%	525
Compacted Radon Attenuation Layer Tailings Surface	197,000	2	303	100%	651
Water Storage Layer Tailings Surface	246,000	2	303	100%	812
Compacted Outslope Fill Outslopes	85,000	1	358	100%	238
Erosion Protection Layer [1] Tailings Surface	27,000	8	317	100%	86

[1] Volume includes topsoil only (does not include rock mulch)
[2] Rock mulch, rip rap armor, and rip rap bedding layer will be hauled using highway trucks

Rock Mulch, Rip Rap Armor, and Rip Rap Bedding Layer Production Cell 4B

28,000 cubic yards (CY)

38 CY per hour times 8 trucks

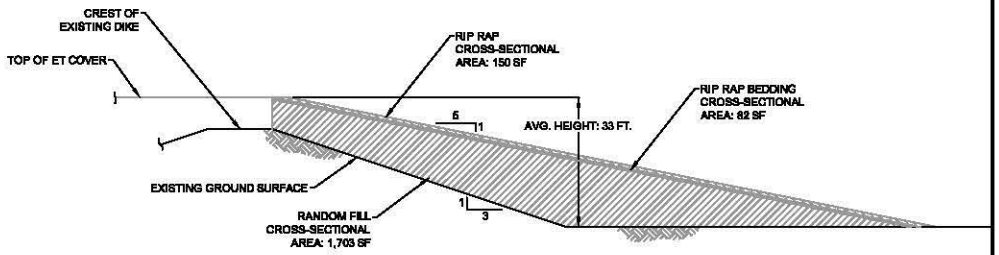
304 CY per hour delivered

Assume 25% extra time for spreading, loading and screen wait

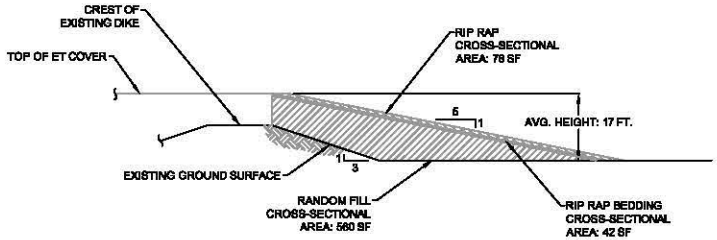
304 / 1.25 243.2 CY per hour 115 Hours

L:\Design-Drafting\Clients-A-H\DENISON MINES\001-Working Drawings\STEVE\1009740 BORROW

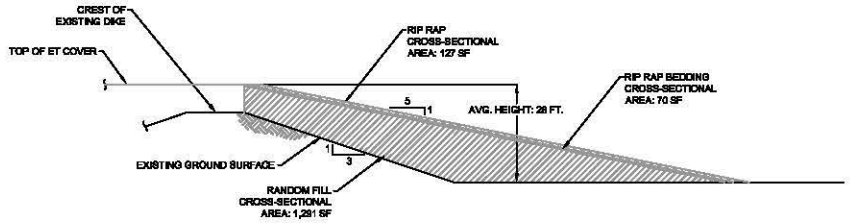
CELL 4A SOUTHERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



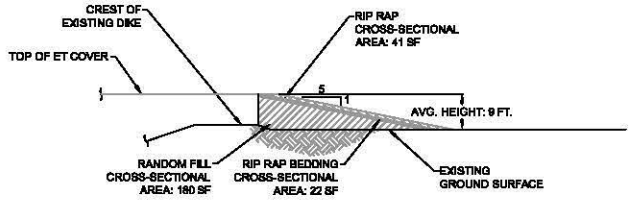
CELL 4A EASTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



CELL 4B SOUTHERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



CELL 4B WESTERN EXTERIOR SLOPE TYPICAL CROSS-SECTION



DENISON MINES
Denison Mines (USA) Corp

PROJECT
WHITE MESA MILL RECLAMATION

TITLE
SLOPE AREA CALCULATIONS
CELLS 4A AND 4B

MWH

DATE
SEP 2011

FILE NAME
1009740 BORROW

Miscellaneous

MISCELLANEOUS ITEMS

Equipment Mobilization

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Butler Machinery Mobilization	LS	$386,600	1	**$386,600**
Other Equipment Mobilization	LS	$4,550	1	**$4,550**
Cranes	LS	$2,700	2	**$5,400**
Total Equipment Mobilization				**$396,550**

Office Facilities

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Install New Powerline	LS	$15,000	1	**$15,000**
Utilities for Offices	months	$1,000	36	**$36,000**
Temporary Office Trailer	months	$1,500	3	**$4,500**
Temporary Office Trailer, mob, demob & setup	LS	$3,000	1	**$3,000**
Total Office Facilities				**$58,500**

Decontamination Pad

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Laborers	hrs	$13	8,320	**$104,046**
Construct Wheel Wash Facility	LS	$180,000	1	**$180,000**
	Facilities constructed in 2000 & 2008			($180,000)
Total Decontamination Facilities				**$104,046**

Plug and Abandon WW2

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Laborers	hrs	$0	8,320	**$0**
Contract Services	LS	$20,000	1	**$20,000**
Total Plug and Abandon WW2				**$20,000**

Slimes Drain Evaporation Pond

Resource Description	Units	Cost/Unit	Task Units	Task Cost
60 mil HDPE Liner	sq. ft.	$0.58	960,000	$556,800
Cat 637 Scraper	hrs	$210.35	100	$21,035
Cat 637 Scraper Operator	hrs	$19.31	100	$1,931
Cat 825 Compactor	hrs	$97.64	25	$2,441
Cat 825 Compactor Operator	hrs	$14.22	25	$355
Cat D7 Dozer	hrs	$81.27	25	$2,032
Cat D7 Dozer Operator	hrs	$20.65	25	$516
Cat 651 Waterwagon	hrs	$113.30	25	$2,832
Cat 651 Waterwagon Operator	hrs	$18.16	25	$454
Cat 14G Motorgrader	hrs	$71.34	25	$1,783
Cat 14G Motorgrader Operator	hrs	$20.62	25	$516
Equipment Maintenance (Butler)	hrs	$18.46	200	$3,691
Total Slimes Drain Evaporation Pond				**$594,388**

MANAGEMENT/SUPPORT

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Manager/Engineer	hrs	$59.06	6,240	**$368,561**
Radiation Safety Officer	hrs	$46.15	6,240	**$287,969**
Secretary	hrs	$18.66	6,240	**$116,465**
Clerk	hrs	$15.36	4,866	**$74,726**
Environmental Technician (Part time, 4.5 years)	hrs	$25.99	7,300	**$189,714**
Maintenance Foreman	hrs	$33.86	6,240	**$211,308**
Chemist	hrs	$27.17	2,080	**$56,513**
Security	hrs	$10.00	18,720	**$187,229**
Safety Engineer	hrs	$25.99	4,160	**$108,111**
Misc. Materials & Supplies	hrs	$36.45	6,240	**$227,448**
Health Physics Costs	hrs	$64.81	2,080	**$134,800**
Environmental Monitoring Costs, Laboratory	years	$71,620.00	7.0	**$501,340**
Total Management/Support				**$2,464,184**

TOTAL MISCELLANEOUS ITEMS **$3,637,667**

Phone Call Summary

From: Steve McManus (MWH Americas, Inc.)

To: Kit Hawkins (Northwest Linings and Geotextile Products, Inc.)

Phone #: (800) 729-6954

Date: September 26, 2011 12:35pm (MDT)

Conversation:

Steve inquired about a unit rate estimate for an evaporation pond liner (installed). 900,000-1,000,000 square feet of liner, 4:1 side slopes, 60-mil smooth HDPE, public wages.

Kit Hawkins estimated $0.55 – 0.58 per square foot of liner (installed).

Rock Production

ROCK PRODUCTION COST

Assumptions:
Rock is obtained from gravel source north of Blanding, Utah. BLM Public Pit
Rip rap rock is processed by screening only, no crushing is required, 1.25 CY of feed for 1 CY of product
Rip rap bedding and rock mulch are produced from rip rap reject
Rock is produced and stockpiled at the site
Site is 7 road miles from the mill; 6 miles of which is paved public highway
Rock will be hauled in 22 CY bellydump trucks, contract haulers ($100.00/hr)
Rock will be dumped in windrows on Tailings Cells by trucks, spread by grader, and spread by D7 Dozer
Trucks can average 30 MPH and unloading/unloading take 5min each: 14miles / 30mph X 60min/hr + (2 X 5min) = 38min round trip
Work hours are 50min long: 50min / 38min round trip = **1.3** round trips per hour

	Product Required (CY)	Reject Factor	Material Feed to Plant (CY)	Plant Throughput (CY/hr)	Plant Operating Hours
Rip rap material fed to plant	54,000	25.0%	67,500	122	600
Rip rap bedding material fed to plant	21,000	10.0%	23,100	122	200
Rock mulch fed to plant	25,000	10.0%	27,500	122	300
	100,000				1,100

PRODUCTION OF RIPRAP

Resource Description	Units	Cost/Unit	Task Units	Task Cost
Laborer	hrs	$12.51	1,100	$13,756
Cat D8N Dozer With Ripper	hrs	$95.82	367	$35,133
Cat D8N Dozer Operator	hrs	$20.65	367	$7,573
Cat 980 Loader	hrs	$93.97	1,100	$103,367
Cat 980 Loader Operator	hrs	$17.21	1,100	$18,935
Screening Plant w/conveyors*	hrs	$60.80	1,100	$66,875
BLM Usage Fee	CY	$0.60	100,000	$60,000
Contract Highway Trucks - Bellydumps**	hrs	$100.00	3,497	$349,650
Equipment Maintenance (Butler)	hrs	$18.46	1,467	$27,070
Mob/Demob and Screen Setup	LS	$7,000.00	1	$7,000
Total Production of Rip Rap				**$689,359**

RIPRAP COST PER CUBIC YARD DELIVERED **$12.77**

* Cost Quoted from Power Motive Corporation, Denver, Colorado updated February 21, 2011
$7,000 plus $3,700 for conveyors, 176 hours per month for one month, plus screen set up at $2,000.
Mob and Demob - $ 5,000.00

** Cost quoted from Dennis Cosby, Cosby Trucking, Inc., Blanding, Utah, Updated February 25, 2011
(includes ownership expense, fuel, maintanence and operator)

Dawn Gagon

From: Jim Schmitt [jschmitt@powermotivecorp.com]
Sent: Tuesday, February 22, 2011 6:20 AM
To: Dawn Gagon
Subject: RE: Annual Request for Quote

Good morning Dawn, I was trying to find the email that I sent you last year, but I couldn't. However, the rental rates are still the same as last year for 2011.

Thanks,
Jim Schmitt
Area Manager
Power Motive Corp.
Mobile (719) 492-7378
jschmitt@powermotivecorp.com

PMC "The Product Support People"
POWER MOTIVE CORPORATION

From: Dawn Gagon [mailto:dgagon@denisonmines.com]
Sent: Monday, February 21, 2011 11:16 AM
To: Jim Schmitt
Subject: FW: Annual Request for Quote
Importance: High

Dawn Gagon

t: 435-678-2221 x106 | f: 435-678-2224
6425 S. Highway 191, PO Box 809,
Blanding, UT 84511

DENISON MINES (USA) CORP
www.denisonmines.com

Amy Bushman

From: Brad Neptune [bneptune@powermotivecorp.com]
Sent: Tuesday, February 24, 2009 9:33 AM
To: Amy Bushman
Cc: Mike Norris
Subject: 2512KT Screen
Attachments: FNG_2512kt_2512k.pdf; FT_271K_291K.pdf

Dear Amy,

Thank you for the opportunity to quote a rental screen to Denison Mines.

Last year, per the February 22, 2008 quote, we quoted our 271K plant and our 2512KT plant. I'm attaching spec sheets on each so you can see what each screen and plant looks like.

The 271K plant does NOT have any on-plant stackers, but does have a 4' x 10' two deck screen. You would need to rent off plant hydraulic stackers to stack out two products. It is also a rubber tired plant.

The 2512KT is a Track Mounted plant that DOES have on-plant stackers and can stack out three products right off of the plant. You do not need additional conveyors.

Rental rates are the same as quoted last year.

271K Screen	$ 7,000 / mo
2512KT Screen	$ 12,800 / mo
36" x 60' Hyd Stacker	$ 1,500 / mo
30" x 80' Hyd Stacker	$ 2,200 / mo

The 271K Screen is presently tied up on a rental. The 2512KT plant is sitting idle in Colorado Springs. I'd estimate delivery from C Spgs to Blanding to be approximately $2,500. The present purchase price we have on the 2512KT is $135,000, thus you may want to consider purchasing the plant as opposed to renting it for $12,800 per month.

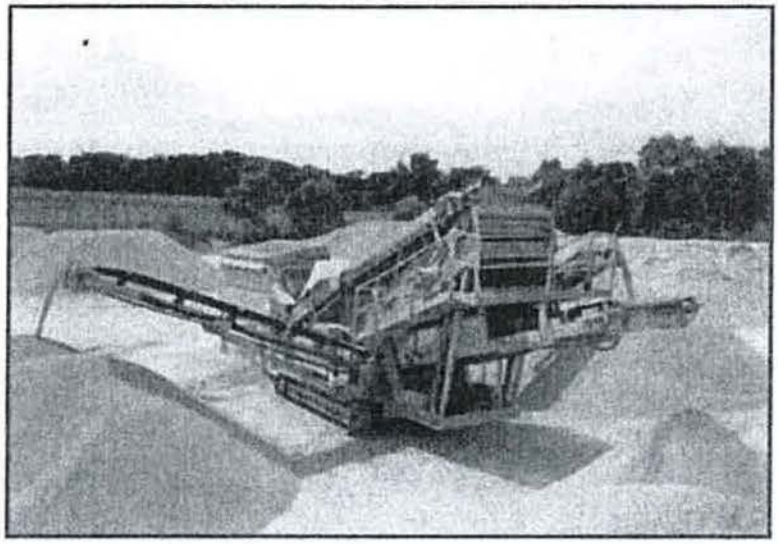
Screen cloth and installation of screen cloth will run about $2,000 total.

Please feel free to email or call with any additional questions.

Sincerely,

Brad Neptune
970-985-5875

ASTEC
MOBILE SCREENS
an Astec Industries, Inc. Company



The Fold `n Go 2512KT is a mobile track screening plant that features a Kolberg® double deck screen for processing sand & gravel, topsoil, slag, crushed stone and recycled materials. This plant offers a standard inlet hopper chute for inline processing feed from crushing plant or feed conveyor. As with all Fold `n Go® mobile screening plants, this plant provides easy to reach engine controls and grease points for routine service.
For material producers that prefer wheels and need more site to site mobility, the Fold `n Go 2512K is available. Both plants provide simple-to-use hydraulic leveling gears, hydraulic plant controls and screen angle adjustment.

Fold 'n Go 2512KT/2512K

SCREEN:
Kolberg® 2512K double deck screen: 5' x 12' screen top and bottom deck driven by 1200 RPM vibrating mechanism mounted on screen; Variable eccentric shaft with five (5) force amplitude settings on adjustable slip counterweights; Rubber isolator blocks; Hydraulic controls for variable angle operation. Top and bottom discharge chutes, aggregate spreader, and fixed access ladder with wrap-around walkway for easy screen access. Standard material separations range from 3" to 10M depending on application.

POWER SYSTEM:
125 HP (100 HP for 2512K) Tier II John Deere water-cooled diesel engine to power all plant functions and three on-board stacking conveyors; 12 volt battery. Engine mounted pumps to operate all plant functions. NEMA-4 rated instrument panel, tachometer, hour meter, voltmeter, oil pressure gauge, oil temperature gauge and emergency stop. Auxiliary power for up to 30 HP off-plant conveyors.

PLANT CAPACITY:
Screening plant can process up to 350 TPH or more of feed material. Actual tonnages will vary depending on application requirements: feed material size, material separations, type of screens used, weight of product and other material considerations.

CONVEYOR SYSTEM:
2512KT: Delivery Conveyor—28' x 42" conveyor with hydraulic drive (350 FPM); Full-length skirt boards. **Side Conveyors**— Two (2) 27' x 24" swing out conveyors with hydraulic variable speed drive (0-350 FPM); **Fines Conveyor**—20' x 48" conveyor with hydraulic drive (350 FPM); All conveyors have 220 PIW, 1/8 x 1/16 cover belting, belt cleaners and fold for transport.
2512K: Delivery Conveyor—38' x 36" conveyor with hydraulic drive (350 FPM). **Side Conveyors**— Two (2) 27' x 24" swing out conveyors with hydraulic variable speed drive (0-350 FPM); **Fines Conveyor**–23'x 42" conveyor with hydraulic drive (350 FPM); All conveyors have 220 PIW, 1/8 x 1/16 cover belting, belt cleaners and fold for transport.

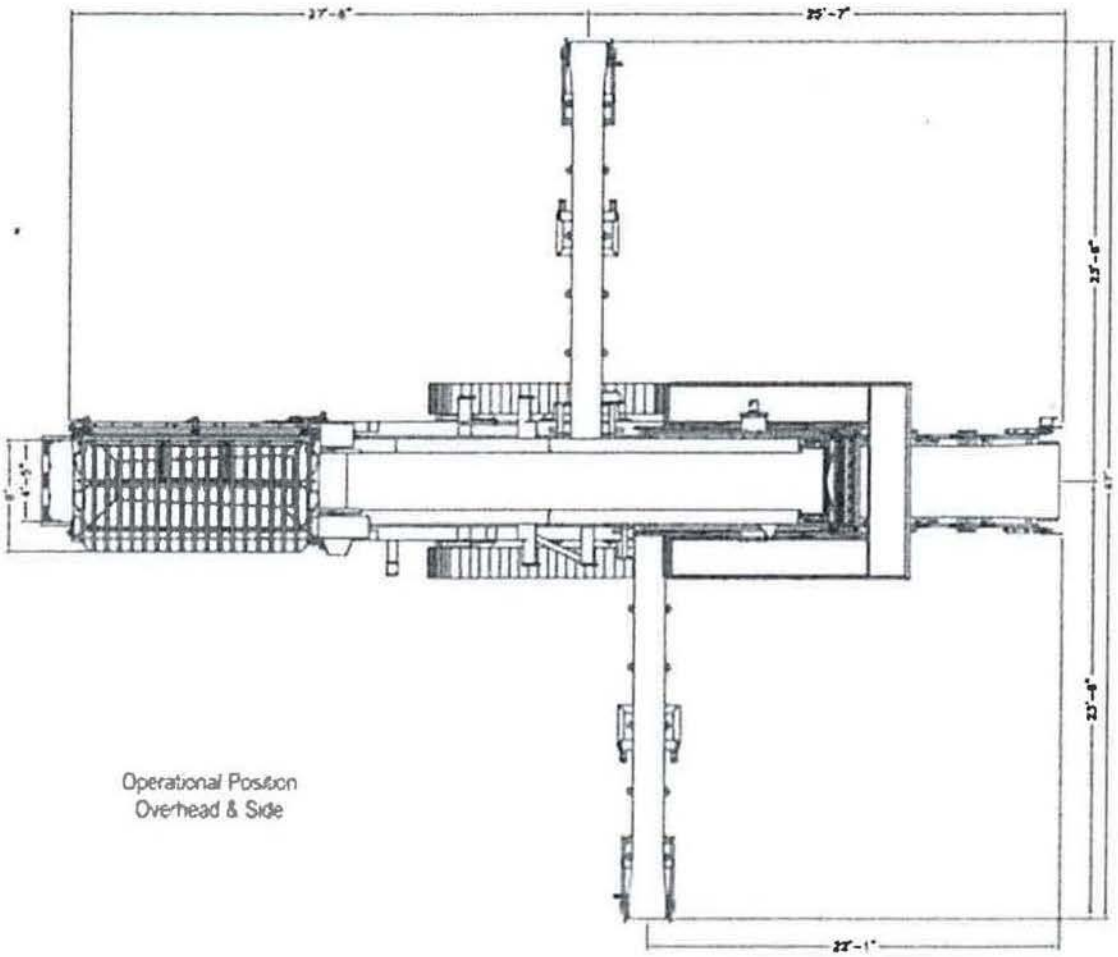
FEEDER SYSTEM:
12 cubic yard heaped capacity hopper with 6' x 13' top opening; Heavy-duty 25" sloped grizzly with 6"nominal opening; Hydraulic dump with patented scissor action for easy cleaning; Adjustable gate; 14' x 42" belt feeder with hydraulic variable speed drive (0-60 FPM); Belting is 330 PIW, 3/16 x 1/16 cover.

CHASSIS:
2512KT: 24" I-beam; Hydraulic landing gear for leveling of plant; Inter-Trac FL6 tracks with wireless remote control for easy jobsite movement.
2512K: 21" I-beam with king pin type hitch; Hydraulic landing gear for leveling of plan; Tandem axle assembly with eight (8) 11 R22.5 tires and mud flaps; Leaf spring type suspension, air brakes, rear tail lights and side marker lights.

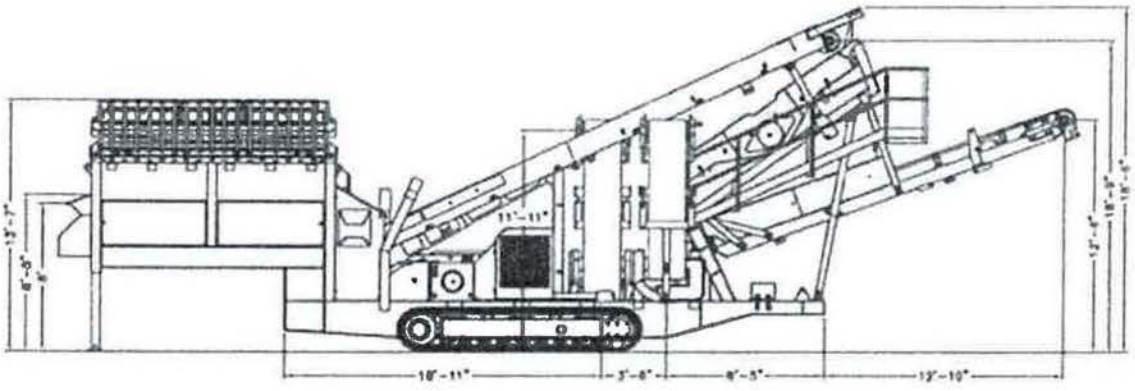
SERVICE CAPACITY:
Fuel.....140 gal
Hydraulic Tank.....100 gal (150 gal for 2512K)

TRANSPORTATION: 2512KT		2512K
Weight	61,000 lbs	54,600 lbs
Height	13' 11" (on lowboy)	13' 0"
Length	49' 8"	62' 2"
Width	11' 11"	11' 11"
Axles	N/A	Tandem

OPTIONS:
Bulkhead—Assists in ramping for loader feed to feed hopper.
Remote Control Grizzly—Assists in dumping oversize material off feed hopper from loader.
Wings—Assists in funneling feed material onto feed hopper grizzly.
Hammermill Shredder—Helps break feed material apart for improved processing. Hydraulic controls can retract shredder up and away from drop zone of feed conveyor to delivery conveyor for material bypass of shredder.
Screen Cloth



Operational Position
Overhead & Side



ASTEC MOBILE SCREENS an Astec Industries Company
2704 WEST LEFEVRE RD · STERLING, IL 61081 · 800.545.2125 FAX 815.626.6430 · astecmobilescreens.com

Record of Telephone Call

Project: WMM - Rec. Plan Rev. 4.5 by: NRC

Call to: Dennis Cosby

Company: Cosby Trucking

Phone No: (435) 678-2990

Date : 02-25-2011

Subject : Update Highway Haul - Belly Dump - Rip Rap

Notes:

Current highway (belly dump) rate:

$100.00 / hour

note: Includes fuel, maintenance, insurance, tires, and write off.

Comments:

Record of Telephone Call

Project: White Mesa Mill Rec. Est. by: NRC

Call to: Ted McDougle

Company: U.S. BLM - Monticello Office

Phone No: (435) 587-1512

Date: July 17, 2009

Subject: Materials Cost, BLM Public Pits

NO change
02-25-11

Notes: Ted's comments:

- Material is sold on a fair market value basis.
- Current price is $0.50 per bank yard removed
- Three (3) or four (4) potential sources close to Mill
- Brown Canyon - east of Mill
- Lens Draw - north of Blanding
- 95, toward Long Park, recapture wash
- Seek Hole.
- Permitting not needed unless new area opened
-

Comments:

Use $ 0.60 per BCY in estimate for material cost and additional clearance of access issues.

Equipment Costs

WHITE MESA MILL RECLAMATION COST
HOURLY EQUIPMENT COSTS 2011 DOLLARS

Actual equipment rates quoted from North Central Rental & Leasing, LLC, 12 month rental period
February 16, 2011

		RATE				MTCE	FUEL	FUEL @	Tires and GET	TOTAL	Mob/Demob	Mob/Demob	Operating Hrs	Replacement Cost
	Units	MONTHLY	HOURLY	Excess Hours	50 Hour Weeks	EXPENDABLES	USAGE	$2.332		COST	per machine	Totals	per Month	
637E Scraper	4	27,500	156.25	79.00	140.80	9.50	23.5	54.80	5.25	$210.35	$25,600	$102,400	880	$ 1,940,000
D8R Dozer	1	13,650	77.56	39.00	69.85	5.10	8.5	19.82	1.05	$95.82	$17,050	$17,050	220	$ 650,000
D7R Dozer	1	11,550	65.63	34.00	59.30	4.60	7.0	16.32	1.05	$81.27	$15,100	$15,100	220	$ 550,000
825H Compactor	1	12,150	69.03	35.00	62.23	4.60	13.0	30.32	0.50	$97.64	$15,750	$15,750	220	$ 250,000
980 H Loader	1	12,250	69.60	35.00	62.68	5.05	9.0	20.99	5.25	$93.97	$15,500	$15,500	220	$ 300,000
988 H Loader	1	18,900	107.39	54.00	96.71	6.50	11.0	25.65	5.25	$134.11	$18,700	$18,700	220	$ 345,000
770 Haul Truck	4	12,450	70.74	36.00	63.79	7.40	8.5	19.82	4.10	$95.11	$16,100	$64,400	880	$ 2,000,000
365BL Excavator	1	17,850	101.42	51.00	91.34	7.55	13.0	30.32	1.05	$130.25	$29,050	$29,050	220	$ 425,000
651 Water Wagon	1	12,750	72.44	37.00	65.35	6.20	17.0	39.64	2.10	$113.30	$17,350	$17,350	220	$ 250,000
5000 gal Water Truck	1	7,200	40.91	21.00	36.93	3.60	10.0	23.32	2.10	$65.95	$7,800	$7,800	220	$ 175,000
14H/Ripper Motor Grader	1	9,550	54.26	28.00	49.01	4.25	5.5	12.83	5.25	$71.34	$12,300	$12,300	220	$ 265,000
												$315,400	3,740	

Equipment Rental Rate Quoted by WorldWide Rental Services (02/19/2011) for PC 300 Excavator with Shear

											Mob/Demob	
PC 300 w/ Shear	19,500.00	110.80	57.00	100.04	17.99	12.5	29.15		$147.18		$4,550	$ 450,000

Small tools allocation - Demolition - $1.35/mechanic labor hour for oxygen/acetylene, expendables	$1.35

	Monthly Maintenance Flat Rate	Butler Maintained Equipment Planned Operating Hours/month	Planned Operating hours/month (other equipment	Total Operating hours per month	Fuel Usage per day, gal,	Fuel Cost per month, 21 days	Maintenance Cost per Operating Hour	Mob/Demob
Butler Equipment Maintenance Cost	$68,050	3,740	570	4,310	20	$ 979.44	$18.46	$ 71,200

	RATE		MTCE	FUEL	FUEL @		TOTAL	
Crane Rental Rates	MONTHLY	HOURLY	EXPENDABLES	USAGE	$2.332		COST	Mob/Demob
60 ton Hydraulic Crane	11,700	66.48	2.15	15.0	34.98		$103.61	$ 2,000
30 ton Hydraulic Crane	7,000	39.77	2.15	10.0	23.32		$65.24	$ 700

Rental Rates updated from Honnen Equipment, 02/14/2011

Power Motive - Screen deck and conveyors	$ 200,000
	$ 8,225,000
	$ 82,250

NORTH CENTRAL
RENTAL & LEASING LLC
A Subsidiary of Butler Machinery Co.

3401 33rd Street Southwest
Po Box 9559
Fargo, ND 58106-9559
Phone (701) 232-0033
Fax (701) 298-1717

February 16, 2011

Denison Mines
Attn: Harold Roberts
E-Mailed to: hroberts@denisonmines.com

Dear Harold:

Thank you for the invitation to quote Denison Mines (Denison) the equipment needed for their mining project in Blanding, Utah. North Central Rental & Leasing, (NCRL) respectfully submits our proposal for a maintained fleet of Caterpillar machines.

Listed on Attachment A, you will find the models, quantities, monthly rental rates, hours allowed per month, excess hour charge, guaranteed number of months rates are based upon, total freight charges and the maintenance rate per hour for materials only.

All rates shown on Attachment A do not include any state, local, property or any other taxes that may be applicable.

Rates are based upon electric hour meter readings that are attached to the dash of each machine. Rates are based on 176 hours of use each month. Excess hour charges, if any, will be calculated and invoiced at the end of the project. There would be no credit issued for any hours under the allowed during the term of this proposal. If Denison elects to double shift machines, then NCRL would invoice those hours at the end of each month. (To figure the double shift rates, take the excess hour rate shown on Attachment A times the number of hours).

Rates are based upon a minimum guarantee of 12 months and a package deal. This quote is valid for 90 days.

Maintenance and Repairs:

Maintenance: The maintenance rates per hour listed on Attachment A includes the material part items only, such as oil filters, lubricant oils, grease, anti-freeze, batteries, fan belts, lights and make-up oils. NCRL would invoice Denison actual hours used on machines at the end of each month. Our monthly maintenance charge would be $68,050 which includes our labor, specialized lube trucks, support vehicles and equipment, specialized tooling, scheduled oil sampling, parts trailers and inventories, mileage and travel expense.

Maintenance (cont.): NCRL will provide two (2) full-time maintenance technicians on site fifty (50) hours per week on a schedule to be determined, Monday through Friday. Denison would have to schedule the machines available for a time frame yet to be determined adequate for NCRL maintenance personnel to perform the required maintenance. NCRL would invoice Denison for the monthly maintenance charge at the end of each month.

Repairs: NCRL would be responsible for all repairs including parts and labor on our machines other than failures caused by damages or mis-use. Repairs include items as minor as starters, alternators, water pumps, hydraulic hoses, etc. to the major items such as engines, transmissions, differentials, brakes, hydraulic pumps and cylinders, etc. If time permits and Denison requests NCRL's technician to perform repairs or maintenance on their machines, our hourly charge would be $99.00 per hour for standard time, $127.00 per hour for overtime and $146.00 per hour for Sundays and holidays plus materials.

Mobilization, Freight and Assembly Charges:

Mobilization: The mobilization charge of $35,600.00 includes the moving expense of our support personnel, set up the job site, and transportation costs of our vehicles, parts and tooling inventory to the job site. NCRL would charge the same amount to demobilize at the end of the project.

Freight and Assembly Charges: The freight and assembly charges listed on Attachment A are based upon all machines shipped by truck to the job site.

Denison would be responsible for demobilization including disassembly and return freight on all machines. Parts, vehicles and equipment, at the end, or at time during the rental period to Rapid City, SD

NCRL would be responsible for freight to the job site for all stock order parts shipments, emergency repair parts, maintenance parts, and G.E.T. and bulk oil shipments.

Once the equipment has been delivered and assembled, an inspection would take place. During the inspection, a representative of NCRL and a representative of Denison will verify on the Acceptance Report the condition of the equipment.

Denison's Responsibilities Include:

Operators: Provide the operators as needed to operate machines as stated in Caterpillar's operating guide. NCRL will provide, at no expense to Denison, qualified training instructors for the purposes of training operators. This training would take place on the jobsite at the initial start up of the job and would include classroom, walk around, and in iron demonstrations.

Fuel: **Supply and fill all fuel for equipment including NCRL's service vehicles.**

Damages: **This includes glass breakage, bent handrails, stepladders, fenders, etc. NCRL's normal policy for repairing damages to rental machines is to repair them when the rental period is completed, however, if the damaged item is of a safety concern, we would repair the damages as soon as possible after they occurred. An itemized list of the parts and labor required would be provided to Denison prior to starting the repair, and invoiced at current list prices plus freight upon completion.**

Undercarriage and Tires: **Denison would be responsible for all tire wear including tire damages on the machines with an asterisk listed on Attachment A. Equipment would have to be returned with same brand and model tires as when delivered, or prorated accordingly by percentage of tire wear and condition at termination of rental period.**

Upon delivery of machines, a representative of NCRL/BMC, a representative of Denison and a representative from an independent tire dealer or manufacturer would jointly verify in writing the condition, percentage of wear, and tire value. Upon termination of rental, we would again have the representatives mentioned above determine the condition, percentage of wear, and tire values. Any differences noted, would then be charged or credited to Denison including both materials and labor.

Undercarriage wear on all track type machines would be NCRL's expense.

Ground Engaging Tools: **Denison would be responsible for all parts relating to ground engaging tools (G.E.T.), i.e. cutting edges, ripper tips and protectors, bucket tips and adapters, edges between adapters, wear plates on bottom of buckets and all mounting hardware. NCRL would install these items on an as needed basis at the current Caterpillar list price plus freight at no additional labor costs. All machines would be delivered with new G.E.T. items and are to be returned with new.**

We wish to thank Denison and you for giving us the opportunity to present our proposal and for all the consideration we receive.

Sincerely yours,

North Central Rental & Leasing
Butler Machinery Company

Oscar D. Swenson
Rental Fleet Marketing Manager

ODS: lmc
Attachment
cc: **Joel Nikle, Rental Fleet Manager**
Joyce Wittkopp, Asst. Rental Fleet Manager

Attachment A

Denison Mine

Equipment Package Quote: Blanding, Utah

February 16, 2011

MODEL	QTY	MONTHLY RENTAL RATE	HOURS ALLOWED PER MONTH	EXCESS HOUR CHARGE	MINIMUM GUARANTEED NUMBER OF MONTHS RATE BASED UPON	TOTAL** FREIGHT CHARGES TO & FROM	MAINTENANCE RATE PER HOUR
*637G	4	$27,500 EA.	176 EA.	$79 EA.	12 EA.	$25,600 EA.	$9.50 EA.
D9R/T RIPPER	1	16,700	176	48	12	18,800	5.80
D8R/T RIPPER	1	13,650	176	39	12	17,050	5.10
D7R/RIPPER	1	11,550	176	34	12	15,100	4.60
825H	1	12,150	176	35	12	15,750	4.60
980H	1	12,250	176	35	12	15,500	5.05
*988H	1	18,900	176	54	12	18,700	6.50
*770	4	12,450	176 EA.	36 EA.	12 EA.	16,100 EA.	7.40 EA.
365B II	1	17,850	176	51	12	29,050	7.55
10,000 GAL. Water Wagon	1	12,750	176	37	12	17,350	6.20
5,000 GAL. Water Wagon	1	7,200	176	21	12	7,800	3.60
14H/M RIPPER	1	9,550	176	28	12	12,300	4.25
16H/M RIPPER	1	13,650	176	39	12	14,650	5.20

* PLUS TIRE WEAR

** INCLUDES ASSEMBLY AND DISASSEMBLY

The charge for two service technician's working fifty (50) hours per week, maintenance and lube trucks, parts and service trailers, and overhead would be $68,050 per month to be invoiced at the end of each month.
Maintenance rates per hour would be invoiced at the end of each month based upon actual hours.

Delivery and receiving mobilization charge is $35,600 each way.

Dawn Gagon

From: Sam Loughman [SamLoughman@honnen.com]
Sent: Monday, February 14, 2011 11:52 AM
To: Dawn Gagon
Cc: Randy DeFosse
Subject: Crane annual quote

Good Morning Dawn,

The following rates are based on 176 usage hours per month, above that overtime hourly rates apply.
The rates do NOT include transport to your location.
Please contact me for current availability and estimated transport cost.

Grove RT530E (30ton) Crane: $7,000 per month
Grove RT760E (60Ton) Crane: $11,700 per month
Grove RT875E (75 ton) Crane: $14,500 per month

HONNEN EQUIPMENT
Sam Loughman
Territory Manager
samloughman@honnen.com
(970)403-9985 Cell
(970)247-4460 Office
(970)247-4463 Fax

Dawn Gagon

From: BBryson@wwmach.com
Sent: Friday, February 19, 2010 9:23 AM
To: Dawn Gagon
Subject: Denison Mines Rental Quote # 870 for Jobsite Blanding,UT

Dawn,
Here is the updated quote. Please let me know if you have any questions or if there is anything else you need. Thanks

Brian

RENTAL QUOTE

Worldwide Rental Services - SLC
1125 Legacy View Street | Salt Lake City, UT | Phone (801)978-3300 | Fax (801)978-3777

Questions or comments?

Client
Dawn Gagon
Denison Mines
Phone: (435)678-2221
Fax: (435)678-2224
Email: [redacted]

Job site
Blanding,UT

Date
02/19/2010

Quote #
870

Expiration Date
03/21/2010

Estimated start

Representative
Brian Bryson
Email: [redacted]
Mobile : (801)879-6702

We are pleased to offer the following quote.
Do not hesitate to contact us with any question or concerns.

Qty.	Equipment	Freight (one-way) *	Monthly rate *	Weekly rate *
1	PC300 Excavator w/ shear	$2,275	$19,500	$6,500

** All Rates are per Machine. Special use and Sales tax are not included in above rates.*

Terms and Conditions

1.- All equipment is subject to availability.
2.- Monthly rate (28 day billing cycle) is based on 200 hours usage. Overtime will be billed at 70% of the hourly rate.
3.- Payment terms are due upon receipt, unless otherwise specified.
4.- Credit approval will be determined by credit information supplied by the contractor to Worldwide, prior to job mobilization.
5.- Ground engaging tool wear to be billed at the end of the contract.
6.- Machine month is defined as cost of one machine per 28 day month. If multiple units are required, multiply the base rate times the number of units required.

January 2010 to December 2010
- Fuel Cost Calculation
Producer Price Index - Commodities #2 Diesel

January 2010	229.4			
February	206.9			
March	225.5			
April	240.0			
May	235.8			
June	221.8			
July	218.5			
August	231.1			
September	227.6			
October	243.9			
November	255.7			
December	261.7	2797.9	**$ 2.332**	per Gallon *12 month Average off road use

Databases, Tables & Calculators by Subject

Change Output Options: From: 2000 To: 2010 GO

include graphs

More Formatting Options

Data extracted on: February 11, 2011 (3:17:35 PM)

Producer Price Index-Commodities

Series Id: WPU057303
Not Seasonally Adjusted
Group: Fuels and related products and power
Item: No. 2 diesel fuel
Base Date: 198200

Download: .xls

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
2000	76.1	86.1	90.0	84.1	82.8	85.7	89.5	92.1	110.8	110.0	110.4	101.6	93.3
2001	96.7	92.4	83.5	86.4	93.1	90.2	81.6	82.0	91.6	75.9	71.3	56.2	83.4
2002	58.9	60.0	69.7	76.9	74.7	73.3	77.6	80.4	92.3	98.7	85.5	86.8	77.9
2003	97.6	123.8	129.4	102.3	87.9	89.8	92.7	96.6	91.1	101.1	95.9	98.1	100.5
2004	109.3	103.7	109.7	119.9	121.0	114.2	123.0	135.1	140.9	166.6	159.7	135.3	128.2
2005	141.1	149.5	173.3	175.4	170.8	187.2	189.8	200.6	212.6	264.1	206.2	198.5	189.1
2006	197.1	196.2	206.5	230.4	239.6	246.9	237.5	250.2	201.3	197.5	197.2	203.0	216.9
2007	180.9	193.5	220.2	238.0	226.5	227.6	243.5	231.2	246.2	249.6	296.7	271.9	235.5
2008	278.2	287.5	353.7	365.1	398.2	421.0	431.9	346.7	342.3	281.8	224.1	168.0	324.9
2009	161.6	147.2	139.2	167.4	166.4	191.1	172.8	204.1	193.2	202.8	215.7	205.1	180.6
2010	229.4	206.9	225.5	240.0	235.8	221.8	218.5	231.1	227.6(P)	243.9(P)	255.7(P)	261.7(P)	233.2(P)

P : Preliminary. All indexes are subject to revision four months after original publication.

Labor Costs

LABOR COSTS

Specified Wages

Heavy Construction **2011 Estimated Labor Rates****

Labor Classification	Base Rate	Mandated Fringe	Labor Burden (FICA, SUI, FUI, etc. 17.67%	Company Benefits (medical, life insure, etc) 21.28%	Fringe Costs	Labor Cost/HR	Fringe Costs - on Overtime hours 17.07%	Labor Cost/HR - Overtime	**Labor Cost/HR - 50 hour week**
Boiler Makers	$25.22	$18.76	$4.46	no added cost	$23.22	$48.44	$22.62	$71.75	**$53.10**
Millwrights	$20.82	$4.28	$3.68	$0.15	$8.11	$28.93	$7.51	$42.49	**$31.64**
Ironworkers	$21.84	$9.92	$3.86	no added cost	$13.78	$35.62	$13.18	$52.53	**$39.00**
Cement Masons	$14.00	$0.56	$2.47	$2.42	$5.45	$19.45	$4.85	$28.28	**$21.22**
Electricians	$14.52	$2.71	$2.57	$0.38	$5.66	$20.18	$5.06	$29.36	**$22.01**
Ironworkers - Reinforcing	$14.00		$2.47	$2.98	$5.45	$19.45	$4.85	$28.28	**$21.22**
Laborers (including pipelayers)	$9.00	$0.00	$1.59	$1.92	$3.51	$12.51	$2.91	$17.86	**$13.58**
Pipefitters	$12.60		$2.23	$2.68	$4.91	$17.51	$4.31	$25.36	**$19.08**
POWER EQUIPMENT OPERATORS									
Backhoes	$10.00		$1.77	$2.13	$3.90	$13.90	$3.30	$19.94	**$15.10**
Cranes	$10.43		$1.84	$2.22	$4.06	$14.49	$3.46	$20.84	**$15.76**
Dozers	$13.63		$2.41	$2.90	$5.31	$18.94	$4.71	$27.51	**$20.65**
Graders	$13.61		$2.40	$2.90	$5.30	$18.91	$4.70	$27.47	**$20.62**
Loaders	$11.38		$2.01	$2.42	$4.43	$15.81	$3.83	$22.82	**$17.21**
Scrapers	$12.75		$2.25	$2.71	$4.97	$17.72	$4.37	$25.67	**$19.31**
Trackhoes	$13.63		$2.41	$2.90	$5.31	$18.94	$4.71	$27.51	**$20.65**
Tractors	$9.42		$1.66	$2.00	$3.67	$13.09	$3.07	$18.73	**$14.22**
Truck Drivers	$12.00		$2.12	$2.55	$4.67	$16.67	$4.07	$24.11	**$18.16**

	% of employee pay
Payroll Taxes	7.65
WC	9.42
UI	0.60
	17.67

Note: base rates do not include FICA, worker comp, unemployment, or company benefits which increase the cost per hour

** State of Utah - General Decision - Current Update UT20100073, 4 pages, 07/09/2010

LABOR COSTS

Nonspecified Wages	Base Rate***	Mandated Fringe	Labor Burden (FICA, SUI, FUI, etc.	Company Benefits (medical, life insure, etc)	Fringe Costs	Labor Cost/HR	Fringe Costs - on Overtime hours	Labor Cost/HR - Overtime	**Labor Cost/HR - 50 hour week**
Survey Crew Member	$11.62	$0.00	$2.05	$2.47	$4.53	$16.14	$3.93	$23.32	**$17.58**
Sample Crew Member	$11.62	$0.00	$2.05	$2.47	$4.53	$16.14	$3.93	$23.32	**$17.58**
Mechanic (Demolition)	$12.07	$0.00	$2.13	$2.57	$4.70	$16.77	$4.10	$24.26	**$18.27**
Manager/Engineer	$42.51	$0.00	$7.51	$9.05	$16.56	$59.06	$15.96	$87.70	**$64.79**
Radiation Safety Officer	$33.21	$0.00	$5.87	$7.07	$12.94	$46.15	$12.34	$68.32	**$50.58**
Secretary	$13.43	$0.00	$2.37	$2.86	$5.23	$18.66	$4.63	$27.10	**$20.35**
Clerk	$11.05	$0.00	$1.95	$2.35	$4.30	$15.36	$3.70	$22.14	**$16.71**
Engineer	$33.21	$0.00	$5.87	$7.07	$12.94	$46.15	$12.34	$68.32	**$50.58**
Environmental Technician	$18.70	$0.00	$3.30	$3.98	$7.28	$25.99	$6.68	$38.08	**$28.41**
Safety Engineer	$18.70	$0.00	$3.30	$3.98	$7.28	$25.99	$6.68	$38.08	**$28.41**
Maintenance Foreman	$24.37	$0.00	$4.31	$5.19	$9.49	$33.86	$8.89	$49.90	**$37.07**
Security Personnel	$7.20	$0.00	$1.27	$1.53	$2.80	$10.00	$2.20	$14.10	**$10.82**
Chemist	$19.55	$0.00	$3.46	$4.16	$7.62	$27.17	$7.02	$39.85	**$29.71**

*** Reflects ------% cost of living raise for 2011

GENERAL DECISION: UT20100073 07/09/2010 UT73

Date: July 9, 2010
General Decision Number: UT20100073 07/09/2010

Superseded General Decision Number: UT20080073

State: Utah

Construction Type: Heavy

County: San Juan County in Utah.

Including Natural Gas Pipeline Construction

Modification Number	Publication Date
0	03/12/2010
1	07/09/2010

* ENGI0003-047 07/01/2010

Excluding Natural Gas Pipeline Construction

	Rates	Fringes
OPERATOR: Power Equipment		
(3)Backhoe	$ 24.93	13.26

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* ENGI0003-054 02/02/2010

Natural Gas Pipeline Construction Only

	Rates	Fringes
OPERATOR: Power Equipment		
Backhoe/Excavator/Trackhoe, Blade/Grader, Boom, Bulldozer, Crane, Mechanic, Trencher	$ 35.10	12.49
Oiler	$ 20.62	9.37

LABO0295-018 11/01/2007

Natural Gas Pipeline Construction Only

	Rates	Fringes
LABORER		
Chain Saw and Power Drill	$ 18.86	4.94
Common or General, Nail gun, Pipelayer, Pot Tender	$ 17.61	4.94
Formworker	$ 18.61	4.94
Powderman	$ 19.36	4.94
Sandblaster	$ 18.36	4.94

SUUT2008-028 08/19/2008

	Rates	Fringes

CARPENTER, Including Form Work (Excluding Natural Gas Pipeline Construction Form Work)	$ 14.75	3.03
CEMENT MASON/CONCRETE FINISHER	$ 14.00	0.56
LABORER: Mason Tender - Cement/Concrete	$ 9.00	0.36
LABORER: Common or General (Excluding Natural Gas Pipeline Construction)	$ 12.00	0.00
LABORER: Pipelayer (Excluding Natural Gas Pipeline Construction)	$ 9.00	0.00
OPERATOR: Roller (Dirt and Grade Compaction)	$ 10.89	0.00
OPERATOR: Trackhoe (Excluding Natural Gas Pipeline Construction)	$ 13.63	0.00
OPERATOR: Blade/Grader (Excluding Natural Gas Pipeline Construction)	$ 13.61	0.00
OPERATOR: Excavator (Excluding Natural Gas Pipeline Construction)	$ 12.75	0.00
OPERATOR: Front End Loader	$ 11.38	0.00
TRUCK DRIVER (Excluding Natural Gas Pipeline Construction)	$ 12.00	0.00

TEAM0222-020 11/01/2007

NATURAL GAS PIPELINE CONSTRUCTION ONLY

	Rates	Fringes
TRUCK DRIVER		
Group 1:		
Articulated End Dump, Low Boy, Rollagon or Similar type Equipment, Truck Mechanic	$ 27.14	8.74
Group 2:		
A-Frame, Challenger(For transportation purposes), Forklift, Fuel Truck, Gin Pole, Rubber-Tired Tractor, Tandem Float (4 & 5 Axle), Track Truck/All-Track Dumper Equipment, Vacuum Truck,		

```
      Winch Truck.....$ 26.68              8.74
     Group 3:
      Ambulance , Bus, Dump
      Truck (2 and 3 axle),
      Flatbed Truck (2 and 3
      axle), Grease Truck, Hot
      Pass Truck (3 axle),
      Jeep, Pick-up, Single
      Axle Float (3 axle), Skid
      Truck (2 and 3 axle),
      Station Wagon, Stringer
      Bead & Hot Pass (2 axle),
      Swamp Buggy/ Marsh Buggy,
      or similar type
      equipment, Team Driver,
      Water Truck (2 and 3 axle).$ 26.39    8.74

Premium Pay:

Add $1.25 to the above Rate for the following classifications

   Group 1: Low Boy and Truck Mechanic
   Group 2: Stringer Truck
----------------------------------------------------------------

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.
================================================================

Unlisted classifications needed for work not included within
the scope of the
classifications listed may be added after award only as
provided in the labor
standards contract clauses (29 CFR 5.5(a)(1)(ii)).

----------------------------------------------------------------
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In the listing above, the "SU" designation means that rates
listed under the
identifier do not reflect collectively bargained wage and
fringe benefit
rates.  Other designations indicate unions whose rates have
been determined
to be prevailing.

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            WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in he matter? This can
be:

*  an existing published wage determination
*  a survey underlying a wage determination
*  a Wage and Hour Division letter setting forth a position on
a wage
   determination matter
*  a conformance (additional classification and rate) ruling
```

Long Term Care

LONG TERM CARE CALCULATION
March 2011

Base Amount (Starting in Dec. 1978)	$250,000
CPI-U December, 1978	67.7
CPI-U December 2010	219.179

Adjusted Long Term Care = $250,000 x (CPI-U most recent / CPI-U Dec., 1978)

Adjusted Long Term Care	$809,376

Databases, Tables & Calculators by Subject

Change Output Options: From: 2000 To: 2010 GO

include graphs

More Formatting Options

Data extracted on: February 11, 2011 (3:15:40 PM)

Consumer Price Index - All Urban Consumers

Series Id: CUUR0000SA0
Not Seasonally Adjusted
Area: U.S. city average
Item: All items
Base Period: 1982-84=100

Download: .xls

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	HALF1	HALF2
2000	168.8	169.8	171.2	171.3	171.5	172.4	172.8	172.8	173.7	174.0	174.1	174.0	172.2	170.8	173.6
2001	175.1	175.8	176.2	176.9	177.7	178.0	177.5	177.5	178.3	177.7	177.4	176.7	177.1	176.6	177.5
2002	177.1	177.8	178.8	179.8	179.8	179.9	180.1	180.7	181.0	181.3	181.3	180.9	179.9	178.9	180.9
2003	181.7	183.1	184.2	183.8	183.5	183.7	183.9	184.6	185.2	185.0	184.5	184.3	184.0	183.3	184.6
2004	185.2	186.2	187.4	188.0	189.1	189.7	189.4	189.5	189.9	190.9	191.0	190.3	188.9	187.6	190.2
2005	190.7	191.8	193.3	194.6	194.4	194.5	195.4	196.4	198.8	199.2	197.6	196.8	195.3	193.2	197.4
2006	198.3	198.7	199.8	201.5	202.5	202.9	203.5	203.9	202.9	201.8	201.5	201.8	201.6	200.6	202.6
2007	202.416	203.499	205.352	206.686	207.949	208.352	208.299	207.917	208.490	208.936	210.177	210.036	207.342	205.709	208.976
2008	211.080	211.693	213.528	214.823	216.632	218.815	219.964	219.086	218.783	216.573	212.425	210.228	215.303	214.429	216.177
2009	211.143	212.193	212.709	213.240	213.856	215.693	215.351	215.834	215.969	216.177	216.330	215.949	214.537	213.139	215.935
2010	216.687	216.741	217.631	218.009	218.178	217.965	218.011	218.312	218.439	218.711	218.803	219.179	218.056	217.535	218.576

General Liability & Auto Insurance

General Liability and Auto Insurance

Project Life	7 years	
GL Insurance per full year		$ 35,000
Auto	$ 1,200	$ 12,000

	Vehicles	Vehicle Ins.	GL Insurance
Year 1	5	$ 6,000	$ 20,000
Year 2	10	$ 12,000	$ 35,000
Year 3	10	$ 12,000	$ 35,000
Year 4	10	$ 12,000	$ 35,000
Year 5	10	$ 12,000	$ 35,000
Year 6	10	$ 12,000	$ 35,000
Year 7	3	$ 3,600	$ 20,000
		$ 69,600	$ 215,000

Project Cost	$ 284,600

Harold Roberts

From: Thomas.McBeath@aon.ca
Sent: Friday, February 04, 2011 2:41 PM
To: Jim Anderson
Cc: Harold Roberts
Subject: Re: FW: Denison Mines

Hi,

Our estimate of costs remains unchanged, as the insurance market place pricing remains constant and general criteria for the work is also unchanged.
That is:

a) General Liability: $35,000 per year
b) Automobile: $1,200 per vehicle per year. Thus, $12,000 for 10 vehicles.

Best Regards,

Thomas McBeath, P.Eng. | Aon Reed Stenhouse Inc.
Vice President | *Risk Management Practice*
20 Bay Street, Toronto, ON M5J 2N9
Tel: 416.868.2449 | Fax: 416.868.5580
thomas.mcbeath@aon.ca
www.aon.ca

Jim Anderson <JAnderson@denisonmines.com>

Feb/04/2011 03:38 PM EST

To Thomas McBeath/ARS/CA/AON
cc Harold Roberts <HRoberts@denisonmines.com>
Subject FW: Denison Mines

Tom, can you provide this?

Jim Anderson
Executive Vice President & Chief Financial Officer

t: 416-979-1991 x372 | f: 416-979-5893
595 Bay Street, Suite 402, Toronto, ON M5G 2C2

DENISON MINES CORP
www.denisonmines.com

From: Harold Roberts
Sent: February 4, 2011 3:36 PM

To: Jim Anderson
Subject: RE: Denison Mines

Jim:

I need to get an update on this insurance number. A statement that it hasn't changed or an update on the costs.

Thanks,

Harold Roberts
Executive Vice President, US Operations

t: (303) 389-4160 | f: (303) 389-4125
1050 17th Street, Suite 950, Denver, CO 80265

DENISON MINES (USA) CORP
www.denisonmines.com

From: Jim Anderson
Sent: Thursday, July 29, 2010 7:16 AM
To: Harold Roberts
Subject: FW: Denison Mines

Harold, is Tom's assumption correct?

Jim Anderson
Executive Vice President & Chief Financial Officer

t: 416-979-1991 x372 | f: 416-979-5893
595 Bay Street, Suite 402, Toronto, ON M5G 2C2

DENISON MINES CORP
www.denisonmines.com

From: Thomas.McBeath@aon.ca [mailto:Thomas.McBeath@aon.ca]
Sent: July 29, 2010 8:07 AM
To: Jim Anderson
Subject: Re: Denison Mines

Jim,

Would it be correct to assume that the $16mil reclaimation project would be done over several years? The letter hints at this with 5 years of monitoring, and 6.5yrs of pumping. I have used that assumption and recommend the following premiums:

a) General Liability: $35,000 per year
b) Automobile: $1,200 per vehicle per year. Thus, $12,000 for 10 vehicles.

Trust this meets your needs. Feel free to call if questions.

Sincerely,

Tom

Thomas McBeath, P.Eng. | Aon Reed Stenhouse Inc.
Vice President | *Risk Management Practice*
20 Bay Street, Toronto, ON M5J 2N9
Tel: 416.868.2449 | Fax: 416.868.5580
thomas.mcbeath@aon.ca
www.aon.ca

Jim Anderson <JAnderson@denisonmines.com>

Jul/23/2010 02:29 PM AST

To "Thomas.McBeath@aon.ca" <Thomas.McBeath@aon.ca>
cc

Subject Denison Mines

Tom, we are re-estimating our reclamation liability for the White Mesa mill in the US. The attached letter outlines some additional information required by the State. On page two in the paragraph marked they require some specific estimates on insurance. Once you have had a chance to review, could you give me a call to discuss how best to address this?

Jim Anderson
Executive Vice President & Chief Financial Officer

t: 416-979-1991 x372 | f: 416-979-5893
595 Bay Street, Suite 402, Toronto, ON M5G 2C2
DENISON MINES CORP
http://www.denisonmines.com/

Haul Routes

HAUL ROUTE SUMMARY					
Haul Route	Travel Time (min)	Fixed Time (min)	Total Cycle Time (min)	Trips per Work Hour [1]	Bank Cubic Yards per Hour
1	2.7	1.2	3.9	12.8	**358**
2	3.4	1.2	4.6	10.9	**303**
3	3.7	1.2	4.9	10.2	**285**
4	2.7	1.2	3.9	12.8	**358**
5	4.1	1.2	5.3	9.4	**263**
6	4.5	1.2	5.7	8.8	**245**
7	2.4	1.2	3.6	13.9	**388**
8	3.2	1.2	4.4	11.4	**317**
9	3.6	1.2	4.8	10.4	**291**
10	2.9	1.2	4.1	12.2	**340**
11	4.5	1.2	5.7	8.8	**245**
12	3.5	1.2	4.7	10.6	**297**
13	2.2	1.2	3.4	14.7	**410**
14	2.4	1.2	3.6	13.9	**388**
15	3.8	1.2	5	10.0	**279**
16	4.4	1.2	5.6	8.9	**249**

[1] 50 minute work hour (83.3% efficiency)

HAUL ROUTE DESCRIPTIONS

Haul Route	Material Source	Material Destination	In-Stockpile Quantity (cy)	Notes
1	E8 and W9	Outslopes of Cells 4A and 4B	243,000	227,000 cy (all) from E8 and 16,000 cy (5%) from W9
2	W7, W8, and W9	Tailings Surface of Cells 4A and 4B	1,194,000	900,000 cy (all) from W8, 284,000 cy (95%) from W9 and 10,000 cy (25%) from W7
3	E2, E3, E4, E5, E6, E7	Cell 3 Tailings Surface and Outslopes	420,000	All of stockpiles E2-E7
4	W7, W5	Cell 3 Tailings Surface and Outslopes	603,000	29,000 cy (75%) from W7 and 574,000 cy (60%) from W5
5	W5	Cell 2 Tailings Surface and Outslopes	391,000	391,000 cy (40%) from W5
6	W2	Cell 2 Tailings Surface and Outslopes	298,000	298,000 cy (51%) from W2
7	W2	Cell 1	235,000	235,000 cy (40%) from W2
8	W6	Tailings Surface of Cells 4A and 4B	54,000	54,000 cy (58%) of W6
9	W6	Cell 3 Tailings Surface	39,000	39,000 cy (42%) of W6
10	W4	Cell 3 Tailings Surface	20,000	20,000 cy (22%) of W4
11	E1	Cell 2 Tailings Surface	15,900	15,900 cy (all) of E1
12	W4	Cell 2 Tailings Surface	36,100	36,100 cy (40%) of W4
13	W4	Cell 1	10,500	10,500 cy (12%) of W4
14	Mill Site (Contaminated Soils)	Cell 1	N/A	
15	W3	Mill Site	54,400	54,400 cy (64%) of Stockpile W3
16	Cell 1 Contaminated Material	Cell 4B	N/A	

TRAVEL TIMES

Haul Route	LOADED											
	Segment A				Segment B				Segment C			
	Length (ft)	GR	TR (%)	Travel Time (min)	Length (ft)	GR	TR (%)	Travel Time (min)	Length (ft)	GR	TR (%)	Travel Time (min)
1	420	-7%	-2%	0.3	1,590	0%	5%	1.1				
2	760	-1%	4%	0.6	1,810	0%	5%	1.2				
3	810	0%	5%	0.8	1,870	0%	5%	1.3				
4	2,470	0%	5%	1.7								
5	800	1%	6%	0.9	2,320	0%	5%	1.5				
6	1,310	-1%	4%	0.8	2,180	0%	5%	1.4				
7	570	0%	5%	0.5	1,340	-1%	4%	0.8				
8	550	2%	7%	0.6	1,810	0%	5%	1.2				
9	1,070	1%	6%	0.9	1,650	0%	5%	1.2				
10	680	-1%	4%	0.5	1,620	0%	5%	1.1				
11	1,370	-1%	4%	0.9	1,110	0%	5%	0.8	710	0%	5%	0.6
12	680	-1%	4%	0.5	2,180	0%	5%	1.4				
13	1,440	0%	5%	1								
14	2,030	-1%	4%	1.1								
15	1,695	-2%	3%	0.9	1,695	2%	7%	1.4				
16	1,980	0%	5%	1.3	1,620	-1%	4%	1				

Haul Route	EMPTY												TOTAL			
	Segment D				Segment E				Segment F							
	Length (ft)	GR	TR (%)	Travel Time (min)	Length (ft)	GR	TR (%)	Travel Time (min)	Length (ft)	GR	TR (%)	Travel Time (min)	Total Travel Time (min)	Load Time (min) [1]	Maneuver and Spread Time (min)	Total Cycle Time (min)
1					1,590	0%	5%	0.9	420	7%	12%	0.4	2.7	0.6	0.6	3.9
2					1,810	0%	5%	1.1	760	1%	6%	0.5	3.4	0.6	0.6	4.6
3					1,870	0%	5%	1.1	810	0%	5%	0.5	3.7	0.6	0.6	4.9
4									2,470	0%	5%	1	2.7	0.6	0.6	3.9
5					2,320	0%	5%	1.2	800	-1%	4%	0.5	4.1	0.6	0.6	5.3
6					2,180	0%	5%	1.2	1,310	1%	6%	1.1	4.5	0.6	0.6	5.7
7					1,340	1%	6%	0.8	570	0%	5%	0.3	2.4	0.6	0.6	3.6
8					1,810	0%	5%	1.1	550	-2%	3%	0.3	3.2	0.6	0.6	4.4
9					1,650	0%	5%	1	1,070	-1%	4%	0.5	3.6	0.6	0.6	4.8
10					1,620	0%	5%	0.9	680	1%	6%	0.4	2.9	0.6	0.6	4.1
11	710	0%	5%	0.4	1,110	0%	5%	0.6	1,370	1%	6%	1.2	4.5	0.6	0.6	5.7
12					2,180	0%	5%	1.2	680	1%	6%	0.4	3.5	0.6	0.6	4.7
13									1,440	0%	5%	1.2	2.2	0.6	0.6	3.4
14									2,030	1%	6%	1.3	2.4	0.6	0.6	3.6
15					1,695	-2%	3%	0.6	1,695	2%	7%	0.9	3.8	0.6	0.6	5
16					1,620	1%	6%	1	1,980	0%	5%	1.1	4.4	0.6	0.6	5.6

[1] Loaded using 1 D8

Haul Route	HAUL ROUTE DISTANCES AND GRADES (LOADED)											
	Segment A				Segment B				Segment C			
	Length (ft)	Initial El.	Final El.	Grade (%)	Length (ft)	Initial El.	Final El.	Grade (%)	Length (ft)	Initial El.	Final El.	Grade (%)
1	420	5,610	5,581	-6.9%	1,590	5,581	5,581	0.0%				
2	760	5,624	5,617	-0.9%	1,810	5,617	5,613	-0.2%				
3	810	5,620	5,619	-0.1%	1,870	5,619	5,620	0.1%				
3a	1,430	5,640	5,619	-1.5%	1,870	5,619	5,620	0.1%				
3b	1,030	5,629	5,619	-1.0%	1,870	5,619	5,620	0.1%				
3c	840	5,628	5,619	-1.1%	1,870	5,619	5,620	0.1%				
3d	560	5,616	5,619	0.5%	1,870	5,619	5,620	0.1%				
3e	480	5,607	5,619	2.5%	1,870	5,619	5,620	0.1%				
3f	600	5,606	5,619	2.2%	1,870	5,619	5,620	0.1%				
4	2,470	5,612	5,620	0.3%								
5	800	5,612	5,620	1.0%	2,320	5,620	5,625	0.2%				
6	1,310	5,625	5,616	-0.7%	2,180	5,616	5,625	0.4%				
7	570	5,625	5,627	0.4%	1,340	5,627	5,620	-0.5%				
8	550	5,608	5,617	1.6%	1,810	5,617	5,613	-0.2%				
9	1,070	5,608	5,620	1.1%	1,650	5,620	5,620	0.0%				
10	680	5,624	5,616	-1.2%	1,620	5,616	5,620	0.2%				
11	1,370	5,634	5,622	-0.9%	1,110	5,622	5,622	0.0%	710	5,622	5,625	0.4%
12	680	5,624	5,616	-1.2%	2,180	5,616	5,625	0.4%				
13	1,440	5,624	5,620	-0.3%								
14	2,030	5,637	5,622	-0.7%								
15	1,695	5,640	5,610	-1.8%	1,695	5,610	5,637	1.6%				
16	1,980	5,610	5,616	0.3%	1,620	5,616	5,605	-0.7%				

Haul Route	HAUL ROUTE DISTANCES AND GRADES (EMPTY)											
	Segment D				Segment E				Segment F			
	Length (ft)	Initial El.	Final El.	Grade (%)	Length (ft)	Initial El.	Final El.	Grade (%)	Length (ft)	Initial El.	Final El.	Grade (%)
1					1,590	5,581	5,581	0.0%	420	5,581	5,610	6.9%
2					1,810	5,613	5,617	0.2%	760	5,617	5,624	0.9%
3					1,870	5,620	5,619	-0.1%	810	5,619	5,620	0.1%
3a					1,870	5,620	5,619	-0.1%	1,430	5,619	5,640	1.5%
3b					1,870	5,620	5,619	-0.1%	1,030	5,619	5,629	1.0%
3c					1,870	5,620	5,619	-0.1%	840	5,619	5,628	1.1%
3d					1,870	5,620	5,619	-0.1%	560	5,619	5,616	-0.5%
3e					1,870	5,620	5,619	-0.1%	480	5,619	5,607	-2.5%
3f					1,870	5,620	5,619	-0.1%	600	5,619	5,606	-2.2%
4									2,470	5,620	5,612	-0.3%
5					2,320	5,625	5,620	-0.2%	800	5,620	5,612	-1.0%
6					2,180	5,625	5,616	-0.4%	1,310	5,616	5,625	0.7%
7					1,340	5,620	5,627	0.5%	570	5,627	5,625	-0.4%
8					1,810	5,613	5,617	0.2%	550	5,617	5,608	-1.6%
9					1,650	5,620	5,620	0.0%	1,070	5,620	5,608	-1.1%
10					1,620	5,620	5,616	-0.2%	680	5,616	5,624	1.2%
11	710	5,625	5,622	-0.4%	1,110	5,622	5,622	0.0%	1,370	5,622	5,634	0.9%
12					2,180	5,625	5,616	-0.4%	680	5,616	5,624	1.2%
13									1,440	5,620	5,624	0.3%
14									2,030	5,622	5,637	0.7%
15					1,695	5,637	5,610	-1.6%	1,695	5,610	5,640	1.8%
					1,620	5,605	5,616	0.7%	1,980	5,616	5,610	-0.3%

	Estimated Load (LCY)	Load Factor	Payload (BCY)
Cat 637G	31	0.9	27.9

Assume 1 BCY =	3,200	lb
Machine Weight (Empty) =	114,744	lb
Payload =	89,280	lb
Machine Weight (Loaded) =	204,024	lb

Calculate Usable Pull (Traction Limitation)

Percentage of Weight on Driving Wheels (Loaded) =	49%	
Percentage of Weight on Driving Wheels (Empty)=	59%	

Usable Pull = Traction Factor * Weight on Driving Wheels

Traction Factor (med. firm earth) =	0.5	page 27-2
Usable Pull (Loaded) =	49,986	lb
Usable Pull (Empty) =	33,849	lb

Altitude Deration Factor @ 5,600 ft amsl =	1	page 27-8
Rolling Resistance (rutted/flexing dirt roadway w/ little maintenance and no water) =	5%	page 27-1

IN-PLACE VOLUMES

Cell	Radon Attenuation and Grading Layer	Compacted Radon Attenuation Layer	Water Storage Layer	Erosion Protection Layer	Topsoil	Rock Mulch	Compacted Outslope Fill	Rip Rap Bedding Layer	Rip Rap Armor	Random Fill Subtotal (cy)
1	58,000	68,000	86,000	8,000	6,000	2,000	33,000	5,000	10,000	245,000
2	231,000	57,000	392,000	57,000	52,000	5,000	9,000	2,000	6,000	689,000
3	544,000	64,000	409,000	59,000	59,000	0	7,000	2,000	4,000	1,024,000
4a	158,000	192,000	241,000	35,000	27,000	9,000	130,000	7,000	20,000	721,000
4b	159,000	197,000	246,000	36,000	27,000	9,000	85,000	5,000	14,000	687,000
Mill	0	0	0	0	55,000	0	0	0	0	0
Subtotal:	1,150,000	578,000	1,374,000	195,000	226,000	25,000	264,000	21,000	54,000	3,366,000
TOTAL:	**3,366,000**									

IN-STOCKPILE VOLUMES

Cell	Radon Attenuation and Grading Layer	Compacted Radon Attenuation Layer	Water Storage Layer	Erosion Protection Layer	Topsoil	Rock Mulch	Compacted Outslope Fill	Rip Rap Bedding Layer	Rip Rap Armor	Random Fill Subtotal (cy)
1	54,588	76,000	86,000	8,000	6,000	N/A	36,882	N/A	N/A	253,471
2	217,412	63,706	392,000	57,000	52,000	N/A	10,059	N/A	N/A	683,176
3	512,000	71,529	409,000	59,000	59,000	N/A	7,824	N/A	N/A	1,000,353
4a	148,706	214,588	241,000	35,000	27,000	N/A	145,294	N/A	N/A	749,588
4b	149,647	220,176	246,000	36,000	27,000	N/A	95,000	N/A	N/A	710,824
Mill					55,000					
Subtotal:	1,082,353	646,000	1,374,000	195,000	226,000	0	295,059	0	0	3,397,412
TOTAL:	**3,398,000**									

Relative Compaction in Stockpiles: 85%

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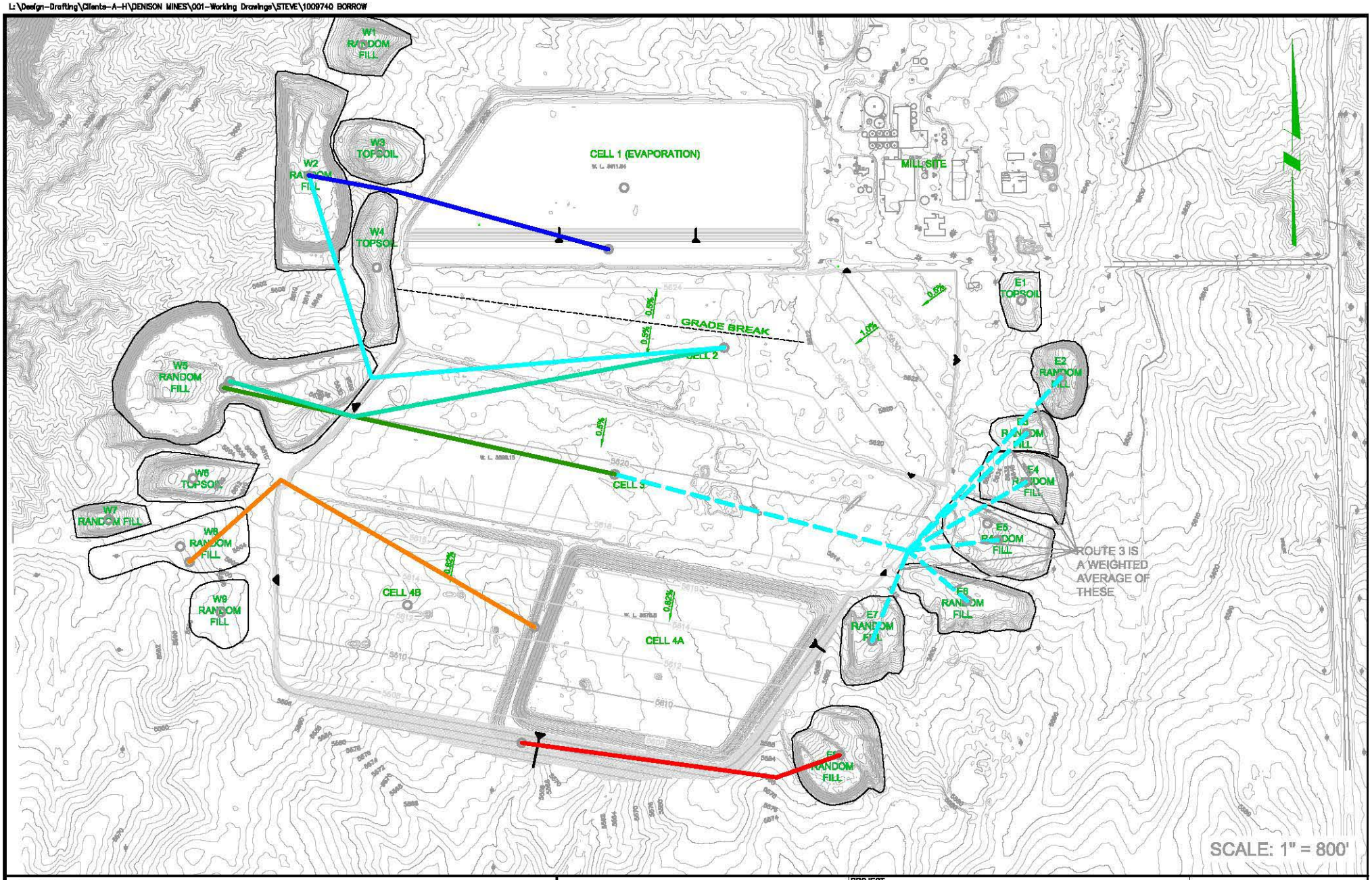

LEGEND

- HAUL ROUTE 1
- HAUL ROUTE 2
- HAUL ROUTE 3
- HAUL ROUTE 4
- HAUL ROUTE 5
- HAUL ROUTE 6
- HAUL ROUTE 7

DENISON MINES

Denison Mines (USA) Corp

PROJECT: WHITE MESA MILL RECLAMATION

TITLE: HAUL ROUTES 1 - 7

MWH

DATE: SEP 2011

FILE NAME: 1009740 BORROW

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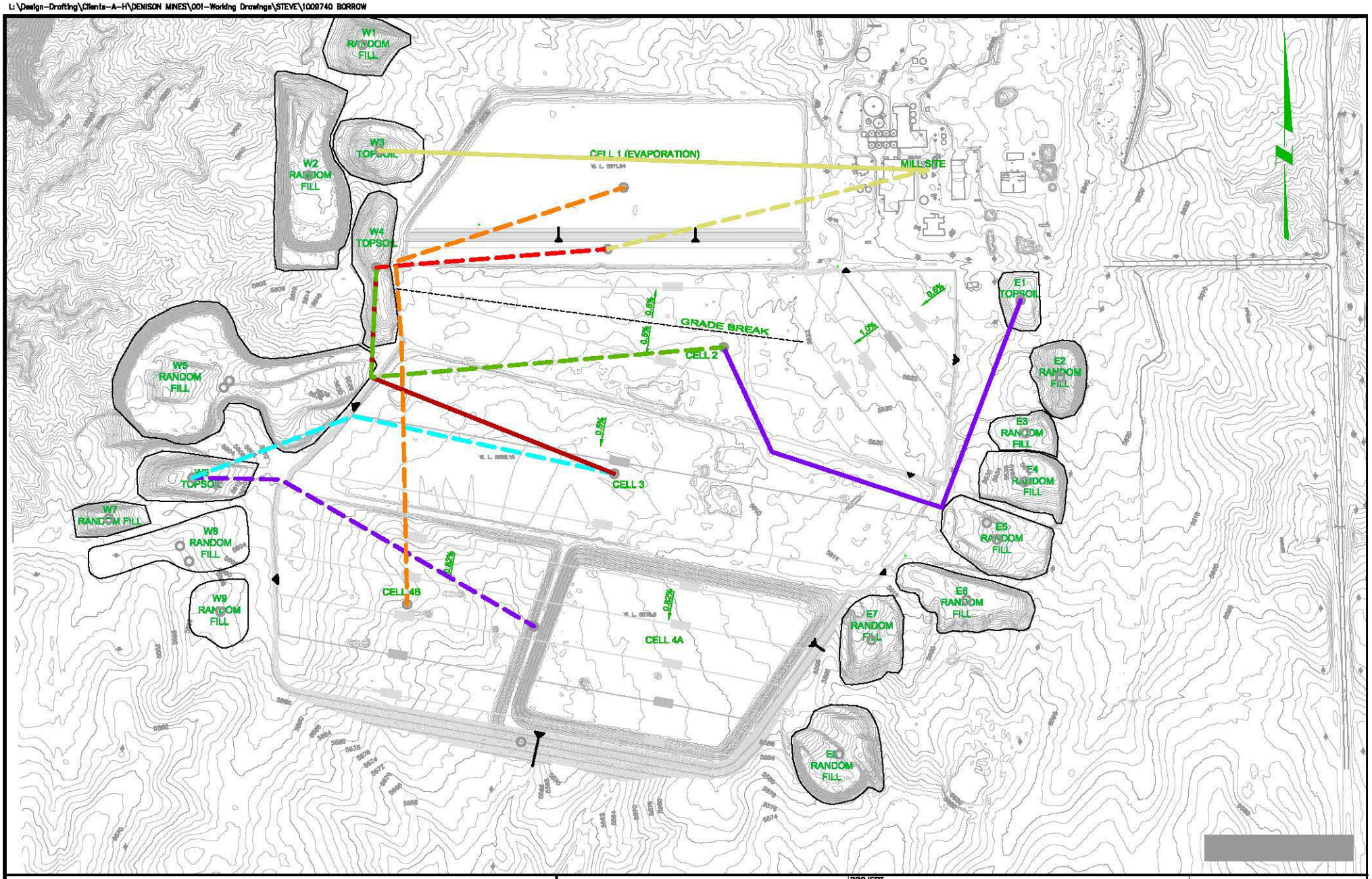

LEGEND

- HAUL ROUTE 8
- HAUL ROUTE 9
- HAUL ROUTE 10
- HAUL ROUTE 11
- HAUL ROUTE 12
- HAUL ROUTE 13
- HAUL ROUTE 14
- HAUL ROUTE 15
- HAUL ROUTE 16

DENISON MINES

Denison Mines (USA) Corp

PROJECT: WHITE MESA MILL RECLAMATION

TITLE: HAUL ROUTES 8 - 16

MWH

DATE: SEP 2011

FILE NAME: 1009740 BORROW