Appendix 8-A

DOGM Reclamation Calculations

Bonding Calculations
Bear Canyon Mine

Bond Summary

Direct Costs		
Subtotal Demolition and Removal	$357,428.00	
Subtotal Backfilling and Grading	$319,889.00	
Subtotal Revegetation	$489,133.00	
Direct Costs	$1,166,450.00	
Indirect Costs		
Mob/Demob	$116,645.00	10.0%
Contingency	$58,323.00	5.0%
Engineering Redesign	$29,161.00	2.5%
Main Office Expense	$79,319.00	6.8%
Project Mainagement Fee	$29,161.00	2.5%
Subtotal Indirect Costs	$312,609.00	26.8%
Total Cost	$1,479,059.00	
Escalation factor		0.032
Number of years		5
Escalation	$252,287.00	
Reclamation Cost	$1,731,346.00	
Bond Amount (rounded to nearest $1,000) 2013 dollars	$1,731,000.00	
Bond Posted 2005 dollars	$1,825,000.00	
Difference Between Cost Estimate and Bond	$94,000.00	
Percent Difference	5.43%	
next midterm	4/2/2013	

Appendix 8-A

Demolition Estimated Costs

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Scale House 01																			19064
	Scalehouse Pavement 02																			7529
	Shower House 03																			31573
	Shop 04																			15976
	Machine Shop 05																			4218
	Tipple 07																			20469
	Substation 08																			14954
	Coal Storage Bin 09																			9041
	Lump Coal 10																			7377
	Coal Recovery Bin 11																			68
	Slack Bin 12																			993
	WHR Surge Bin 13																			12607
	Lump Coal Storage Pad 15																			1031
	Equipment Wash Pad 16																			213
	Transformer Pad Shop 17																			23
	Water Tanks 18																			2242
	Fuel Tanks 19																			2796
	Fuel Lines 20																			3800
	Fans 21																			4429
	Conveyor 22																			89303
	Bld Tank Seam 23																			334
	Septic Tanks 24																			585
	Culverts 25																			976
	Watchman Trailer 26																			183
	Cap and Powder Mag 27																			139
	Conveyor Tunnel 28																			2922
	Plug Well 29																			5000
	Seal Portals 30																			93600
	Power Lines and Poles 32																			5983
	Total																			357428

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Scale House 01																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02 41 16 13 0100	0.3	/CF	34	83	16								FT		45152	CF	13546
	Structure's Vol. Demolished																0.3	502	CY	
	Rubble's Weight (exclude steel)												1.35			TON/CY		678	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	Nielson Construction	Neilson Con.	7	/TON													678	TON	4746
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			18292
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	234	2	0.67								FT		12	CY	119
	Concrete's Vol. Demolished																1.3	16	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													16	CY	16
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			135
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	234	4	0.67								FT		23	CY	228
	Concrete's Vol. Demolished																1.3	30	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													30	CY	29
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			257
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	83	34	0.33								FT		34	CY	337
	Concrete's Vol. Demolished																1.3	44	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													44	CY	43
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			380
	Total																			19064

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Scalehouse Pavement 02																			
	Structure's Demolition Cost	Pavement removal (asphalt) 3 inch	02 41 13 17 5010	4.63	/SY					1450						SY		1450	SY	6714
	Structure's Vol. Demolished															YD	1.3	0	CY	
	Rubble's Weight (exclude steel)															ton/CY		0	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck	Truck dump 16 ton payload	01 54 33 20 5300	435.96	/day									1		DAY		1	DAY	436
	Transportation Cost Non Steel Drive	Truck Driver, Heavy	Trhv	$47.35	HR									8		HR		8	HR	379
	Disposal Cost Non Steel	Nielson Construction	Neilson Con.	7	/TON													0	TON	0
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			7529
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			7529

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Shower House 03																			
	Structure's Demolition Cost																			
	Structure's Vol.	Mixed Materials Bld. Large	02 41 16 13 0100	0.3	/CF	92	50	8								FT		36800	CF	11040
	Structure's Vol.	Masonary Bld. Large	02 41 16 13 0080	0.31	/CF	92	50	8								FT		36800	CF	11408
	Structure's Vol. Demolished																0.3	818	CY	
	Rubble's Weight (exclude steel)												1.35			TON/CY		1104	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	Nielson Construction	Neilson Con.	7	/TON													1104	TON	7728
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			90176
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	284	2	0.67								FT		14	CY	139
	Concrete's Vol. Demolished																1.3	18	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													18	CY	18
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													18	CY	67
	Disposal Costs																	18	CY	0
	Subtotal																			224
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	319	2	0.67								FT		16	CY	159
	Concrete's Vol. Demolished																1.3	21	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													21	CY	21
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													21	CY	78
	Disposal Costs																	21	CY	0
	Subtotal																			258
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	92	50	0.33								FT		56	CY	556
	Concrete's Vol. Demolished																1.3	73	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													73	CY	72
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													73	CY	272
	Disposal Costs																	73	CY	0
	Subtotal																			900
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	12	5.5	0.33								FT		1	CY	10
	Concrete's Vol. Demolished																1.3	1	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													1	CY	1
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													1	CY	4
	Disposal Costs																	1	CY	0
	Subtotal																			15
	Total																			31573

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Shop 04																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	40	93	14								FT		52080	CF	15103
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			15103
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	198	4	0.67								FT		20	CY	198
	Concrete's Vol. Demolished																1.3	26	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													26	CY	25
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			223
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	266	2	0.67								FT		13	CY	129
	Concrete's Vol. Demolished																1.3	17	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													17	CY	17
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			146
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	40	93	0.33								FT		45	CY	446
	Concrete's Vol. Demolished																1.3	59	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													59	CY	58
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			504
	Total																			15976

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Machine Shop 05																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	30	45	10								FT		13500	CF	3915
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			3915
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	135	1	0.67								FT		3	CY	30
	Concrete's Vol. Demolished																1.3	4	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													4	CY	4
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			34
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	150	2	0.67								FT		7	CY	69
	Concrete's Vol. Demolished																1.3	9	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													9	CY	9
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			78
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	30	45	0.33								FT		17	CY	169
	Concrete's Vol. Demolished																1.3	22	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													22	CY	22
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			191
	Total																			4218

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Tipple 07																			
	Structure's Demolition Cost																			
	Structure's Vol.	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	27	10	25								FT		6750	CF	1958
	Structure's Vol.	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	27	20	17								FT		9180	CF	2662
	Structure's Vol.	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	27	10	8								FT		2160	CF	626
	Structure's Vol.	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	20	30	51								FT		30600	CF	8874
	Structure's Vol.	Mixed Materials Bld. Large	02 41 16 13 0100	0.3	/CF	12	20	10								FT		2400	CF	720
	Structure's Vol. Demolished																0.3	568	CY	
	Rubble's Weight (exclude steel)												1.35			TON/CY		767	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	Nielson Construction	Neilson Con.	7	/TON													767	TON	5369
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			20209
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	2	2	1.5							11	EA		2	CY	20
	Concrete's Vol. Demolished																1.3	3	CT	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													3	CT	3
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			23
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	3	3	2							4	EA		3	CY	30
	Concrete's Vol. Demolished																1.3	4	CT	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													4	CT	4
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			34
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	27	40	0.29							1	EA		12	CY	119
	Concrete's Vol. Demolished																1.3	16	CT	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													16	CT	16
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			135
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	20	30	0.29							1	EA		6	CY	60
	Concrete's Vol. Demolished																1.3	8	CT	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													8	CT	8
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			68
	Total																			20469

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Substation 08																			
	Structure's Demolition Cost																			
		Torch Cutting Steel 1" plate	02 41 19 27 0020	1.28	/LF	26.6										LF		27	LF	35
		Torch Cutting Steel 1" bar	02 41 19 27 0040	1.79	/EA									0.77	1	Day		0.8	DAY	1
		Truck Mounted Crane 25 ton	01 54 33 60 2500	608.56	/day									6.2	1	HR		6.2	HR	3773
		Eq. Op., Crane or Shovel (Eqhv)	Eqhv	$61.75	HR									0.77	2	DAY		1.5	DAY	93
		Truck dump 16 ton payload	01 54 33 20 5300	435.96	/day									6.2	2	HR		12.4	HR	5406
		Truck Driver, Heavy	Trhv	$47.35	HR									6.2	2	HR		12.4	HR	587
		CLAB	Clab	$47.05	HR															
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			9895
	Equipment 's Disposal Cost																			
	Dismantling Cost	Chain link remove 8'-10'	02 41 13 60 1700	3.43	/LF	157									2	LF		314	LF	1077
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			1077
	Transformers																			
	Equipment 's Disposal Cost																			
	Dismantling Cost	Mechanical equipment heavy	25 05 05 10 3600	615	/ton							6				EA		6	EA	3690
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			3690
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	19	19	0.5							2	FT		13	CY	129
	Concrete's Vol. Demolished																1.3	17	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													17	CY	17
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													17	CY	63
	Disposal Costs																	17	CY	0
	Subtotal																			209
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	30	9	0.5							1	FT		5	CY	50
	Concrete's Vol. Demolished																1.3	7	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													7	CY	7
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													7	CY	26
	Disposal Costs																	7	CY	0
	Subtotal																			83
	Total																			14954

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Coal Storage Bin 09																			
	Structure's Demolition Cost																			
		Torch Cutting Steel 1" plate	02 41 19 27 0020	1.28	/LF	163.3										LF		163	LF	209
		Torch Cutting Steel 1" bar	02 41 19 27 0040	1.79	/EA									0.66	1	DAY		0.7	DAY	1
		Truck Mounted Crane 25 ton	01 54 33 60 2500	608.56	/day									5.3	1	HR		5.3	HR	3225
		Eq. Op., Crane or Shovel (Eqhv)	Eqhv	$61.75	HR									0.66	2	DAY		1.3	DAY	80
		Truck dump 16 ton payload	01 54 33 20 5300	435.96	/day									5.3	2	HR		10.6	HR	4621
		Truck Driver, Heavy	Trhv	$47.35	HR									5.3	2	HR		10.6	HR	502
		CLAB	Clab	$47.05	HR															
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			8638
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	60	1	6										13	CY	129
	Concrete's Vol. Demolished																1.3	17	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													17	CY	17
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			146
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	3	3	1							4	EA		1	CY	10
	Concrete's Vol. Demolished																1.3	1	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													1	CY	1
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			11
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	30	30	0.67										22	CY	218
	Concrete's Vol. Demolished																1.3	29	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													29	CY	28
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			246
	Total																			9041

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Lump Coal 10																			
	Structure's Demolition Cost																			
		Torch Cutting Steel 1" plate	02 41 19 27 0020	1.28	/LF	225										LF		225	LF	288
		Torch Cutting Steel 1" bar	02 41 19 27 0040	1.79	/EA									0.55	1	DAY		0.55	DAY	1
		Truck Mounted Crane 25 ton	01 54 33 60 2500	608.56	/day									4.4	1	HR		4.4	HR	2678
		Eq. Op., Crane or Shovel (Eqhv)	Eqhv	$61.75	HR									0.55	2	DAY		1.1	DAY	68
		Truck dump 16 ton payload	01 54 33 20 5300	435.96	/day									4.4	2	HR		8.8	HR	3836
		Truck Driver, Heavy	Trhv	$47.35	HR									4.4	2	HR		8.8	HR	417
		CLAB	Clab	$47.05	HR															
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			7288
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	102	2	1										8	CY	79
	Concrete's Vol. Demolished																1.3	10	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													10	CY	10
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			89
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			7377

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Coal Recovery Bin 11																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	12	2.5	1							4	EA		4	CY	40
	Concrete's Vol. Demolished																1.3	5	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													5	CY	5
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			45
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	12	12	0.33								EA		2	CY	20
	Concrete's Vol. Demolished																1.3	3	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													3	CY	3
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			23
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			68

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Slack Bin 12																			
	Structure's Demolition Cost																			
	Structure was rerplaced by Conveyor																			
	tunnel 28																			
		Torch Cutting Steel 1" plate	02 41 19 27 0020	1.28	/LF	8										LF		8	LF	10.24
		Torch Cutting Steel 1" bar	02 41 19 27 0040	1.79	/EA									0.2	1	DAY		0.2	DAY	
		Truck Mounted Crane 25 ton	01 54 33 60 2500	608.56	/day									1.6	1	HR		1.6	HR	608.56
		Eq. Op., Crane or Shovel (Eqhv)	Eqhv	$61.75	HR									1.6	1	hr		1.6	hr	$98.80
		Truck dump 16 ton payload	01 54 33 20 5300	435.96	/day									1.6	2	HR		3.2	HR	$151.52
		Truck Driver, Heavy	Trhv	$47.35	HR									1.6	1	HR		1.6	HR	75.28
		CLAB	Clab	$47.05	HR															
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			944
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	2.5	2.5	1							4	EA		1	CY	9.92
	Concrete's Vol. Demolished																1.3	1	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													1	CY	0.98
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													1	CY	3.73
	Disposal Costs																	1	CY	
	Subtotal																			15
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	12	16	0.33							1	EA		2	CY	19.84
	Concrete's Vol. Demolished																1.3	3	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													3	CY	2.94
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													3	CY	11.19
	Disposal Costs																	3	CY	
	Subtotal																			34
	Total																			993

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	WHR Surge Bin 13																			
	Structure's Demolition Cost																			
		Torch Cutting Steel 1" plate	02 41 19 27 0020	1.28	/LF	458										LF		458	LF	586
		Torch Cutting Steel 1" bar	02 41 19 27 0040	1.79	/EA									0.85	1	DAY		0.85	DAY	2
		Truck Mounted Crane 25 ton	01 54 33 60 2500	608.56	/day									6.8	1	HR		6.8	HR	4138
		Eq. Op., Crane or Shovel (Eqhv)	Eqhv	$61.75	HR									0.85	2	DAY		1.7	DAY	105
		Truck dump 16 ton payload	01 54 33 20 5300	435.96	/day									6.8	2	HR		13.6	HR	5929
		Truck Driver, Heavy	Trhv	$47.35	HR									6.8	2	HR		13.6	HR	644
		CLAB	Clab	$47.05	HR															
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			11404
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	120	6	0.67								EA		18	CY	179
	Concrete's Vol. Demolished																1.3	23	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													23	CY	23
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													23	CY	86
	Disposal Costs																	23	CY	0
	Subtotal																			289
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	3	3	1							4	EA		1	CY	10
	Concrete's Vol. Demolished																1.3	1	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													1	CY	1
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													1	CY	4
	Disposal Costs																	1	CY	0
	Subtotal																			15
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	60	50	0.5								EA		56	CY	556
	Concrete's Vol. Demolished																1.3	73	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													73	CY	72
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													73	CY	272
	Disposal Costs																	73	CY	0
	Subtotal																			900
	Total																			12607

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Lump Coal Storage Pad 15																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	118	4	1								EA		17	CY	169
	Concrete's Vol. Demolished																1.3	22	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													22	CY	22
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			191
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	38	80	0.67								EA		75	CY	744
	Concrete's Vol. Demolished																1.3	98	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													98	CY	96
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			840
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			1031

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Equipment Wash Pad 16																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	40	25	0.5								EA		19	CY	188
	Concrete's Vol. Demolished																1.3	25	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													25	CY	25
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			213
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			213

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Transformer Pad Shop 17																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	11	9	0.5								EA		2	CY	20
	Concrete's Vol. Demolished																1.3	3	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													3	CY	3
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			23
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			23

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Water Tanks 18																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	10			14						4	EA		6158	CF	1786
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	20			10						1	EA		1571	CF	456
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			2242
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2242

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Fuel Tanks 19																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	10			13.5						2	EA		2863	CF	830
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	23			11.5						1	EA		2389	CF	693
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	19			9						3	EA		3626	CF	1052
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	11			4						1	EA		138	CF	40
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	7			7						1	EA		269	CF	78
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	5			9.5						1	EA		354	CF	103
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Disposal Cost Steel																			
	Subtotal																			2796
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2796

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Fuel Lines 20																			
	Structure's Demolition Cost	Pipe Steel 4" dia	02 41 13 33 3200	9.5	/LF	400										LF		400	LF	3800
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			3800
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			3800

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Fans 21																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished	Torch Cutting Steel 1" plate	02 41 19 27 0020	1.28	/LF	77										LF		77	LF	99
		Torch Cutting Steel 1" bar	02 41 19 27 0040	1.79	/EA										288	EA		288	EA	516
		Truck Mounted Crane 25 ton	01 54 33 60 2500	608.56	/day									1	1	DAY		1	DAY	609
		Eq. Op., Crane or Shovel (Eqhv)	Eqhv	$61.75	HR									8.2	1	HR		8.2	HR	506
		Truck dump 16 ton payload	01 54 33 20 5300	435.96	/day									1	2	DAY		2	DAY	872
		Truck Driver, Heavy	Trhv	$47.35	HR									8.2	2	HR		16.4	HR	777
		CLAB	Clab	$47.05	HR									8.2	2	HR		16.4	HR	772
	Subtotal																			4151
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	7.5	2	0.67							6	FT		2	CY	20
	Concrete's Vol. Demolished																1.3	3	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													3	CY	3
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													3	CY	11
	Disposal Costs																	3	CY	0
	Subtotal																			34
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	16	13	0.67							3	FT		15	CY	149
	Concrete's Vol. Demolished																1.3	20	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													20	CY	20
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													20	CY	75
	Disposal Costs																	20	CY	0
	Subtotal																			244
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			4429

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Conveyor 22																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	6230	5	5										155750	CF	45168
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	60	8	8							39	EA		149760	CF	43430
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			88598
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	3	3	1							188	EA		63	CY	625
	Concrete's Vol. Demolished																1.3	82	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													82	CY	80
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			705
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			89303

Calculated from (39 towers + 8 ground) * 4 footings each = 188 footings

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Bld Tank Seam 23																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	12	12	8								FT		1152	CF	334
	Subtotal																			334
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			334

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Septic Tanks 24																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Excavation of Septic Tanks																			
	Excavation	Concrete demolition	ConcreteDemo1	9.92	/CY	10	10	3							4	FT		44	CY	436
	Backfill	Backfill Trench Mininal Haul 2 1/4 CY	31 23 16 13 3080	1.83	/CY	10	10	3							4	FT		44	CY	81
	Subtotal																			517
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY						1.5				4	CY		6	CY	60
	Concrete's Vol. Demolished																1.3	8	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													8	CY	8
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			68
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			585

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Culverts 25																			
	Concrete Demolition D-8D Water Bar																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	35	12	0.67										10	CY	99
	Concrete's Vol. Demolished																1.3	13	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													13	CY	13
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													13	CY	48
	Disposal Costs																	13	CY	0
	Subtotal																			160
	Concrete Demolition C-8U																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	350	0.33		1.5									20	CY	198
	Concrete's Vol. Demolished																1.3	26	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													26	CY	25
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													26	CY	97
	Disposal Costs																	26	CY	0
	Subtotal																			320
	Concrete Demolition C-10U																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	160	0.33		5									31	CY	308
	Concrete's Vol. Demolished																1.3	40	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													40	CY	39
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23 18 0320	3.73	/CY													40	CY	149
	Disposal Costs																	40	CY	0
	Subtotal																			496
	Total																			976

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Watchman Trailer 26																			
	Structure's Demolition Cost	Mixed Materials Bld. Large	02 41 16 13 0100	0.3	/CF	8	8	7								FT		448	CF	134
	Structure's Vol. Demolished																0.3	5	CY	
	Rubble's Weight (exclude steel)												1.35			TON/CY		7	TON	
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	Nielson Construction	Neilson Con.	7	/TON													7	TON	49
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			183
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			183

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Cap and Powder Mag 27																			
	Structure's Demolition Cost	Steel Bld. Large	02 41 16 13 0012	0.29	/CF	5	6	8							2	EA		480	CF	139
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			139
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			139

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Conveyor Tunnel 28																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	470	7	0.5							2	FT		122	CY	1210
	Concrete's Vol. Demolished																1.3	159	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													159	CY	156
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			1366
	Concrete Demolition																			
	Demolition Cost	Concrete demolition	ConcreteDemo1	9.92	/CY	470	8	0.5							2	FT		139	CY	1379
	Concrete's Vol. Demolished																1.3	181	CY	
	Loading Cost	Front end loader wheel 3 CY	31 23 16 42 1601	0.98	/CY													181	CY	177
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			1556
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			2922

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Plug Well 29																			
	Structure's Demolition Cost	Plug Well	AML3	5000	EA.										1	EA		1	EA	5000
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			5000
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			5000

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Seal Portals 30																			
	Structure's Demolition Cost	Seal Portals	AML1	5200	EA.										18	EA		18	EA	93600
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			93600
	Equipment 's Disposal Cost																			
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			93600

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Power Lines and Poles 32																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			
	Equipment 's Disposal Cost	Wire Removal	Old Means 1	11.3	/CLF	8700										FT		87	CLF	983
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			983
	Equipment 's Disposal Cost	Powerpole	Hiawatha	100	EA										50	EA		50	EA	5000
	Dismantling Cost																			
	Equipment 's Vol. Demolished																			
	Loading Costs																			
	Transport Costs																			
	Disposal Costs																			
	Subtotal																			5000
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Demolition Cost																			
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			
	Total																			5983

Appendix 8-A

Earthwork Estimated Costs

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Earthwork															
Tank Seam No 01															33981
Upper Storage Pad No 02															3608
Portal Pad Area No 03															9081
Portal Access Road No 04															5008
Coal Storage Pad															40684
Scale House															658
Sediment Ponds															1603
Shower House															2690
Borehole No 12															29059
Wild Horse Ridge															32648
Support															38918
Riprap No 14															121951
Total															319889

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Tank Seam No 01															
Tank Seam Access Road and Portal Pad Area															
Direct Cut and Fill															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	9649	CY	478	CY/HR	20.2	HR	4958
Load and Haul															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	10661	CY	313.7	CY/HR	34	HR	8345
6X4 50,000lbs 10-12 CY (20-11) (2nd2006)	3210	40.35	0.1	47.35	111.8	4	447.2	$/HR					34	HR	15205
Place Hauled Material															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	10661	CY	478	CY/HR	22.3	HR	5473
Volume									20310	CY					
Total															33981

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Upper Storage Pad No 02															
Direct Cut and Fill															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	3666	CY	478	CY/HR	7.7	HR	1890
Place Hauled Material From TS-5 and TS-6															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	3356	CY	478	CY/HR	7	HR	1718
Volume									7022						
Total															3608

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Portal Pad Area No 03															
Direct Cut and Fill															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	6445	CY	488	CY/HR	13.2	HR	3240
Place Hauled Material from TS-5															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	11592	CY	488	CY/HR	23.8	HR	5841
Volume									18037						
Total															9081

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Portal Access Road No 04															
Direct Cut and Fill															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	5573	CY	478	CY/HR	11.7	HR	2872
Load and Haul															
980G Series II EROPS (9-34) (2nd2006)	10255	51.7	0.1	60.1	181.06	1	181.06	$/HR	2553	CY	760	CY/HR	3.4	HR	616
6X4 50,000lbs 10-12 CY (20-11) (2nd2006)	3210	40.35	0.1	47.35	111.8	4	447.2	$/HR					3.4	HR	1520
Volume									8126						
Total															5008

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Coal Storage Pad															
Load and Haul Soil to other sites															
980G Series II EROPS (9-34) (2nd2006)	10255	51.7	0.1	60.1	181.06	1	181.06	$/HR	12395	CY	480	CY/HR	25.8	HR	4671
6X4 50,000lbs 10-12 CY (20-11) (2nd2006)	3210	40.35	0.1	47.35	111.8	8	894.4	$/HR					25.8	HR	23076
Move material on sitePlace Hauled Material															
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	28190	CY	623	CY/HR	45.2	HR	12937
Volume									40585						
Total															40684

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Scale House															
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	1454	CY	623	CY/HR	2.3	HR	658
Volume									1454						
Total															658

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Sediment Ponds															
Sediment Ponds "A"															
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	3460	CY	623	CY/HR	5.6	HR	1603
Sediment Ponds "B"															
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	0	CY	400	CY/HR	0	HR	0
Sediment Ponds "C"															
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	0	CY	400	CY/HR	0	HR	0
Volume									3460						
Total															1603

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Shower House															
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	5851	CY	623	CY	9.4	CY	2690
Volume									5851						
Total															2690

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Wild Horse Ridge															
Wild Horse Ridge TS-12 through 15															
Rough Backfilling and Grading															
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	12500	CY	623	CY/HR	20.1	HR	5753
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	11141	CY	488	CY/HR	22.8	HR	5596
Haul and Place Topsoil															
980G Series II EROPS (9-34) (2nd2006)	10255	51.7	0.1	60.1	181.06	1	181.06	$/HR	4860	CY	320	CY/HR	15.2	HR	2752
6X4 50,000lbs 10-12 CY (20-11) (2nd2006)	3210	40.35	0.1	47.35	111.8	4	447.2	$/HR					15.2	HR	6797
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	4860	CY	623	CY/HR	7.8	HR	2232
Subtotal															23130
Wild Horse Ridge TS-16 through 17															
Cut and Fill Material															
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	13295	CY	488	CY/HR	27.2	HR	6676
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	1760	CY	623	CY/HR	2.8	HR	801
Haul and Place Topsoil															
980G Series II EROPS (9-34) (2nd2006)	10255	51.7	0.1	60.1	181.06	1	181.06	$/HR	1760	CY	720	CY/HR	2.4	HR	435
6X4 50,000lbs 10-12 CY (20-11) (2nd2006)	3210	40.35	0.1	47.35	111.8	3	335.4	$/HR					2.4	HR	805
D9R Semi-U EROPS (9-52) (2H2007)	19405	95.3	0.1	60.1	286.21	1	286.21	$/HR	1760	CY	623	CY/HR	2.8	HR	801
Subtotal															9518
Volume															
Total									23641	12-15					32648
									15055	16-17					

TS-17, Table 5k-2, topsoil = 1760

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Borehole No 12															
Load and Haul Material															
980G Series II EROPS (9-34) (2nd2006)	10255	51.7	0.1	60.1	181.06	1	181.06	$/HR	10560	CY	480	CY/HR	22	HR	3983
6X4 50,000lbs 10-12 CY (20-11) (2nd2006)	3210	40.35	0.1	47.35	111.8	8	894.4	$/HR					22	HR	19677
CAT 345BL II (10-24)(2nd2006) 2005	16330	75.7	0.1	60.1	245.43	1	245.43	$/HR	10560	CY	480	CY/HR	22	HR	5399
Volume									10560						
Total															29059

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Support															
Foreman Average, Outside					64.4	1	64.4	$/HR					189	HR	12172
5,000 gal H2O truck Diesel (20-17) (2nd2006)	5170	35.7	0.1	47.35	118.93	1	118.93	$/HR					189	HR	22478
Pickup Crew 4x4 1 ton 340 hp (20-17) (2nd2007)	1060	14.5	0.1	0	22.58	1	22.58	$/HR					189	HR	4268
Total															38918

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine															
Erosion Control															
Riprap No 14															
Placed rip-rap 18" min thickness mat only					16.65				2359	sy				SY	39277
Place Riprap															
CAT 330D L (10-24) (2nd2007)	15415	68.9	0.1	60.1	232.23	1	232.23	$/HR	2359	sy	53	sy/day	356	HR	82674
Volume															
Total															121951

Appendix 8-A

Vegetation Estimated Costs

Estimated
Vegetation Costs

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Main Mine Site 01																			404631
	Wild Horse Ridge 02																			84502
	Total																			489133

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Main Mine Site 01																			
	Revegatation																			
	Drill Seeding																			
	Drill Seeding	Tractor Spreader (equip. & labor) B-66	Reveg004	13.34	/MSF					13.4						AC		584	MSF	7791
	Seed Material	Bear Canyon Main Mine Shrubs	Bear Canyon 001	166	$/AC					13.4						AC		13	AC	2158
	Seed Material	Bear Canyon Main Mine Forbes	Bear Canyon 002	149.05	$/AC					13.4						AC		13	AC	1938
	Seed Material	Bear Canyon Main Mine Grass	Bear Canyon 003	158.9	$/AC					13.4						AC		13	AC	2066
	Mulch	Tractor Spreader (equip. & labor) B-66	Reveg004	13.34	/MSF					13.4						AC		584	MSF	7791
	Mulch	Hay 1" material only 32 91 13 16 0350	Reveg001	56.1	/MSF					13.4						AC		584	MSF	32762
	Stock Labor	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0140	1.79	Ea					13.4					500	AC		6700	EA	11993
	Stock Material	Bear Canyon Main Transplants	Bear Canyon 004	3.95	$/AC					13.4					500	AC		6700	EA	26465
	Ripping	300 HP Dozer w/ Ripper	31 23 16 32 2830	0.42	/CY					13.4						AC		21614	CY	9078
	Subtotal																			102042
	Number 2 Mine Area																			
	Hydroseeding	Hydro Spreader (equip. & labor) B-81 80MS	Reveg002	18.54	/MSF					9.39						AC		527	MSF	9771
	Seed Material	Bear Canyon Main Mine Shrubs	Bear Canyon 001	166	$/AC					9.39						AC		9	AC	1494
	Seed Material	Bear Canyon Main Mine Forbes	Bear Canyon 002	149.05	$/AC					9.39						AC		9	AC	1341
	Seed Material	Bear Canyon Main Mine Grass	Bear Canyon 003	158.9	$/AC					9.39						AC		9	AC	1430
	Mulch	Hay 1" material only 32 91 13 16 0350	Reveg001	56.1	/MSF					9.39						AC		409	MSF	22945
	Stock Labor	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0140	1.79	Ea					9.39					500	AC		4695	EA	8404
	Stock Material	Bear Canyon Main Transplants	Bear Canyon 004	3.95	$/AC					9.39					500	AC		4695	EA	18545
	Pocking 340 CY/AC	Excavation Bulk Bank 2 CY (322BL)	31 23 16 42 0260	1.54	/CY					9.39						AC		3193	CY	4917
	Subtotal																			68847
	Riparian Planting Area																			
		Bear Canyon Main Mine Grass	Bear Canyon 008	889	$/AC					1						AC		1	AC	889
	Plant Stock	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0140	1.79	Ea					1					1000	AC		1000	EA	1790
	Subtotal																			2679
	Matting																			
	Matting	Revegetation mat, webbed	31 25 13 10 0120	7.05	SY					4.4						AC		21296	SY	150137
	Subtotal																			150137
	Total																			323705
	Reseed																			
	Assume 25% reseeding																			80926
	Subtotal																			80926
	Total																			404631

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Wild Horse Ridge 02																			
	Revegatation																			
	Drill Seeding																			
	Drill Seeding																			
	Drill Seeding																			
	Mulch																			
	Mulch																			
	Stock																			
	Ripping																			
	Subtotal																			
	Hydroseeding																			
	Hydroseeding	Hydro Spreader (equip. & labor) B-81 80MS	Reveg002	18.54	/MSF					3.74						AC		162.9	MSF	3020
	Hydroseeding	Bear Canyon Main Mine Grass	Bear Canyon 005	166	$/AC					3.74						AC		4	AC	664
		Bear Canyon Main Mine Grass	Bear Canyon 006	199.05	$/AC					3.74						AC		4	AC	796
	Hydroseeding	Bear Canyon Main Mine Grass	Bear Canyon 007	158.9	$/AC					3.74						AC		4	AC	636
	Mulch	Hydro Spreader (equip. & labor) B-81	Reveg005	23.15	/MSF					3.74						AC		162.9	MSF	3771
	Mulch	Hay 1" material only 32 91 13 16 0350	Reveg001	56.1	/MSF					3.74						AC		162.9	MSF	9139
	Stock	Bear Canyon Main Transplants	Bear Canyon 004	3.95	$/AC					3.74					500	AC		1870	EA	7387
	Stock (labor cost = material cost)	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0140	1.79	Ea					3.74					500	AC		1870	EA	3347
	Pocking 340 CY/AC	Excavation Bulk Bank 2 CY (322BL)	31 23 16 42 0260	1.54	/CY					3.74						AC		1272	CY	1959
	Subtotal																			30719
	Hand Seed	Hand Spread Seed (CLAB) 0291205100010	Reveg003	47.05	/MSF					1.6						AC		69.7	MSF	3279
	Seed	Bear Canyon Main Mine Grass	Bear Canyon 005	166	$/AC					1.6						AC		1.6	AC	266
		Bear Canyon Main Mine Grass	Bear Canyon 006	199.05	$/AC					1.6						AC		1.6	AC	318
	Hydroseeding	Bear Canyon Main Mine Grass	Bear Canyon 007	158.9	$/AC					1.6						AC		1.6	AC	254
	Stock	Bear Canyon Main Transplants	Bear Canyon 004	3.95	$/AC					1.6					500	AC		800	EA	3160
	Stock (labor cost = material cost)	Bare root seedlings, 11" to 16" med. soil	32 93 43 10 0140	1.79	Ea					1.6					500	AC		800	EA	1432
	Matting	Revegetation mat, webbed	31 25 13 10 0120	7.05	SY					1.6						AC		7744	SY	18709
	Subtotal																			18709
	Total Vegetation																			53782.5
	Reseed																			13446
	Assume 25% reseeding																			
	Subtotal																			13446
	Total																			84502

Bonding Calculations
Bear Canyon Mine

Bond Summary

Direct Costs		
Subtotal Demolition and Removal	$357,428.00	
Subtotal Backfilling and Grading	$319,889.00	
Subtotal Revegetation	$489,133.00	
Direct Costs	$1,166,450.00	
Indirect Costs		
Mob/Demob	$116,645.00	10.0%
Contingency	$58,323.00	5.0%
Engineering Redesign	$29,161.00	2.5%
Main Office Expense	$79,319.00	6.8%
Project Mainagement Fee	$29,161.00	2.5%
Subtotal Indirect Costs	$312,609.00	26.8%
Total Cost	$1,479,059.00	
Escalation factor		0.032
Number of years		5
Escalation	$252,287.00	
Reclamation Cost	$1,731,346.00	
Bond Amount (rounded to nearest $1,000) 2013 dollars	$1,731,000.00	
Bond Posted 2005 dollars	$1,825,000.00	
Difference Between Cost Estimate and Bond	$94,000.00	
Percent Difference	5.43%	
next midterm	4/2/2013	