



ANDALEX
RESOURCES, INC.

P.O. Box 910, East Carbon, Utah 84520
Telephone (435) 888-4000 Fax (435) 888-4002

Utah Division of Oil, Gas & Mining
Utah Coal Program
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

August 17, 2016

Attn: Daron Haddock
Permit Supervisor

Re: Andalex Resources, Inc. C/007/019
T16-002 Temporary Cessation Amendment Task ID #5207

Dear Mr. Haddock,

Attached you will find the corrected submittal response to Deficiencies from Task #5207 to request bonding changes and temporary cessation changes for Tower mine, to include adding gates to the doors of the shop building to provide security measures, eliminate trespassing, and provide public safety for anyone attempting to get in the buildings when not occupied. The bonding calculations are included within the submittal. In the deficiencies letter, there was a request to include bonding sheets for earthwork totals. No earthwork was done, or will be done in regards to this submittal. Also, another deficiency stated that: "the permittee shall include detailed information regarding the number of surface areas involved in the cessation, prior reclamation efforts accomplished on the property, identification of all backfilling, regrading revegetation, environmental monitoring, underground opening closures, and water treatment activities that will continue during the temporary cessation...include all detailed information in Chapter 5". This submittal did not change any of the existing cessation activities, nor any text in the permit involving any of these subjects. The only thing changed on the property, and the only thing included in this submittal is a minor addition of metal gates to be welded onto the existing door frames for security purposes. Nothing else has changed, and the current state of the temporary cessation has not changed, and has been approved since 2008.

If you have any questions, or need any additional information regarding this submittal, please contact me directly at 435-888-4000.

Sincerely,

Karin Madsen
Engineering Tech
UtahAmerican Energy, Inc.

APPLICATION FOR PERMIT PROCESSING

<input checked="" type="checkbox"/> Permit Change X	<input type="checkbox"/> New Permit	<input type="checkbox"/> Renewal	<input type="checkbox"/> Transfer	<input type="checkbox"/> Exploration	<input type="checkbox"/> Bond Release	Permit Number: ACT/007/019
Title of Proposal: T16-002 Temporary Cessation Amendment						Centennial Coal Mine
						Permittee: UtahAmerican Energy, Inc.

Description, include reason for application and timing required to implement:

Instructions: If you answer yes to any of the first 8 questions (gray), submit the application to the Salt Lake Office. Otherwise, you may submit it to your reclamation

<input type="checkbox"/> Yes	<input type="checkbox"/> No	1. Change in the size of the Permit Area? _____ acres Disturbed Area? _____ acres decrease.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	2. Is the application submitted as a result of a Division Order? DO # _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	3. Does application include operations outside a previously identified Cumulative Hydrologic Impact Area?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	4. Does application include operations in hydrologic basins other than as currently approved?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	5. Does application result from cancellation, reduction or increase of insurance or reclamation bond?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	6. Does the application require or include public notice/publication?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	7. Does the application require or include ownership, control, right-of-entry, or compliance information?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	9. Is the application submitted as a result of a Violation? NOV # _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	10. Is the application submitted as a result of other laws or regulations or policies? Explain: _____
<input type="checkbox"/> Yes	<input type="checkbox"/> No	11. Does the application affect the surface landowner or change the post mining land use?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2?)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	13. Does the application require or include collection and reporting of any baseline information?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	15. Does application require or include soil removal, storage or placement?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	16. Does the application require or include vegetation monitoring, removal or revegetation activities?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	17. Does the application require or include construction, modification, or removal of surface facilities?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	18. Does the application require or include water monitoring, sediment or drainage control measures?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	19. Does the application require or include certified designs, maps, or calculations?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	20. Does the application require or include subsidence control or monitoring?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	21. Have reclamation costs for bonding been provided for?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	22. Does application involve a perennial stream, a stream buffer zone or discharges to a stream?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	23. Does the application affect permits issued by other agencies or permits issued to other entities?

X Attach 1 complete digital copy of the application. In PDF Format

I hereby certify that I am a responsible official of the applicant and that the information contained in this application is true and correct to the best of my information and belief in all respects with the laws of Utah in reference to commitments, undertakings, and obligations, herein.


 _____ - Karin Madsen - Engineering Tech. 8-17-16
 Signed - Name - Position - Date

Subscribed and sworn to before me this 17th day of August, 19 2016

My Commission Expires: _____
 Attest: Linda Kerns Notary Public
 STATE OF Utah 03/27/17
 COUNTY OF Wasatch



Received by Oil, Gas & Mining

ASSIGNED TRACKING NUMBER

plates 11, 12, and 13). Drainage directly into the Pinnacle and Apex Portals is not part of the calculation for sediment pond sizing (Pond C).

R645-301-515.300. TEMPORARY CESSATION OF OPERATIONS

Whenever it is known that operations are to be temporarily ceased for more than 30 days, Andalex Resources will submit to the Division a notice of intention to cease or abandon the operations, in accordance with R645-301-515.320 and to MSHA standards.

This notice will describe mitigation measures to be employed in accordance with the terms and conditions of the permit approval, such as a statement of the number of surface areas involved in the cessation, extent of sub-surface strata, prior reclamation efforts accomplished on the property, and identification of all backfilling, regrading, revegetation, environmental monitoring, underground opening closures and water treatment activities that will continue during the temporary cessation.

Temporary closing of underground workings will be accomplished with chain link fence material as recommended by MSHA. This prevents access by unauthorized individuals during idle periods. It is not anticipated that once Andalex reaches its peak production that this will occur.

If underground openings are to remain inactive for a period greater than 90 days, such openings will be temporarily closed off from access. Such closures will consist of a chain link or other substantial wire mesh fabric fence placed over the portals to prevent public access while allowing for air flow. Locked gates may be installed in the portal to allow for mine inspection.

In the event of a temporary cessation, iron gates will be placed over the doors of the shop building if deemed necessary at any time by the company to protect the contents of the building from public access. These gates will be welded to the side of the building. The gates will be padlocked for company access.

Total Bond Amount

Direct Costs

Subtotal Demolition and Removal	\$402,708
Subtotal Backfilling and Grading	\$416,639
Subtotal Revegetation	\$146,756
Subtotal Direct Costs	<u>\$966,103</u>

Indirect Costs

Mob/Demob	\$96,610	10.00%
Contingency	\$48,305	5.00%
Engineering Redesign	\$24,153	2.50%
Main Office Expense	\$65,695	6.80%
Project Management Fee	<u>\$24,153</u>	2.50%
Subtotal Indirect Costs	<u>\$258,916</u>	26.80%

Total Cost \$1,225,019

Escalation Factor 0.012
 Number of years 5
 Escalation \$73,501

Total \$1,298,520

Reclamation Cost 2020 \$1,298,520

bond Amount (rounded to nearest \$1,000) \$1,299,000

Cost Factors

Means Number	Material	Unit Cost	Units
Concrete Demo1	Concrete Demolition	11.72	CY
31 23 16.42 1300	Front End Loader 3 CY	2.09	CY
City Sanitation Price	City Sanitation	2.10	CY
02 41 16.13 0020	Steel bld. Large	0.28	CF
02 41 13.60 1700	Chain Link, posts & fabric remove only	3.07	LF
23 05 05.10 3600	Mechanical equipment heavy	795.00	Ton
31 23 23.20 1025	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	10.80	CY
	On Site Disposal	9.07	CY
JennChem	Seal Portals	4320.00	EA
	Plug Wells	170.00	CY
02 41 16.13 0100	Mixture of Types, average	0.31	CF
AML 4	Seal Portals	25.75	SF
31 23 16.42 0260	Backhoe, hydraulic Bulk Bank Measure	1.44	CY
31 23 16.13 3080	Backfill Trench Minimal Haul 21/4 CY	1.79	CY
01 54 33 5300	Truck, Dump 16 Ton payload	104.00	HR
	Truck Driver	40.05	HR
	Dozer w/scarifer	4.67	CY
Centennial 001	Seed Mix Centennial Drainage	364.22	AC
32 92 19.14 0200	Hydro Spreader (equip. & labor)	41.39	MSF
32 92 13.16 0250	Hay 1" material only	61.27	MSF
32 92 19.14 0200	Hydro Spreader (equip. & labor)	41.39	MSF
Centennial 002	Seed Mix Centennial Slopes	482.41	AC
CLAB		37.60	HR
Centennial 003	Transplant for Centennial Mine	1150.00	\$/AC
01 54 33 20 4310	D8R Semi-U EROPS	100.65	
01 54 33 4310	Hourly Cost		
01 54 33 20 3600	627 G Scraper	231.70	
01 54 33 3550	Hourly Cost		
01 54 33 20 4870	CAT 325L (10-24) (2nd2005)	160.55	
01 54 33 4870	Hourly Cost		
01 54 33 20 4260	D7R Semi-U EROPS	77.25	
01 54 33 4262	Hourly Cost		
01 54 33 40 6950	6,000 Gal H2O Truck Diesel	88.15	
01 54 33 6950	Hourly Cost		
01 54 33 40 7200	Pick-up Truck 4x4 1 Ton	13.95	
01 54 33 7200	Hourly Cost		
	Formen Average Outside	39.60	
	Heavy Equip. Operator (Heavy)	50.60	
	Heavy Equip. Operator (Med)		
01 54 33 20 4360	D9R Semi-U EROPS	132.60	
01 54 33 4360	Hourly Cost		
	Tractor Spreader (equip. & labor) B-66	11.47	SY
01 54 33 4710	Front End Loader \$WD, 3.5 CY 145 HP	33.25	
	Plug Wells (Environmental Fee)	15.00	Load
	Labor	265.00	Hr
02 41 13.66 0600	Metal gate 4'-6'h x 3'-4'w (4) Labor included	67.70	EA
02 41 13.62 0300	Metal gate 8'x15' (3) labor included	135.50	EA

Demolition

Loadout Bin No. 01	2240
Concrete No. 02	626
Reclaim No. 03	4032
Conveyor No. 04	560
Hopper No. 05	1680
Conveyor No. 06	1820
Tunnel No. 07	2419
Fan No. 08	896
Substation No. 09	1909
Water Tank No. 10	263
Portals No. 11	896
Main Office No. 12	14722
Bath House No. 13	7,317
Substation No. 14	3392
Loadout Bin No. 15	3225
Conveyor No. 16	896
Reclaim No. 17	645
Hopper No. 18	1613
Conveyor No. 19	1036
Tunnel No. 20	2419
Water Tank No.21	395
Trailers No.23	3912
Portals No. 24	5920
Office No. 25	5157
Portals No. 26	945
ShopWarehouse No. 27	58783
Loadout No. 28	2463
Conveyor No. 29	0
Reclaim No. 30	4570
Hopper No. 31	2580
Conveyor No. 32	1400
Tunnel No. 33	3360
Portals No. 34	20595
Water Tank No. 35	263
Shed No. 36	1120
Magazines No. 37	27
Substation No. 38	1912
Office No. 39	3444
Portals No. 40	12152
Culverts 41	18097
Gob Vent Well 1,3,4,5,5A,6,7,8,9	100365
Gob Vent Well 8A,7A	33460
Gob Vent Well 10 thru 17	0
Vent Shaft Blowing Fan 45	66586
Aberdeen Substation	2061
Security gates 47	531
	<hr/>
	402708

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Loadout Bin No. 01																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	20										8000	CF	2240	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				2240
		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																				
		Total																				2240

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost			
		Concrete No. 02																						
		Structure's Demolition Cost																						
		Structure's Vol. Demolished																						
		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 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	Concrete Demo1	11.72	CY	20	28	0.75								FT			16	CY	182		
		Concrete's Vol. Demolished																1.3			20	CY		
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09	CY															20	CY	42	
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80	CY															20	CY	218	
		Disposal Costs	On Site Disposal		9.07	CY																20	CY	183
		Subtotal																					626	
		Concrete Demolition																						
		Demolition Cost																						
		Concrete's Vol. Demolished																						
		Loading Cost																						
		Transportation Cost																						
		Disposal Costs																						
		Subtotal																						
		Total																					626	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Reclaim No. 03																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	8	12	150										14400	CF	4032	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				4032
		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																				
		Total																				4032

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Conveyor No. 04																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	4	4	125										2000	CF	560	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				560
		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																				
		Total																				560

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Hopper No. 05																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	15										6000	CF	1680	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				1680
		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																				
		Total																				1680

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Conveyor No. 06																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	5	5	260										6500	CF	1820	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				1820
		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																				
		Total																				1820

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Tunnel No. 07																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	8	12	90										8640	CF	2419	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				2419
		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																				
		Total																				2419

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Fan No. 08																			
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	8	20	20										3200	CF	896
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			896
		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																			
		Total																			896

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Substation No. 09																				
		Structure's Demolition Cost																				
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				
		Equipment's Disposal Cost	Mechanical equipment heavy	23 05 05.10 3600	795.00	Ton											2	EA		2	EA	1590
		Equipment's Disposal Cost	Chain Link, posts & fabric remove only	02 41 13.60 1700	3.07	LF	104													104	FT	319
		Subtotal																				1909
		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																				1909

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Water Tank No. 10																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF						941							941	CF	263	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				263
		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																				
		Total																				263

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Portals No. 11																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	8										3200	CF	896	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				896
		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																				
		Total																				896

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Main Office No. 12																				
		Office Demolition Cost	Mixture of Types, average	02 41 16.13 0100	0.31	CF	32	60	16											30720	CF	9523
		Trailer's Demolition Cost	Mixture of Types, average	02 41 16.13 0100	0.31	CF	8	12	70											6720	CF	2083
			Steel bld. Large	02 41 16.13 0020	0.28	CF						706					CF		706	CF	198	
		Structure's Vol. Demolished																	0.35	485	CY	
		Rubble's Weight (exclude steel)																				
		Truck's Capacity																				
		Haulage																				
		Transportation Cost Non Steel Truck																				
		Transportation Cost Non Steel Drive																				
		Disposal Cost Non Steel	City Sanitation	City Sanitation Price	2.10	CY														485	CY	1019
		Steel's Weight																				
		Truck's Capacity																				
		Haulage																				
		Transportation Cost Steel Truck																				
		Transportation Cost Steel Drive																				
		Disposal Cost steel																				
		Subtotal																				12823
		Equipment's Disposal Cost																				
		Dismantling Cost																				
		Equipment's Vol. Demolished																				
		Loading Costs																				
		Transport Costs																				
		Disposal Costs																				
		Subtotal																				
		Concrete Demolition																				
		Demolition Cost	Concrete Demolition	Concrete Demo1	11.72	CY						47.15										553
		Concrete's Vol. Demolished																		1.3	61	CY
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09	CY															61	CY
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80	CY															61	CY
		Disposal Costs	Seal Portals		9.07	CY															61	CY
		Subtotal																				1899
		Concrete Demolition																				
		Demolition Cost																				
		Concrete's Vol. Demolished																				
		Loading Cost																				
		Transportation Cost																				
		Disposal Costs																				
		Subtotal																				
		Total																				14722

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Bath House No. 13																		
		Bath House 1's Demolition Cost	Mixture of Types, average	02 41 16.13 0100	0.31 /CF	14	65	8										7280	CF	2,257
		Bath House 2's Demolition Cost	Mixture of Types, average	02 41 16.13 0100	0.31 /CF	12	50	8										4800	CF	1,488
			Mixture of Types, average	02 41 16.13 0100	0.31 /CF	12	42	8								FT		4032	CF	1,250
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28 /CF						941				2	CF		1882	CF	527
		Structure's Vol. Demolished																		
		Rubble's Weight (exclude steel)																		
		Truck's Capacity																		
		Haulage																		
		Transportation Cost Non Steel Truck																		
		Disposal Cost Non Steel Drive																		
		Disposal Cost Non Steel	City Sanitation	City Sanitation Price	2.10 /CY												0.35	209	CY	439
		Steel's Weight																		
		Truck's Capacity																		
		Haulage																		
		Transportation Cost Steel Truck																		
		Transportation Cost Steel Drive																		
		Disposal Cost steel																		
		Subtotal																		
		Equipment's Disposal Cost																		
		Dismantling Cost																		
		Equipment's Vol. Demolished																		
		Loading Costs																		
		Transport Costs																		
		Disposal Costs																		
		Subtotal																		
		Concrete Demolition	Concrete Demolition	Concrete Demo1	11.72 /CY	14	65	0.5								FT		17	CY	198
		Demolition Cost																1.3	22	CY
		Concrete's Vol. Demolished																	22	CY
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09 /CY														22	CY
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80 /CY														22	CY
		Disposal Costs	On Site Disposal		9.07 /CY														22	CY
		Subtotal																		
		Concrete Demolition	Concrete Demolition	Concrete Demo1	11.72 /CY	14	65	0.5								FT		17	CY	198
		Demolition Cost																1.3	22	CY
		Concrete's Vol. Demolished																	22	CY
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09 /CY														22	CY
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	12 CY (16 Ton) Dump	10.80 /CY														22	CY
		Disposal Costs	On Site Disposal		9.07 /CY														22	CY
		Subtotal																		
		Total																		7,317

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Substation No. 14																			
		Structure's Demolition Cost																			
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			
		Equipment's Disposal Cost	Mechanical equipment heavy	23 05 05.10 3600	795.00	Ton											3 EA		3 EA		2385
		Equipment's Disposal Cost	Chain Link, posts & fabric remove only	02 41 13.60 1700	3.07	LF	328												328 LF		1007
		Subtotal																			3392
		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																			3392

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Loadout Bin No. 15																				
		Structure's Demolition Cost	Steel bid. Large	02 41 16.13 0020	0.28	CF	20	20	24										9600	CF	2688	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				2688
		Equipment's Disposal Cost																				
		Dismantling Cost																				
		Equipment's Vol. Demolished																				
		Loading Costs																				
		Transport Costs																				
		Disposal Costs																				
		Subtotal																				
		Concrete Demolition																				
		Demolition Cost	Concrete Demolition	Concrete Demo1	11.72	CY	20	24	0.75								FT		13	CY	156	
		Concrete's Vol. Demolished																1.3	17	CY		
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09	CY													17	CY	36	
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80	CY													17	CY	187	
		Disposal Costs	On Site Disposal		9.07	CY														17	CY	157
		Subtotal																				537
		Concrete Demolition																				
		Demolition Cost																				
		Concrete's Vol. Demolished																				
		Loading Cost																				
		Transportation Cost																				
		Disposal Costs																				
		Subtotal																				
		Total																				3225

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Conveyor No. 16																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	4	4	200										3200	CF	896	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				896
		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																				
		Total																				896

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Reclaim No. 17																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	8	12	24										2304	CF	645	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				645
		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																				
		Total																				645

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Hopper No. 18																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	10	24	24										5760	CF	1613	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				1613
		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																				
		Total																				1613

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Conveyor No. 19																			
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	4	5	185										3700	CF	1036
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			1036
		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																			
		Total																			1036

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Tunnel No. 20																			
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	8	12	90										8640	CF	2419
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			2419
		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																			
		Total																			2419

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Water Tank No 21																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF						1412							1412	CF	395	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				395
		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																				
		Total																				395

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Trailers No.23																				
		Structure's Demolition Cost	Mixture of Types, average	02 41 16.13 0100	0.31	CF	10	55	8								FT		4400	CF	1364	
		Structure's Demolition Cost	Mixture of Types, average	02 41 16.13 0100	0.31	CF	10	50	8								FT		4000	CF	1240	
		Structure's Demolition Cost	Mixture of Types, average	02 41 16.13 0100	0.31	CF	10	40	8								FT		3200	CF	992	
		Structure's Vol. Demolished																0.35	150	CY		
		Rubble's Weight (exclude steel)																				
		Truck's Capacity																				
		Haulage																				
		Transportation Cost Non Steel Truck																				
		Transportation Cost Non Steel Drive																				
		Disposal Cost Non Steel	City Sanitation	City Sanitation Price	2.10	CY													150	CY	316	
		Steel's Weight																				
		Truck's Capacity																				
		Haulage																				
		Transportation Cost Steel Truck																				
		Transportation Cost Steel Drive																				
		Disposal Cost steel																				
		Subtotal																			3912	
		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																				
		Total																			3912	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost		
		Portals No. 24																					
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	8											3200	CF	896	
		Structure's Vol. Demolished																					
		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 Drive																					
		Disposal Cost steel																					
		Subtotal																				896	
		Portal Sealing																					
		Seal Construction			4320.00	Ea															1	Ea	4320
		Labor			265.00	Hr.															2	Hr	530
		Portal Backfilling					20	20	8			119					1	Ea					
							Equipment Cost	Hourly Operating Rate	Operator's Hourly Rate	Hourly Cost		Production Rate											
		Equipment Cost	Front End Loader \$WD, 3.5 CY 145 HP	01 54 33 4710			33.25	3.33	50.60	87.18	\$/HR	60	CY/HR								2	Hr	174
		Subtotal																				5024	
		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																				5920	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Office No. 25																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	24	42	8										8064	CF	2258	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																			2258	
		Equipment's Disposal Cost																				
		Dismantling Cost																				
		Equipment's Vol. Demolished																				
		Loading Costs																				
		Transport Costs																				
		Disposal Costs																				
		Subtotal																				
		Concrete Demolition																				
		Demolition Cost	Concrete Demolition	Concrete Demo1	11.72	CY	24	42	0.5								FT		72	CY	844	
		Concrete's Vol. Demolished																1.3	94	CY		
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09	CY													94	CY	196	
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80	CY													94	CY	1011	
		Disposal Costs	On Site Disposal		9.07	CY														94	CY	849
		Subtotal																			2899	
		Concrete Demolition																				
		Demolition Cost																				
		Concrete's Vol. Demolished																				
		Loading Cost																				
		Transportation Cost																				
		Disposal Costs																				
		Subtotal																				
		Total																			5157	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Portals No. 26																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	7										2800	CF	784	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				784
		Portal Sealing																				
		Seal Construction																				
		Portal Backfilling					20	6	25			111					CY					
							Equipment Cost	Hourly Operating Rate	Operator's Hourly Rate	Hourly Cost	Production Rate											
		Equipment Cost	Front End Loader \$WD, 3.5 CY 145 HP	01 54 33 4710			33.25	3.33	50.60	87.18	\$/HR	60	CY/HR						1.85	HR	161	
		Subtotal																				161
		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																				945

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Shop Warehouse No. 27																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	150	60	18										162000	CF	45360	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																			45360	
		Equipment's Disposal Cost																				
		Dismantling Cost																				
		Equipment's Vol. Demolished																				
		Loading Costs																				
		Transport Costs																				
		Disposal Costs																				
		Subtotal																				
		Concrete Demolition																				
		Demolition Cost	Concrete Demolition	Concrete Demo1	11.72	CY	150	60	1								FT		333	CY	3907	
		Concrete's Vol. Demolished																1.3	433	CY		
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09	CY													433	CY	906	
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80	CY													433	CY	4680	
		Disposal Costs	Seal Portals		9.07	CY														433	CY	3930
		Subtotal																			13423	
		Concrete Demolition																				
		Demolition Cost																				
		Concrete's Vol. Demolished																				
		Loading Cost																				
		Transportation Cost																				
		Disposal Costs																				
		Subtotal																				
		Total																			58783	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost		
		Loadout No. 28																					
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	18										7200	CF	2016		
		Structure's Vol. Demolished																					
		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 Drive																					
		Disposal Cost steel																					
		Subtotal																			2016		
		Equipment's Disposal Cost																					
		Dismantling Cost																					
		Equipment's Vol. Demolished																					
		Loading Costs																					
		Transport Costs																					
		Disposal Costs																					
		Subtotal																					
		Concrete Demolition																					
		Demolition Cost	Concrete Demolition	Concrete Demo1	11.72	CY	20	20	0.75								FT			11	CY	130	
		Concrete's Vol. Demolished																	1.3		14	CY	
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09	CY															14	CY	
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80	CY															14	CY	
		Disposal Costs	On Site Disposal		9.07	CY																14	CY
		Subtotal																				447	
		Concrete Demolition																					
		Demolition Cost																					
		Concrete's Vol. Demolished																					
		Loading Cost																					
		Transportation Cost																					
		Disposal Costs																					
		Subtotal																					
		Total																				2463	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Conveyor No. 29		MOVE TO LILA CANYON MINE																		
		Structure's Demolition Cost																				0
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				0
		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																				
		Total																				0

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Reclaim No. 30																			
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	8	12	170										16320	CF	4570
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			4570
		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																			
		Total																			4570

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Hopper No. 31																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	24	24	16										9216	CF	2580	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				2580
		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																				
		Total																				2580

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Conveyor No. 32																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	5	4	250										5000	CF	1400	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				1400
		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																				
		Total																				1400

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Tunnel No. 33																			
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	8	12	125										12000	CF	3360
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			3360
		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																			
		Total																			3360

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost		
		Portals No. 34																					
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	6											2400	CF	672	
		Structure's Vol. Demolished																					
		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 Drive																					
		Disposal Cost steel																					
		Subtotal																				672	
		Portal Sealing																					
		Seal Construction			4320.00	Ea											4	EA			4	Ea	17280
		Labor			265.00	Hr															8	Hr	2120
		Portal Backfilling					20	20	6				89								356	CY	
							Equipment Cost	Hourly Operating Rate	Operator's Hourly Rate	Hourly Cost		Production Rate											
		Equipment Cost	Front End Loader \$WD, 3.5 CY 145 HP	01 54 33 4710			33.25	3.33	50.60	87.18	\$/HR		60	CY/HR							6	HR	523
																						19923	
		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			100365																		
					33460																	20595	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Water Tank No. 35																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF					941								941	CF	263	
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				263
		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																				
		Total																				263

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Shed No. 36																			
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	10	50	8										4000	CF	1120
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			1120
		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																			
		Total																			1120

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Magazines No. 37																				
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	4	4	6											96	CF	27
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				27
		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																				
		Total																				27

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Substation No. 38																				
		Structure's Demolition Cost	Mechanical equipment heavy	23 05 05.10 3600	795.00	Ton											2	EA		2	Ea	1590
		Structure's Vol. Demolished																				
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				1590
		Equipment's Disposal Cost	Chain Link, posts & fabric remove only	02 41 13.60 1700	3.07	LF	105													105	FT	322
		Dismantling Cost																				
		Equipment's Vol. Demolished																				
		Loading Costs																				
		Transport Costs																				
		Disposal Costs																				
		Subtotal																				322
		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																				1912

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Office No. 39																				
		Structure's Demolition Cost	Mixture of Types, average	23 05 05.10 3600	0.31	CF	25	40	8										8000	CF	2480	
		Structure's Vol. Demolished																0.35	104	CY		
		Truck's Capacity																				
		Haulage																				
		Transportation Cost Non Steel Truck																				
		Transportation Cost Non Steel Drive																				
		Disposal Cost Non Steel	City Sanitation	City Sanitation Price	2.10	CY													104	CY	218	
		Steel's Weight																				
		Truck's Capacity																				
		Haulage																				
		Transportation Cost Steel Truck																				
		Transportation Cost Steel Drive																				
		Disposal Cost steel																				
		Subtotal																				2698
		Equipment's Disposal Cost																				
		Dismantling Cost																				
		Equipment's Vol. Demolished																				
		Loading Costs																				
		Transport Costs																				
		Disposal Costs																				
		Subtotal																				
		Concrete Demolition																				
		Demolition Cost	Concrete Demolition	Concrete Demo1	11.72	CY	25	40	0.5								Ft		19	CY	217	
		Concrete's Vol. Demolished																1.3	24	CY		
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09	CY													24	CY	50	
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80	CY													24	CY	260	
		Disposal Costs	On Site Disposal		9.07	CY													24	CY	218	
		Subtotal																				746
		Concrete Demolition																				
		Demolition Cost																				
		Concrete's Vol. Demolished																				
		Loading Cost																				
		Transportation Cost																				
		Disposal Costs																				
		Subtotal																				
		Total																				3444

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost		
		Portals No. 40																					
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	25	8										4000	CF	1120		
		Structure's Demolition Cost	Steel bld. Large	02 41 16.13 0020	0.28	CF	20	20	8										3200	CF	896		
		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 Drive																					
		Disposal Cost steel																					
		Subtotal																				2016	
		Portal Sealing																	2	EA			
		Seal Construction			4320.00	Ea															2	Ea	8640
		Labor			265.00	Hr															4	Hr	1060
		Portal Backfilling					20	25	8			148									296	CY	
							Equipment Cost	Hourly Operating Rate	Operator's Hourly Rate	Hourly Cost		Production Rate											
		Equipment Cost	Front End Loader \$WD, 3.5 CY 145 HP	01 54 33 4710			33.25	3.33	50.60	87.18	\$/HR	60	CY/HR								5	HR	436
		Subtotal																				10136	
		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																				12152	

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length Avg.	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Gob Vent Well 1.3,4,5,5A,6,7,8,9																				
		Structure's Demolition Cost	Mechanical equipment heavy	23 05 05.10 3600	795.00	Ton											6	Ton		24	Ton	19080
		Plug Well	Plug Wells		170.00	CY	2721			1		79					6	EA		6	EA	
		Plug Wells (Environmental Fee)	Plug Wells		15.00	Load														474	CY	80580
		Gob Vent Well 1.5,6, have reclaimed																		47	Load	705
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				100365
		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																				
		Total																				100365

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost	
		Gob Vent Well 8A.7A																				
		Structure's Demolition Cost	Mechanical equipment heavy	23 05 05.10 3600	795.00	Ton							4				2	TON		8	TON	6360
		Plug Well	Plug Wells		170.00	CY	2721			1		79					2	EA				
		Plug Wells (Environmental Fee)	Plug Wells		15.00	Load														158	CY	26860
		Truck's Capacity																		16	Load	240
		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 Drive																				
		Disposal Cost steel																				
		Subtotal																				33460
		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																				
		Total																				33460

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Gob Vent Well 10 thru 17																			
		Structure's Demolition Cost	Mechanical equipment heavy	23 05 05.10 3600	795.00	Ton							0			0	Ton		0	Ton	0
		Plug Well	Plug Wells		170.00	EA										0	EA		0	EA	0
		Gob Vent Well 10 thru 17 were not developed and/or reclaimed																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			0
		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																			
		Total																			0

Ref.	Task	Description	Materials	Means Reference Number	Unit Cost		Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
		Aberdeen Substation																			
		Structure's Demolition Cost																			
		Structure's Vol. Demolished																			
		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 Drive																			
		Disposal Cost steel																			
		Subtotal																			
		Dismantling Cost	Chain Link, posts & fabric remove only	02 41 13.60 1700	3.07 LF		105										LF		105 LF		322
		Transformer																			
		Dismantling Cost	Mechanical equipment heavy	23 05 05.10 3600	795.00 Ton												Ton		2 Ton		1590
		Subtotal																			1912
		Concrete Demolition																			
		Demolition Cost	Concrete Demolition	Concrete Demo1	11.72 CY		10	10	1								FT		4 CY		43
		Concrete's Vol. Demolished																1.3	5 CY		
		Loading Cost	Front End Loader 3 CY	31 23 16.42 1300	2.09 CY														5 CY		10
		Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rod. Trip	31 23 23.20 1025	10.80 CY														5 CY		52
		Disposal Costs	On Site Disposal		9.07 CY														5 CY		44
		Subtotal																			149
		Concrete Demolition																			
		Demolition Cost																			
		Concrete's Vol. Demolished																			
		Loading Cost																			
		Transportation Cost																			
		Disposal Costs																			
		Subtotal																			
		Total																			2061

Mine Site Grading	336,140
Gob Wells 1,2,4,5,5A,6,7,8,9,	73,602
Gob Wells 5A,8A,7A	6,897
Gob Wells 10 thru 17	<u>0</u>
	416,639

	Task	Equipment Cost	Hourly Operating Rate	Equipment Overhead	Operator's Hourly Rate	Number Hourly Cost	of Men or Eq.	Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
	Gob Wells 1,2,4,5,5A,6,7,8,9.												6			6
	Gob Vent Well 1,5,6, have reclaimed															6
	Grading															
	Backfill and rough grade pond, canyon and bench area															
	D7R	77.25	8.00		50.60	135.85	1	135.85	\$/HR	60000	CY	250	CY/HR	240.0		
	Subtotal															32604
	Haul and spread topsoil															
	D7R	77.25	8.00		50.60	135.85	1	135.85	\$/HR	30000	CY	250	CY/HR	120.0	HR	
	Subtotal															16302
	Support Equipment															
	6,000 Gal. Water Truck	88.15	9.00		40.05	137.20	1	137.20	\$/HR					180	HR	
	Subtotal															24696
																73602

36
6

100365
33460

	Task	Equipment Cost	Hourly Operating Rate	Equipment Overhead	Operator's Hourly Rate	Number Hourly Cost	of Men or Eq.	Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
	Gob Wells 5A,8A,7A															
	7A is a Redrill															
	Grading															
	Backfill and rough grade pond, canyon and bench area															
	D7R	77.25	8.00		50.60	135.85	1	135.85	\$/HR	2000	CY	250	CY/HR	8.0		
	Subtotal															1087
	Haul and spread topsoil															
	D7R	77.25	8.00		50.60	135.85	1	135.85	\$/HR	6400	CY	250	CY/HR	25.6	HR	
	Subtotal															3478
	Support Equipment															
	6,000 Gal. Water Truck	88.15	9.00		40.05	137.20	1	137.20	\$/HR					17	HR	
	Subtotal															2332
																6897

	Task	Equipment Cost	Hourly Operating Rate	Equipment Overhead	Operator's Hourly Rate	Number Hourly Cost	of Men or Eq.	Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Vent Gob Wells 10 thru 17																
Wells not developed or drilled																
Grading																
Backfill and rough grade pond, canyon and bench area																
D7R Semi-U EROPS		77.25	8.00		50.60	77.25	1	77.25	\$/HR	0	CY	250	CY/HR	0.0	HR	0
Subtotal																
Haul and spread topsoil																
D7R Semi-U EROPS		77.25	8.00		50.60	77.25	1	77.25	\$/HR	0	CY	250	CY/HR	0.0	HR	0
Subtotal																
Support Equipment																
6,000 Gal H2O Truck Diesel		88.15	9.00		40.05	88.15	1	88.15	\$/HR					0	HR	0
Subtotal																
																0

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Nimber	Unit	Swell Factor	Quantity	Unit	Cost	
	Mine Site																				
	Slopes																				
	Ground Preparation																				
	Goughing/Pocking	Backhoe, hydraulic Bulk Bank Measure	31 23 16.42 0260	1.44	CY						29201					CY		29201	CY	42049	
	Assume vol = area(18.1AC) x 1ft.																				
	Seed for Hydromulch	Seed Mix Centennial Drainage	Centennial 001	364.22	AC					18.1						AC		18.1			
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 002	41.39	MSF					18.1						AC		788			
	Mulch material	Hay 1" material only	Reveg 001	61.27	MSF					18.1						AC		18.1	AC	1109	
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 005	41.39	MSF					18.1						AC		788	MSF	32633	
	Flat Area																				
	Ground Preparation																				
	Scarify Area	Dozer w/scarifier		0	4.67	CY				15.02						AC		654	MSF	3055	
	Seed for drilling	Seed Mix Centennial Slopes	Centennial 002	482.41	AC					15.02						AC		15.02	AC	7246	
	Drill seeding	Tractor Spreader (equip. & labor) B-66		0	11.47	HR				15.02						AC		654	MSF	7504	
	Drainage																				
	Seedlings material cost	Transplant for Centennial Mine	Centennial 003	1150.00	\$/AC					2.15						AC		2.15	AC	2473	
	Seedlings labor	Common Labor	CLAB	37.60	HR									16		HR		16	HR	602	
	Gob Hole																				
	Ground Preparation																				
	Goughing/Pocking	Backhoe, hydraulic Bulk Bank Measure	31 23 16.42 0260	1.44	CY						0					CY		0	CY	0	
	Assume vol = area(18.1AC) x 1ft.																				
	Seed for Hydromulch	Seed Mix Centennial Drainage	Centennial 001	364.22	AC					0						AC		0	AC	0	
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 002	41.39	MSF					0						AC		0	MSF	0	
	Mulch material	Hay 1" material only	Reveg 001	61.27	MSF					0						AC		0	AC	0	
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 005	41.39	MSF					0						AC		0	MSF	0	
	Gob Holes 2679																				
	Ground Preparation																				
	Goughing/Pocking	Backhoe, hydraulic Bulk Bank Measure	31 23 16.42 0260	1.44	CY						0					CY		0	CY	0	
	Assume vol = area(18.1AC) x 1ft.																				
	Seed for Hydromulch	Seed Mix Centennial Drainage	Centennial 001	364.22	AC					0						AC		0	AC	0	
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 002	41.39	MSF					0						AC		0	MSF	0	
	Mulch material	Hay 1" material only	Reveg 001	61.27	MSF					0						AC		0	AC	0	
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 005	41.39	MSF					0						AC		0	MSF	0	
	Gob Holes New																				
	Ground Preparation																				
	Goughing/Pocking	Backhoe, hydraulic Bulk Bank Measure	31 23 16.42 0260	1.44	CY						3200					CY		3200	CY	4608	
	Seed for Hydromulch	Seed Mix Centennial Drainage		364.22	AC					4						AC		4	AC	1457	
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 002	41.39	MSF					4						AC		174	MSF	7212	
	Mulch material	Hay 1" material only	Reveg 001	61.27	MSF					4						AC		4	AC	245	
	Hydroseed Application	Hydro Spreader (equip. & labor)	Reveg 005	41.39	MSF					4						AC		174	MSF	7212	
	Subtotal																			117405	
	Reseeding																				
	Assume 25% reseeding rate																			29351	
	Subtotal																				
	Total																				146756