Application for Permit Processing
Detailed Schedule of Changes to the MRP

L20-001 Surface Facility Update

C/007/0013
Clean Copies
Received 4/10/20
Task #6079

Permit Number: ACT/007/013

Mine: Lila Canyon

Permittee: UtahAmerican Energy, Inc.

Provide a detailed listing of all changes to the mining and reclamation plan which will be required as a result of this proposed permit application. Individually list all maps and drawings which are to be added, replaced, or removed from the plan. Include changes of the table of contents, section of the plan, pages, or other information as needed to specifically locate, identify and revise the existing mining and reclamation plan. **Include page, section and drawing numbers as part of the description.**

			DESCRIPTION OF MAP, TEXT, OR MATERIALS TO BE CHANGED
☐ ADD	☐ REPLACE	☐ REMOVE	Plate 5-2 Surface Facilities
☐ ADD	☐ REPLACE	☐ REMOVE	Ch. 5 pgs 10, 11, 12, 13, 14, 18, 23, 25, 24 & 30
☐ ADD	☐ REPLACE	☐ REMOVE	Bonding Tabs 1, 3, 10, 13, 15, 29, 36, 42, 49, 50, and 54
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	
☐ ADD	☐ REPLACE	☐ REMOVE	

Any other specific or special instructions required for insertion of this proposal into the Mining and Reclamation Plan?

perform minor equipment repairs. The building measures approximately 30' by 62'. Once long-term offices and the long-term Shop/Warehouse have been constructed, the temporary office / shop building will be raised. A temporary shop structure will be assembled on the Temporary Storage Pad and is located on Plate 5-2 As-Built Surface Facilities. This structure will consist of a 40'x60' tent, similar to the storage tent already on site, and two conex trailers. There will be a 40'x40'x8" concrete pad underneath it.

4) Temporary Storage Shed (Wooden)

The temporary wooden storage sheds measure approximately 8'x8'x8' and 10' by 20' by 8' high, with a wooden floor structure. The sheds are used to store various equipment and supplies needed for mine operations. Multiple sheds are currently used. The locations of these sheds are shown on Plate 5-2. Once the long-term Shop/Warehouse has been constructed, the temporary storage sheds will be removed.

5) Temporary Storage Building (Metal)

The temporary metal storage buildings are prefabricated, metal, intermodal container used for storage. These structures are sometimes referred to as "conex containers." The containers are typically 20' to 40' long by 8' wide by 8.5' high. These structures are used to store various equipment and supplies needed for mine operations. The metal storage structures typically provide a higher level of security than do wooden sheds. Multiple metal storage buildings are currently used. The locations of these buildings are shown on Plate 5-2. Once the long-term Shop/Warehouse has been constructed, the temporary storage buildings will be removed.

7) Temporary Office Building

The temporary office / storage building is shown on Plate 5-2. The office space is used by mine personnel in support positions to mine operations. The building measures 20' by 12' by 10' high. The building is a wood frame on a concrete foundation. The floor is a 4" thick concrete slab. Once the long-term office areas and Shop/Warehouse have been constructed, the temporary office building will be razed.

9) Temporary Storage Tent with Concrete Floor

The temporary storage tent is constructed of an arched metal wall/roof structure covered with a canvas overlay. The tent rests on a 6" concrete floor slab. Two tents are currently in use at the mine site. One tent measures 30' by 30'. The other measures 70' by 48'. The tents are used to store large wares and supplies needed for mining operations that need some protection from the weather. The temporary storage tents with concrete floors are shown on Plate 5-2. Once the long-term Shop/Warehouse has been constructed, the temporary storage tents and associated concrete floor slabs will be removed.

22) Temporary Crusher / Screen Building

The temporary crusher / screen building is shown on Plate 5-2, and houses the screen and crusher assemblies. The screen assembly sorts the coal as it enters the building, via the temporary crusher conveyor (see #21 below), between the larger lump sizes that need to be crushed (2"-8" in size) and the smaller nuggets that do not need to be crushed (less than 2" in size). The crusher assembly reduces the larger 2" to 8" sized coal lumps to nuggets measuring less than 2" in size. The coal that is now 2" or less in size falls onto the crushed coal conveyor (see #23 below) and exits the building. The building itself is constructed of a wide flange steel frame and rests on a 12" thick monolithic concrete slab base. The building measures approximately 48' by 22', and stands approximately 58' at its peak. The temporary crusher / screen building has been constructed to meet MSHA regulations. Once the long-term coal handling facilities have been constructed, the temporary crusher / screen building will be razed.

33) Shop / Warehouse Building

The shop / warehouse building is shown on Plate 5-2. This building will be a long-term structure used to repair machinery and vehicles associated with mine operations, and shall store various wares associated with mine operations. The building will be 120 feet long by 60 feet deep. The roof will be sloped for drainage. The facility will be approximately 36 feet high at the peak of the roof. The building will be constructed of a poured concrete footing and foundation system and floor. The walls and roof will be of pre-fabricated steel. Several roll-up type overhead doors will allow vehicles to enter the building for repair and maintenance. One bay will have overhead doors on the front and rear of the building to allow trucks to enter the building on one side, load or off load wares or equipment, then exit the building through the opposite side of the structure. The building will also house a large capacity overhead crane that will be used to lift heavy objects and equipment. This structure will remain throughout the life of the mine, and will be removed at the time of final reclamation.

UTILITIES

Mine Substation

The mine substation is shown on Plate 5-2, and provides power to surface and underground areas of the mine property. The substation includes approximately four transformers setting on a concrete pad approximately 20' by 20' by 12" and fully fenced. The total fenced area of the substation is approximately 215' by 112'. Power is fed into the transformers at 138 KVA and will be transformed down to usable voltages for both the surface and underground facilities. It is anticipated that voltages of 110V, 220V, 440V will be used on the surface, and 12,470 volts will be

utilized underground. The mine substation is constructed to fulfill all appropriate MSHA regulations. The Mine Substation will remain throughout the life of the mine, and will be removed during final reclamation.

8) Potable Water Tanks

The potable water tanks are shown on Plate 5-2. Potable water is purchased off-site and is transported to the mine site via tanker truck, which in turn fills the tanks. The potable water is stored in one 15' diameter by 20' high metal tank and two (2) 20' by 8' by 8' high conex-type cubic tanks . Water from these tanks are used for toilets and showering in the temporary bath house (see #1 above). The round tank is set on a 15' by 15' concrete pad designed for adequate support of the tank. The cubic tanks are self-contained and rest on native soil. The location of the potable water tanks can be found on Plate 5-2. The potable water tanks will remain throughout the life of the mine, and will be removed during final reclamation.

10) Power Poles

Multiple wooden power poles are utilized throughout the disturbed area. Locations of power poles are shown on Plate 5-2. The power poles are large, upright wooden poles used to support overhead power transmission lines and other wires as needed. The power poles will remain throughout the life of the mine and will be removed during final reclamation.

11) Electrical Transformer

An electrical transformer is used to adjust and transfer electrical energy in electric power applications. Each transformer rests on a 4" thick concrete slab of suitable size to support the weight of the transformer. The transformer feeds various mine facilities. Multiple transformers are currently utilized. Their locations are shown on Plate 5-2. Transformers will be removed as their respective temporary facilities are removed and replaced upon the completion of long-term facilities).

12) Overhead Power Transmission Lines

Within the disturbed area, both overhead and underground power lines will be utilized. Overhead power lines will be run where underground power lines are not feasible. Vertical power poles (see #10 above) support the overhead lines to provide adequate and safe clearances below the power transmission lines. The overhead power transmission lines have been spaced to protect raptors. As-built drawings will be provided upon completion of the long-term surface facilities. Overhead power lines will be remain through the life of the mine, and will be removed upon final reclamation.

13) Buried Power Transmission Lines

Within the disturbed area both overhead and buried power lines will be utilized.

Buried power transmission lines will be run where feasible. All buried power transmission lines will be run in conduits. As-built drawings will be provided upon completion of the long-term surface facilities. Long-term underground power lines will remain throughout the life of the mine. Upon final reclamation, the long-term underground power transmission lines will be abandoned and left in place. To protect the underground high voltage cable from damage caused by equipment on the main access road, an 8'x20' steel sled has been buried on top of the cable.

28) Electrical Grounding Field

The electrical grounding field is composed of a grounding grid and rods buried below the soil. The electrical grounding field has been designed and constructed to meet MSHA requirements and regulations. It is used to ground the Mine Substation (see above). The location of the electrical grounding field is shown on Plate 5-2. The electrical grounding field will remain throughout the life of the mine, and will be removed during final reclamation.

37) Non-Potable Water Storage Tanks

Three non-potable water storage tanks are used to store water for mine-related purposes including dust suppression on roadways and other points as required by the approved Air Quality Order. The location of the non-potable water storage tanks is shown on Plate 5-2. The non-potable water storage tanks will remain throughout the life of the mine, and will be removed upon final reclamation.

40) Concrete Electrical Junction Box

The location of the concrete electrical junction box is shown on Plate 5-2. The concrete electrical junction box is a buried 6' by 6' by 6' concrete box with 6" thick walls, top and floor. A steel manhole allows access to the interior of the box. Within the junction box, high-voltage connections are made that allow power to be transferred from the Mine Substation to the overhead power lines. The concrete electrical junction box will remain throughout the life of the mine, and will be removed upon final reclamation.

41) Temporary Concrete Septic Tank

The temporary concrete septic tank facilitates the existing employees working on rotating shifts. The tanks are used in conjunction with the tanks that are a part of the bath house trailer (see #1 above) and other temporary office trailers (see #2 above). The tanks will be pumped out regularly. Multiple tanks are currently used. The locations of these tanks are shown on Plate 5-2. The temporary concrete septic tanks will be removed upon the completion of the long-term office areas and long-term bath house facilities.

27) Temporary Concrete Equipment Pad

The temporary concrete equipment pad is a portion of the temporary coal handling facilities for the mine. The pad is a 12" thick, steel reinforced concrete slab. The drive motor and take-up equipment for the temporary crushed coal conveyor (see #21 above) rest upon this concrete pad. The concrete equipment pad is shown on Plate 5-2. The concrete equipment pad will remain until final reclamation, at which point it will be buried with other concrete materials as described in the Reclamation Plan.

30) Existing ROM Coal Conveyor from Underground (60")

The ROM (Run of Mine) coal conveyor from underground is a part of the temporary AND long-term coal handling facilities for the mine. The ROM coal conveyor from underground ties into the coal conveyor system within the underground mine workings to convey mined coal from the working face to the surface. The surface portion of the ROM coal conveyor measures approximately 300' long. The assembly is a steel framework, supported by steel bents on concrete foundations, running a 60" conveyor belt. The ROM coal conveyor from underground is shown on Plate 5-2. The existing ROM coal conveyor from underground will remain through the life of the mine. The alignment and elevation of the conveyor structure are such that when the long-term coal handling system is constructed, the existing ROM coal conveyor structure will be extended to the future ROM coal stacking tube. The entire assembly (existing and future) will be removed upon final reclamation.

31) Steel Portal Canopy Structure

A steel portal canopy structure is constructed at each portal of the mine. The canopy consists of steel wide flange posts and beams, and sheathed with steel plate. The canopy structure protects the portals (openings) to the underground workings. The canopies are constructed to meet MSHA regulations. Multiple steel portal canopy structures are utilized for the mine. The locations of the steel portal canopies are shown on Plates 5-2 and 5-2a, and in Appendix 5-9. The steel portal canopy structures will each remain throughout the life of the mine, or until its respective portal is no longer necessary and is sealed and reclaimed; whichever comes first. All remaining steel portal canopy structures will be removed during final reclamation.

32) Concrete Conveyor Bay at Belt Portal

The concrete conveyor bay at the belt portal is a portion of the temporary AND long-term coal handling facilities for the mine. The bay was originally used to house the belt drive for the original ROM conveyor structure, which has since been removed. The concrete conveyor bay now cradles and

constructed, and maintained according to appropriate R645 regulations. The slope access road is shown on Plate 5-2. The slope access road will remain throughout the life of the mine, and will be removed during final reclamation. There are 3 convex traffic mirrors mounted on metal poles located along this road, to assist with visibility around corners.

Storage Pad

A supply and materials storage pad is constructed directly south of the Mine Substation (see above), but within the existing disturbed boundary line as shown on Plate 5-2. The pad is constructed similarly to the existing Lower, Middle and Upper Pads (see Chapter 2, Section 232.500), with a gravel covering. The storage pad is needed so large trucks delivering and/or collecting materials and supplies will not congest the parking and supply areas already in-place on the Lower Pad, or interfere with the Mine Facilities Access Road / Truck Loadout Road (see above) and trucks preparing to load coal or loaded trucks hauling coal from the mine site. Moving the delivery trucks to the storage pad will reduce vehicle congestion, and decrease the possibility of accidents resulting from said congestion. The storage pad will be utilized throughout the life of the mine, and will be reclaimed per the Reclamation Plan. There is a 3'x10' steel foot bridge connecting this storage pad to the undisturbed area between it and the substation. This is for foot traffic to access the rain monitoring gauge that is located in that area. The rain gauge is a single pole holding a rain collection data devise.

Storage Pad Access Road

The storage pad access road will extend from the Middle Pad to the Storage Pad (see above), which lies just south the Mine Substation (see above). The storage pad access road will be used to provide access between the two pads for mine personnel, equipment and supplies. Since the storage pad access road will provide access for men, equipment and materials for a period of six months or longer, the new storage pad access road is classified as a primary road, and will be paved. The new storage pad access road has been designed and will be constructed and maintained according to appropriate R645 regulations. The storage pad access road is shown on Plate 5-2. The storage pad access road will remain throughout the life of the mine, and will be removed upon final reclamation.

Storage Pad Service Road

The storage pad service road, shown on Plate 5-2, will begin at the edge of County Road 164 (Lila Canyon Road), and will allow for access to the storage pad (see above) directly south of the Mine Substation (see above). The first approximately 350 feet of the storage pad service road from County Road 164 (Lila Canyon Road) will be a reworking of the existing County Road RS-2477. The storage pad service road will then continue to the storage pad (see above). The storage pad service road will be approximately 30 feet wide and provide access for trucks to deliver and/or collect supplies, materials or equipment related to mine activities, without

increasing congestion on the mine facilities access road / truck loadout road (see above). Since the storage pad service road will provide access for men, equipment and materials for a period of six months or longer, the storage pad service road is classified as a primary road, and will be paved. The storage pad service road has been designed and will be constructed and maintained according to appropriate R645 regulations. The storage pad service road is shown on Plate 5-2. The storage pad service road will be removed during the course of construction of the long-term coal handling facilities. The portion of the storage pad road that lies along the existing County Road RS-2477 may remain or be reclaimed. The BLM and Emery County will be consulted when appropriate, and the Division will be advised as to the course of action for the roadway (remain or be reclaimed). Access to the storage pad (see above) will be rerouted through the new truck loadout road when the long-term truck loadout road is completed. When this happens, the existing truck loop will become the new truck loading/unloading area for the future warehouse on the Upper Pad.

Topsoil Pile

The topsoil pile has been located on the southwest end of the surface facilities. The pile has been designed to contain adequate topsoil for redistribution according to the reclamation plan found in Chapter 5. The proposed location provides for good protection from wind contamination, as well as protection from mine related activities. The location of the topsoil pile is shown on Plate 5-2. The topsoil will be redistributed across the disturbed area according to the mine reclamation plan.

6) Temporary Concrete Walkway

Temporary concrete walkways have been constructed at temporary buildings, the temporary bath house (see #1 above) and temporary office trailers (see #2 above). The walkways are generally 6' wide by 4" thick. The locations of the temporary concrete walkways are shown on Plate 5-2. The temporary concrete walkways will be removed as their respective temporary buildings are removed.

15) Temporary Fuel Storage Tanks

The temporary locations of the fuel storage tanks are on the Middle Pad as shown on Plate 5-2. The tanks are bulk fuel storage tanks containing gasoline or diesel fuel for mine vehicles. The tanks are supported by steel legs above integral steel secondary containment basins. Upon completion of the long-term surface facilities' construction, the fuel tanks will be relocated to their long-term location on the Upper Pad. The fuel tanks will remain in their long-term locations for the life of the mine, and will be removed upon final reclamation.

521.161 Proposed buildings, utility corridors, and facilities are shown on Plate 5-2, as well as others.

521.162 The area of land affected according to the sequence of mining and reclamation is shown on the appropriate plates.

521.163 Land for which a performance bond will be posted is shown on the appropriate plate. Plate 5-2 as well as others, show the area for which the performance bond will be posted. All disturbed areas within the permit boundary have been bonded.

521.164 Existing coal storage and loading areas are shown on Plates 5-2 and certified as required. Future coal storage and loading areas are certified as required. Additional information can be found in Appendix 5-4.

521.165 Topsoil and waste piles are shown on Plate 5-2, as well as others.

521.166 The waste disposal areas are shown for non-coal waste and underground mine waste on Plate 5-2.

521.167 No explosives are expected to be stored on-site. However, if explosives are stored, they will be stored as discussed in Section 520. on Plate 5-2.

521.168 Since Lila Canyon mine is an underground operation, this paragraph is not applicable.

521.169 The refuse pile is shown on Plate 5-2 and discussed in Appendix 5-7.

521.170 Transportation facility maps describing roads and conveyors maintained within the permit are shown with descriptions of roads, embankments, culverts,

Lila Canyon Mine Reclamation Bond Estimate

Bonding Calculations

Direct Costs

Subtotal Demolition and Removal	$960,188.00	
Subtotal Backfilling and Grading	$567,433.00	
Subtotal Revegetation	$151,618.00	
Direct Costs in 2017 Dollars	**$1,679,239.00**	

Indirect Costs

Mob/Demob	$167,924.00	10.0%
Contingency	$83,962.00	5.0%
Engineering Redesign	$41,981.00	2.5%
Main Office Expense	$114,188.00	6.8%
Project Management Fee	$41,981.00	2.5%
Subtotal Indirect Costs 2017 Dollars	**$450,036.00**	26.8%
Total Cost	**$2,129,275.00**	
Escalation factor		0.0232
Number of years		2
Escalation	$99,944.00	
Total Reclamation Cost 2021 Dollars	**$2,229,219.00**	
Bond Amount (rounded to nearest $1,000) 2021 dollars	**$2,229,000.00**	
Bond Posted	$2,166,000.00	Rider updated January 28 2020
Difference Between Posted Bond and Cost Estimate	**-$63,000.00**	

Lila Canyon Mine Reclamation Bond Estimate

Unit Costs

All unit costs were obtained from RS Means 2017 Site Work and Landscape Costs or
RS Means 2017 Heavy Construction Costs, except as noted.
All costs include overhead and profit.

Means Number	Item	Unit Cost	Units	
32 91 13.23 3100	75 HP Dozer with scarifier	5.85	MSF	
32 91 13.16 0390	Power mulcher, large, hay 1" deep	30.50	MSF	
32 01 90.13 0180	Fertilizer, hydro spread, 1.5 lb/MSF	5.00	MSF	
32 92 19.14 4600	Hydroseeder (equipment and labor only)	22.00	MSF	
05 05 05.10 0380	Fabricated steel demo, 121-500 lb	68.00	EA.	
05 05 05.10 0390	Fabricated steel demo, 501-1000 lb	91.00	EA.	
02 41 19.27 0020	Torch cutting, steel, 1" thick plate	3.21	LF	Unit cost reduced 30% for no interior walls
02 41 16.13 0020	Building Demolition - Steel	0.27	CF	(see 02 41 16.13 5000)
02 41 16.13 0100	Building Demolition - Mixture of Types	0.40	CF	
13 05 05.50 0650	Pre-engineered steel bldg demo,>12,500 SF	1.68	SF Flr	
02 41 16.17 0280	Concrete Floor Demolition, 4" thick, reinforced	0.89	SF	
02 41 16.17 0420	Concrete Floor Demolition, 6" thick, reinforced	1.11	SF	Unit cost increased 10% for reinforcing
02 41 16.17 2500	Concrete Wall/Floor Demo, 12" thick, reinforced	1.57	SF	(see 02 41 16.17 2600)
03 05 05.10 0060	Concrete, Selective Demo, Reinf 1-2% of X Sec	167.00	CY	
31 23 16.42 1300	Front End Loader 3CY	2.21	CY	
31 23 23.20 1014	12 CY (16 Ton) Dump Truck 1/2 rod. Trip	3.74	CY	
02 41 16.17 4200	On Site Disposal	11.40	CY	
Crew B-1	Portal seal, site preparation crew	1464.40	Day	See JennChem bid
04 22 10.34 1500	Block wall, reinforced, 4" thick (2 each seal)	8.50	SF	
JennChem	Seal portals, materials	4320.00	EA.	
JennChem	Seal portals, labor	265.00	HR	
Classic Helicopters	Portal seal support, material haulage	11965.00	Job	
23 05 05.10 3600	Mechanical Equipment Demolition, Heavy	1225.00	Ton	
26 05 05.10 1570	Demo of elec transformer, 3 ph, 750kVA	1700.00	EA.	
Crew A-3H	Hydraulic crane, 12 ton, with operator	1518.58	Day	
G1030 1100	Cut and fill common earth, 8" lift, 2 passes	7.00	CY	
31 23 16.42 0260	Excavation Bulk Bank 2 CY (322BL)	1.81	CY	
31 23 16.13 3080	Backfill Trench, min haul, FE loader 2 1/4 CY	2.50	CY	
Crew B-10M	Dozer, 300 HP, 50' haul, sandy clay and loam	2978.00	Day	
Crew B-14A	Loader, 500 HP, wheel mounted, 5 CY cap	4306.40	Day	
Crew B-10G	Sheepsfoot roller, 315 HP, 8" lifts, 2 passes	2313.60	Day	
Crew B-33K	Self-propelled scraper, 34 CY, 500 HP	418.20	HR	
Crew B-34F	Off-highway rear dump truck, 40 ton, 10 MPH	2234.80	Day	
Crew B-9A	5000 gallon water truck	2041.01	Day	
02 41 13.60 1700	Chain link removal, 8'-10' high	4.44	LF	
02 41 13.17 5050	Pavement Removal, bituminous, 4" to 6" thick	9.80	SY	See Scamp bid
02 41 13.30 1600	Median barrier, precast conc, remove and store	14.00	LF	
Scamp	Demolition debris, off-site haul and disposal	6.00	Ton	
02 41 13.80 0200	Wood utility poles, 35'-45' high	370.00	EA.	
02 41 13.80 0300	Wood cross arms, 4'-6' long	136.00	EA.	
Crew B-6	Backhoe loader, 2 laborers, equip operator	1980.00	Day	
Crew B-7	Log chipper, crew, and assoc equipment	5025.34	Day	
26 05 05.10 1900	Electrical demolition, #2 wire, from conduit	30.50	CLF	
02 65 10.30 0110	3000 to 5000 gal. undrgrnd steel tank removal	860.00	EA.	
02 65 10.30 1023	3000 to 5000 gal. tank, disposal, 100 mi RT	830.00	EA.	
02 65 10.30 0300	3000 to 5000 gal. tank, sludge removal	285.00	EA.	
02 65 10.30 0390	Dispose of sludge off site	6.80	Gal	
1305 05.75 0530	5000 to 12000 gal. abovegrnd steel tank removal	1625.00	EA.	
02 41 13.40 0110	Demolition, CMP pipe, steel, 12"	2.60	LF	
02 41 13.40 0160	Demolition, CMP pipe, steel, 18"	3.90	LF	
02 41 13.40 0170	Demolition, CMP pipe, steel, 24"	14.70	LF	
02 41 13.40 0180	Demolition, CMP pipe, steel, 30"-36"	17.65	LF	
24 41 13.40 0190	Demolition, CMP pipe, steel, 48-60"	22.00	LF	
13 05 05.60 0050	Silos, Selective Demolition, steel	2900.00	EA.	
01 52 13.20 0800	Haul Conex units offsite	12.10	Mile	
02 41 13.30 0100	Remove roadside delineator	49.35	EA.	Increased 200% per 02 41 13.30 4400
02 41 13.96 0600	Demo/Remove steps, 3 risers	94.50	EA.	
02 41 13.40 0240	Demolition, CMP end section, 60"	445.00	EA.	

Lila Canyon Mine Reclamation Bond Estimate

Demolition and Removal Cost Summary

Structure/Item	Cost ($)
01 Office/Bathhouse	49,516
02 ROM Coal Stockpile	0
03 Shop/Warehouse	327,646
04 Storage Shed	348
05 Employee Parking	96,771
06 Truck Loading/Unloading Area	0
07 Equipment/Materials Storage Area	0
08 Potable Water Tank	3,741
09 Sewer Treatment Plant	887
10 Power Poles	13,121
11 Electrical Transformers	4,961
12 Overhead Power Lines	2,952
13 Buried Power Lines	860
14 Rock Dust Silo	3,147
15 Fuel & Oil Tanks	8,143
16 Reclaim Tunnel	23,160
17 Reclaim Conveyor	3,709
18 Conveyor to Loadout Bin	4,341
19 Crusher MCC Building	364
20 Truck Loadout	7,270
21 Refuse Conveyor	826
22 Crusher/Screen Plant	3,913
23 Reclaim Escape Tunnel	12,851
24 Reclaim Feeder Gate	137
26 Extended ROM Conveyor	3,258
27 Refuse/Non-Coal Waste Pile	0
28 Electrical Grounding Field	1,986
29 Sedimentation Pond Structures	1,583
30 Existing ROM Conveyor	6,432
31 Portal Closure	63,312
32 Concrete Conveyor Bay	371
33 ROM Coal Staking Tube	8,858
34 Mine MCC Building and Electrical Tower	1,595
35 Backup Ventilation Fans	37,668
36 Main Ventilation Fan	37,698
37 Non-Potable Water Tanks	7,670
38 Powder and Cap Magazines	4,924
39 Chain Link Fence	6,676
40 Concrete Electrical Junction Box	73
41 Loadout MCC Building	289
42 Mine Parking	36,390
43 Abandoned Concrete Reclaim Room	5,364
44 Jersey Barrier	10,640
45 Concrete Trash Chute	1,280
46 Emergency Reclaim Feeder Gate	69
47 Gantry Lift Assembly	5,727
Mine Substation	8,476
Paved Mine Roads	63,372
Culvert Demolition	46,500
Lila Old Fan Portals	24,586
Visual Disconnect	6,279
Drop Box	145
Rain Gauges	303
TOTAL	960,188

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	01 Office/Bathhouse																			
	Structure's Demolition Cost	Pre-engineered steel bldg demo,>12,500 SF	13 05 05.50 0650	1.68	SF Flr	150	100	15		15000								15000	SF Flr	25200
	Structure's Vol. Demolition										225000						0.3	2500	CY	
	Bathhouse New Addition Demo	Building Demolition - Mixture of Types	02 41 16.13 0100	0.40	CF			10		432	4320						0.3	1296	CF	518
	Truck's Capacity																			
	Haulage																			
	Loading Cost Bathhouse New	Front End Loader 3CY	31 23 16.42 1300	2.21	CY													48		106
	Transportation Cost Bathhouse New	12 CY (16 Ton) Dump Truck 1/2 rod. Trip	31 23 23.20 1014	3.74	CY													48		180
	Disposal Cost Bathhouse New	On Site Disposal	02 41 16.17 4200	11.40	CY													54	CY	616
	Steel's Weight																			
	Demo Steel Stairs	Demo/Remove steps, 3 risers	02 41 13.96 0500	94.50	EA													4	EA	378
	Haulage																			
	Transportation and Disposal Cost All	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton								486			lb/cy		608	Tons	3648
	Transportation Cost Steel Drive																			
	Disposal Cost Steel																			0
	Subtotal																			30840
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Load Conex Units	Hydraulic crane, 12 ton, with operator	Crew A-3H	1518.58	Day									1		Day				1519
	Haul Connex Units to SLC, UT	Haul Conex units offsite	01 52 13.20 0800	12.10	Mile										140	Miles		8	EA	13552
	Disposal Costs																			
	Subtotal																			15071
	Office Trailers	Haul Conex units offsite	01 52 13.20 0800	12.10	Mile	70	14	8							140	Miles		2	EA	3388
	Demolish Awning	Torch cutting, steel, 1" thick plate	02 41 19.27 0020	3.21	LF		14											5	EA	225
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton													1	Ton	6
	Subtotal																			3619
	Concrete Walkway Demolition	Concrete Floor Demolition, 4" thick, reinforced	02 41 16.17 0280	0.69	SF	28	6	0.33		168								168	SF	150
	Concrete Cost																			
	Concrete Vol. Demolished										2									
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs	On Site Disposal	02 41 16.17 4200	11.40	CY												1.3	2.6	CY	30
	Subtotal																			180
	Total																			49510

Reclamation Bond Estimate

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	03 Shop/Warehouse																			
	Structure's Demolition Cost (Shop 1)	Pre-engineered steel bldg demo,>12,500 SF	13 05 05.50 0650	1.68	SF Flr	150	100	20		15000								15000	SF Flr	25200
	Structure's Vol. Demolition (Shop 1)										300000						0.3	3333	CY	
	Structure's Demolition Cost (Shop 2)	Pre-engineered steel bldg demo,>12,500 SF	13 05 05.50 0650	1.68	SF Flr	160	60	30		9600								9600	SF Flr	16128
	Structure's Vol. Demolition (Shop 2)										288000						0.3	3200	CY	
	Structure's Demolition Cost (Warehouse)	Pre-engineered steel bldg demo,>12,500 SF	13 05 05.50 0650	1.68	SF Flr	70	50	14		3500								3500	SF Flr	5880
	Structure's Vol. Demolition (Warehouse)										49000						0.3	544	CY	
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation and Disposal Cost All	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton								480			lb/cy		1568	Ton	9408
	Transportation Cost Steel Drive																			
																				0
	Subtotal																			58616
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Load Conex Units	Hydraulic crane, 12 ton, with operator	Crew A-3H	1518.58	Day										1			Day				1519
	Haul Connex Units to SLC, UT	Haul Conex units offsite	01 52 13.20 0800	13.10	Mile										140	Miles			10	EA	16940
	Disposal Costs																			
	Subtotal																			18459
	Slab																			
	Concrete Demolition						420	250	1			3889				105000	SF			
	Concrete Cost	Concrete Wall/Floor Demo, 12" thick, reinforced	02 41 16.17 2500	1.57	SF														105000	SF	164850
	Concrete Vol. Demolished																1.3	5056	CY	
	Loading Costs	Front End Loader 3CY	31 23 16.42 1300	2.21	CY													5056	CY	11174
	Transportation Costs	12 CY (16 Ton) Dump Truck 1/2 rod. Trip	31 23 23.20 1014	3.74	CY													5056	CY	18909
	Disposal Costs	On Site Disposal	02 41 16.17 4200	11.40	CY													5056	CY	57633
	Subtotal																			252571
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Total																			327646

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	10 Power Poles																			
	Structure's Demolition Cost	Wood utility poles, 35'-45' high	02 41 13.80 0200	370.00	EA.										16	EA		16	EA	5920
	Structure's Demolition Cost	Wood cross arms, 4'-6' long	02 41 13.80 0300	136.00	EA.										16	EA.		16	EA.	2176
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation and Disposal Cost All	Log chipper, crew, and assoc equipment	Crew B-7	5025.34	Day													1.00	Day	5025
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Drive																			
	Disposal Cost Steel																			
	Subtotal																			13121
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Total																			13121

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	13 Buried Power Lines																			
	Structure's Demolition Cost	Electrical demolition, #2 wire, from conduit	26 05 05.10 1900	30.50	CLF	890									3			2670	FT	814
	Steel Sled for Cable Protection	Building Demolition - Steel	02 41 16.13 0020	0.27	CF	20	8	1			160							160	CF	43
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation and Disposal Cost All	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton								201			lb/MF		0.54	Ton	3
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Drive																			
	Disposal Cost Steel																			
	Subtotal																			860
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Total																			860

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	15 Fuel & Oil Tanks																			
	Structure's Demolition Cost	5000 to 12000 gal. abovegrnd steel tank removal	1305 05.75 0530	1625.00	EA.													1	EA	1625
	Structure's Demolition Cost																			
	Calcium Chloride Tank	Building Demolition - Steel	02 41 16.13 0020	0.27	CF			30	6		848							848	CF	229
	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 and Disposal Cost All	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton							2				Ton		4.00	Ton	24
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Drive																			
	Subtotal																			1878
	Equipment Disposal Cost																			
	Tank Removal	3000 to 5000 gal. undrgrnd steel tank removal	02 65 10.30 0110	860.00	EA										3	EA		3	EA	2580
	Remove Sludge	3000 to 5000 gal. tank, sludge removal	02 65 10.30 0300	285.00	EA										3	EA		3	EA	855
	Tank Disposal	3000 to 5000 gal. tank, disposal, 100 mi RT	02 65 10.30 1023	830.00	EA										3	EA		3	EA	2490
	Sludge Disposal	Dispose of sludge off site	02 65 10.30 0390	6.80	Gal										50	Gal		50	Gal	340
	Subtotal																			6265
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Total																			8143

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	29 Sedimentation Pond Structures																			
	Pond #2 Barrel Excavation	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	165	1.5	3								FT		28	CY	50
	Subtotal																			50
	Catwalk to Pond Spillway	Building Demolition - Steel	02 41 16.13 0020	0.27	CF	60	3	3			540							540	CF	146
	Dismantling Cost																			
	Equipment's Vol. Demolished										20									
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton								0.2				0.3	1.2	Tons	7
	Subtotal																			153
	Pond #1 - 30" Principal Riser	Demolition, CMP pipe, steel, 30"-36"	02 41 13.40 0180	17.65	LF	20							30	lb/ft		FT		20	FT	353
	Pond #1 - 30" Emergency Riser	Demolition, CMP pipe, steel, 30"-36"	02 41 13.40 0180	17.65	LF	19							30	lb/ft		FT		19	FT	335
	Pond #2 - 12" Principal Riser	Demolition, CMP pipe, steel, 12"	02 41 13.40 0110	2.60	LF	5							103	lb/ft		FT		5	FT	13
	Pond #2 - 15" Emergency Riser	Demolition, CMP pipe, steel, 18"	02 41 13.40 0160	3.90	LF	6							10	lb/ft		FT		6	FT	23
	Pond #2 Barrel (SP2-1)	Demolition, CMP pipe, steel, 18"	02 41 13.40 0160	3.90	LF	165							15	lb/ft		FT		165	FT	644
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation & Disposal Costs	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton							4160	lb					2	Tons	12
	Disposal Costs																			
	Subtotal																			1380
	Total																			1583

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	36 Main Ventilation Fan																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolition																			
	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 Helicopter	Portal seal support, material haulage	Classic Helicopters	11965.00	Job										0.2	Day		0.2	Day	2393
	Transportation Cost Steel Drive																			
	Subtotal																			2393
	Equipment's Disposal Cost																			
	Dismantling Cost	Mechanical Equipment Demolition, Heavy	23 05 05.10 3600	1225.00	Ton							28				Ton		28	Ton	34300
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transportation and Disposal Cost All	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton													28	Ton	168
	Disposal Costs																			
	Subtotal																			34468
	Concrete Demolition																			
	Concrete Cost	Concrete Wall/Floor Demo, 12" thick, reinforced	02 41 16.17 2500	1.57	SF	20	20	0.5		400						SF		400	SF	628
	Concrete Pad-Backup Fan Pwr Cnt	Concrete Floor Demolition, 6" thick, reinforced	02 41 16.17 0420	1.11	SF	6	12	0.5		72						SF		72	SF	80
	Loading Costs																		CY	0
	Transportation Costs																		CY	0
	Disposal Costs	On Site Disposal	02 41 16.17 4200	11.40	CY						8.7						1.3	11	CY	130
	Subtotal																			837
	Shot Crete																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			0
	Total																			37998

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	42 Mine Parking																			
	Wooden Shed Demolition Cost	Building Demolition - Mixture of Types	02 41 16.13 0100	0.40	CF		8	8	8			512				4			512	CF	819
	Structure's Vol. Demolition																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel	On Site Disposal	02 41 16.17 4200	11.40	CY							19				4		0.3	22.8	CY	260
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Drive																			
	Subtotal																			1079
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			0
	Pavement Removal	Pavement Removal, bituminous, 4" to 6" thick	02 41 13.17 5050	9.80	SY			0.33		27800						SF		3089	SY	30272
	Disposal Costs	On Site Disposal	02 41 16.17 4200	11.40	CY						340					CY	1.3	442	CY	5039
	Subtotal																			35311
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Total																			36590

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Paved Mine Roads																			
	Structure's Demolition Cost																			
	Structure's Vol. Demolition																			
	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																			
	Subtotal																			
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Pavement Removal	Pavement Removal, bituminous, 4" to 6" thick	02 41 13.17 5050	9.80	SY	1932	24	0.5		46368						SF		5152	SY	50490
	Disposal Costs	On Site Disposal	02 41 16.17 4200	11.40	CY						859					CY	1.3	1117	CY	12734
	Remove Traffic Mirror	Remove roadside delineator	02 41 13.30 0100	49.35	EA										3	EA		3	EA	148
	Subtotal																			63372
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Total																			63372

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Culvert Demolition																			
	DC-1	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	60	1.5	3								FT		10	CY	18
	DC-2	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	60	1.5	3								FT		10	CY	18
	DC-3	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	65	1.5	3								FT		11	CY	20
	DC-4	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	400	2	3								FT		89	CY	161
	DC-5	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	350	2	3								FT		78	CY	141
	DC-6	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	107	2	3								FT		24	CY	43
	DC-7	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	155	2	3								FT		34	CY	62
	DC-8	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	167	2	3								FT		37	CY	67
	DC-9	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	186	2	3								FT		41	CY	75
	DC-10	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	60	2	3								FT		13	CY	24
	DC-11	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	101	2	3								FT		22	CY	41
	DC-12a	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	140	2.5	3.5								FT		45	CY	82
	DC-12b	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	79	2.5	3								FT		22	CY	40
	DC-12c	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	357	2.5	3								FT		99	CY	179
	DC-12d	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	9	2.5	3.5								FT		3	CY	5
	DC-13	PREVIOUSLY REMOVED																		0
	DC-14	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	40	1.5	3								FT		7	CY	12
	DC-15	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	45	1.5	3								FT		8	CY	14
	DC-16	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	25	1.5	3								FT		4	CY	8
	DC-17	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	120	1.5	3								FT		20	CY	36
	DC-18	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	27	1.5	3								FT		5	CY	8
	UC-1	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81	CY	120	5	6								FT		133	CY	241
	UC-1a	Excavation Bulk Bank 2 CY (322BL)	31 23 16.42 0260	1.81		360	5	6								FT		400	CY	724
	Subtotal																			2019
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Demolition Cost 18" CMP	Demolition, CMP pipe, steel, 18"	02 41 13.40 0160	3.90	LF	402							15	lb/ft		FT		402	FT	1568
	Demolition Cost 24" CMP	Demolition, CMP pipe, steel, 24"	02 41 13.40 0170	14.70	LF	2151							19	lb/ft		FT		2151	FT	31620
	Demolition Cost 60" CMP	Demolition, CMP pipe, steel, 48-60"	24 41 13.40 0190	22.00	LF	480							103	lb/ft				480	FT	10560
	Culvert Trash Rack Demo	Demolition, CMP end section, 60"	02 41 13.40 0240	445.00	EA													1	EA	445
	Loading Costs																			
	Transportation & Disposal Costs	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton							96339	lb					48	Tons	288
	Disposal Costs																			
	Subtotal																			44481
	Total																			46500

Ref.	Description	Materials	Means Reference Number	Unit Cost	Unit	Length	Width	Height	Diameter	Area	Volume	Weight	Density	Time	Number	Unit	Swell Factor	Quantity	Unit	Cost
	Rain Gauges																			
	Rain Gauge Removal	Remove Rain Gauges	Crew B-1	1464.40	Day										2	EA		0.2	Day	293
	Steel Walkway Removal	Building Demolition - Steel	02 41 16.13 0020	0.27	CF	10	3	1										30	CF	8
	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 & Disposal Cost Steel	Demolition debris, off-site haul and disposal	Scamp	6.00	Ton													0.3	Ton	2
	Transportation Cost Steel Drive																			
	Subtotal																			303
	Equipment's Disposal Cost																			
	Dismantling Cost																			
	Equipment's Vol. Demolished																			
	Loading Costs																			
	Transportation & Disposal Cost Steel																			
	Disposal Costs																			
	Subtotal																			0
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			
	Concrete Demolition																			
	Concrete Cost																			
	Concrete Vol. Demolished																			
	Loading Costs																			
	Transportation Costs																			
	Disposal Costs																			
	Subtotal																			0
	Total																			303


LILA CANYON MINE
AS-BUILT SURFACE FACILITIES
R. Jay Marshall
5-2
APRIL 2016
AS SHOWN
INCORPORATED
APR 17 2020
Div. of Oil, Gas & Mining
NOTE: CONTROL POINT COORDINATE SYSTEM IS U.S. STATE PLANE 1983 - UTAH CENTRAL (4302) ADJUSTED TO SEA LEVEL.
REVISION DATE:
JAN. 2008 / APR. 2009 / DEC. 2009 / AUGUST 2010 / SEPT. 2010 / APRIL 2011 / MAY 2011
JUNE 2011 / JAN. 2012 / MAR. 2014 / JULY 2014 / DEC. 2015 / JUNE 2016 / NOV. 2016
JUNE 2017 / APRIL 2018 / JANUARY 2019 / FEBRUARY 2019 / MAY 2019 / DECEMBER 2019 / FEBRUARY 2020
Sec. 15, T 16 S, R 14 E
LEGEND:
UNDISTURBED WITHIN THE DISTURBED AREA
DISTURBED AREA BOUNDARY:
NATURAL DRAINAGE:
6' HIGH CHAIN LINK FENCE
INCIDENTAL ROCK DISTRIBUTION:
STREAM BUFFER ZONE SIGNS:
BLM R.O.W. BOUNDARY LINE:
NOTES: 1. REFER TO PLATE 5-7A&B FOR CROSS-SECTIONS.
TEMPORARY ROADWAYS:
STRUCTURAL FILL:
LEASE BOUNDARY LINES:
EXISTING INDEX CONTOURS (5' INTERVALS):
NEW INDEX CONTOURS (5' INTERVALS):
NEW INTERMEDIATE CONTOURS (1' INTERVALS):
REMOVED INDEX CONTOURS (5' INTERVALS):
MINE FACILITIES ACCESS ROAD / TRUCK LOADOUT ROAD
STREAM BUFFER ZONE
LOWER PAD
MIDDLE PAD
CRUSHED COAL STOCKPILE
UPPER PAD
ROM COAL STOCKPILE
Rock Slope Material 17'x4' Covered 28,000 c.y.
SLOPE / PORTAL ACCESS ROAD
TRUCK LOOP
CONTROL POINT DELTA
NORTHING: 6,962,108.13
EASTING: 1,967,718.52
ELEVATION: 6129.7
ROCK SLOPES
NORTH BREAKOUT
A.S.C.A. Disturbed
UNDERGROUND MINE WORKINGS
OUTCROP
POND #2
TEMPORARY STORAGE PAD
LILA CANYON ROAD
CONTROL POINT BETA
NORTHING: 6,961,805.36
EASTING: 1,965,344.01
ELEVATION: 5859.34
SHOP PAD
SUBSTATION
UNDISTURBED
STORAGE PAD ACCESS ROAD
STORAGE PAD
BLM R.O.W. #UTU-77122
EXISTING UNPAVED EMERY COUNTY ROAD RS-2477
TOPSOIL PILE
TOPSOIL SALVAGED TO DATE: 71,987 C.Y.
SOUTH BREAKOUT
POND #1
BLM R.O.W. #UTU-91789
VEGETATION REFERENCE AREA
SECTION LINE
NOTE: ALL NEW EXPOSED SLOPES TO RECEIVE INTERIM SEEDING UPON COMPLETION OF CONSTRUCTION.
KEYED MINE FACILITIES
1 TEMPORARY BATH HOUSE
2 TEMPORARY OFFICE TRAILER
3 TEMPORARY OFFICE / SHOP BUILDING
4 TEMPORARY STORAGE SHED (WOODEN)
5 TEMPORARY STORAGE BUILDING (METAL)
6 TEMPORARY CONCRETE WALKWAY
7 TEMPORARY OFFICE BUILDING
8 POTABLE WATER TANK
9 TEMPORARY STORAGE TENT W/ CONC. FLOOR
10 POWER POLE
11 ELECTRICAL TRANSFORMER
12 OVERHEAD POWER TRANSMISSION LINES
13 BURIED POWER TRANSMISSION LINES
14 ROCK DUST SILO
15 TEMPORARY FUEL STORAGE TANKS
16 TEMPORARY UNDERGROUND RECLAIM ROOM
17 TEMPORARY CONCRETE RETAINING WALL
18 TEMPORARY LOADOUT CONVEYORS (48")
19 TEMPORARY LOADOUT MCC BUILDING
20 TEMPORARY LOADOUT STRUCTURES
21 TEMPORARY CRUSHER CONVEYOR (48")
22 TEMPORARY CRUSHER / SCREEN BUILDING
23 TEMPORARY CRUSHED COAL CONVEYOR (48")
24 TEMPORARY CRUSHER MCC BUILDING
25 TEMPORARY CONCRETE DOZER TRAP
26 4" THICK ASPHALT PAVING
27 TEMPORARY CONCRETE EQUIPMENT PAD
28 ELECTRICAL GROUNDING FIELD
29 SEDIMENT POND SPILLWAY STRUCTURE
30 EXISTING ROM COAL CONVEYOR (60")
31 STEEL PORTAL CANOPY STRUCTURE
32 CONCRETE CONVEYOR BAY
33 SHOP / WAREHOUSE BUILDING
34 MINE MCC BUILDING / ELECTRICAL TOWER
35 BACKUP VENTILATION FANS
36 MAIN MINE VENTILATION FAN / ELEC. TOWER
37 NON-POTABLE WATER TANKS
38 POWDER AND CAP MAGAZINES
39 CHAIN-LINK FENCING
40 CONCRETE ELECTRICAL JUNCTION BOX
41 TEMPORARY CONCRETE SEPTIC TANK
42 TEMPORARY LOADOUT LIGHT BOARD
43 TEMPORARY CONVEYOR COUNTERWEIGHTS
44 JERSEY BARRIER GUARD RAIL
45 CONCRETE TRASH CHUTE
46 GANTRY LIFT ASSEMBLY
47 TEMPORARY SHOP STRUCTURE
48 TEMPORARY POWER CENTER
49 3' WIDE STEEL ACCESS STAIRS
50 CONVEX TRAFFIC MIRROR
51 STEEL PLATE ELECTRICAL CABLE PROTECTION
52 3' WIDE STEEL ACCESS BRIDGE
53 RAIN GAUGE
54 CALCIUM CHLORIDE TANK
55 STEEL CATWALK TO SPILLWAY STRUCTURE
56 STEEL PIPE TRASH RACK
57 TEMPORARY AWNING BETWEEN TRAILERS