



6/23/2020

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

Re: Castle Valley Mining, LLC, C/015/0025
Fish Creek Ventilation Breakout Portals

Dear Mr. Christensen:

Attached are C1 and C2 forms with supporting documentation for the ventilation breakout portals in Fish Creek Canyon as part of Castle Valley Mining, LLC. Chapter 3 of Castle Valley Mining, LLC Mining and Reclamation Plan (MRP) "Biology" has been reviewed by EIS Environmental and Engineering Consulting (EIS) concerning threatened and/or endangered species both animal and vegetation in the area of the breakout. It has been ascertained from this review that it is highly unlikely that any threatened and/or endangered species would live in this area because of the steepness of the sides of the canyon.

Calculation errors were found during the evaluations of the bond costs. The first error was with the amount of money needed to reseed the different areas at the mine site. The original reseeding reclamation costs included the total costs of equipment used in preparing the soil for planting, reseeding, and planting bare root seedlings. The reseeding cost was changed to reflect the cost of reseeding and planting bare root seedlings only and not the equipment costs. The second error was with the amount of money needed to reclaim the Wild Horse site. The reclaim calculation were the summation of all the costs related to pocking, mulching, seeding, and planting bare root seedlings. This amount should have been divided by two since all costs were included twice in summation but this did not occur. These corrections have reduced the total bond from \$2,930,000 to \$2,856,000 because of a reduction revegetation costs from \$342,321 to \$291,875.

If you have any questions, please call me at (435) 687-2178.

Sincerely,

Jaren Jorgensen
Engineer

P.O. Box 475 • Huntington, UT 84528
Phone (435) 687-5454 • Fax (435) 687-5037

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change New Permit Renewal Exploration Bond Release Transfer

Permittee: Castle Valley Mining, LLC

Mine: Bear Canyon Mine

Permit Number: C/015/0025

Title: Fish Creek Ventilation Breakout Portals

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

Ventilation Portals

Instructions: If you answer yes to any of the first eight (gray) questions, this application may require Public Notice publication.

- | | |
|---|--|
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: 0.048 <input checked="" type="checkbox"/> increase <input type="checkbox"/> decrease. |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 2. Is the application submitted as a result of a Division Order? DO# _____ |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 4. Does the application include operations in hydrologic basins other than as currently approved? |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 6. Does the application require or include public notice publication? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 7. Does the application require or include ownership, control, right-of-entry, or compliance information? |
| <input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> No | 9. Is the application submitted as a result of a Violation? NOV # _____ |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 10. Is the application submitted as a result of other laws or regulations or policies? |
| <i>Explain:</i> _____ | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 11. Does the application affect the surface landowner or change the post mining land use? |
| <input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> No | 13. Does the application require or include collection and reporting of any baseline information? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area? |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 15. Does the application require or include soil removal, storage or placement? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 16. Does the application require or include vegetation monitoring, removal or revegetation activities? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 17. Does the application require or include construction, modification, or removal of surface facilities? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 18. Does the application require or include water monitoring, sediment or drainage control measures? |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 19. Does the application require or include certified designs, maps or calculation? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 20. Does the application require or include subsidence control or monitoring? |
| <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | 21. Have reclamation costs for bonding been provided? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 23. Does the application affect permits issued by other agencies or permits issued to other entities? |

Please attach one (1) review copy of the application.

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.

JAREN JORGENSEN 6/16/2020
 Print Name Sign Name, Position, Date

Subscribed and sworn to before me this 10th day of June, 2020

Miranda Lofley
 Notary Public

My commission Expires: 03-26, 2022
 Attest: State of Utah } ss:
 County of Emery



For Office Use Only:

Assigned Tracking
Number:

Received by Oil, Gas & Mining

Table 1-4 Surface Disturbance Summary

DESCRIPTION	Total acres	Pre-1977 acres	New acres	Reclaimed Acres
Ball Park Topsoil Pile	1.27	-0-	1.27	
Lower Haul Road	1.6	1.6	-0-	
Sed Pond B & Scale Office Pad	2.6	1.23	1.37	
Sed Pond A	0.75	-0-	0.75	
Main Pad Area	12.32	8.89	3.43	
Portal Access Road	3.25	0.02	3.23	
Blind Canyon Seam Portal Area	0.63	0.51	0	1.18
Upper Storage Pad	0	-0-	0	0.87
Shower House Pad	2.19	-0-	2.19	
Tank Seam Access Road	0	-0-	0	2.91
Tank Seam Portal Pad	0	-0-	0	0.66
No. 3 Mine Access Road	3.26	-0-	3.26	
Conveyor belt Access/Topsoil Stockpile	1.56	-0-	0.06	
Upper Conveyor belt Access Road No. 2	0.96	-0-	0.96	
WHR Blind Canyon Seam Portal Area	1.58	-0-	1.58	
1No. 4 Mine Access Road	0.89	-0-	0.89	
2WHR Tank Seam Portal Pad Area	2.22	-0-	2.22	
Fish Creek Portals	0.048	-0-	0.048	
TOTAL	35.128	12.25	21.258	5.62

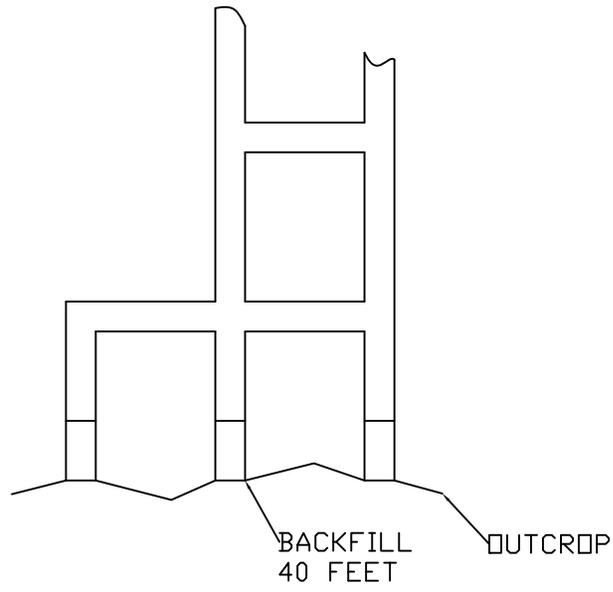
EXISTING STRUCTURES

Table 5A-1 lists each structure and construction dates.

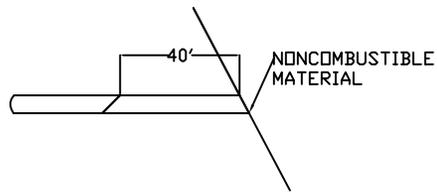
Table 5A-1 Existing Structures
Construction Dates

Existing Structure	Starting	Completion	Photo #
Sales/Receiving/Scale Office/Caretaker Dwelling	6/84	10/87	1
Fuel Tanks	10/83	6/84	2
Truck Loading Facility	9/82	4/83	3
Oil Slack Loading Facility	4/83	7/83	3
Storage & Stacking Facility	6/80	4/84	3
Conveyor Structures	3/80	6/80	3
Machine Shop	11/89	12/89	5
Shop	10/83	9/84	4
Coal Processing Facility	4/80	12/85	6
Lump Coal Facility	10/83	12/85	6
Non-Coal Storage Yard	3/80	9/84	7
WHR Tank Seam Fan	7/04/01	12/31/05	10
Powder Magazine	9/82	containerized	
Water Tanks & System	8/82	11/82	13
Lump Coal Storage Pad	8/92	10/92	15
Equipment Wash Pad	8/92	10/92	16
Shower House	5/93	7/94	17
Antifreeze Storage Tank	12/93	1/94	18
WHR Blind Canyon Seam Fan	7/4/01	12/31/05	19
Wild Horse Ridge Conveyor Belt	7/4/01	12/31/05	9
WHR Substation	7/4/01	12/31/0	12
WHR Fuel Tanks	7/4/01	12/31/05	14
WHR Coal Storage Bin	7/4/01	12/31/05	
Power Lines	7/4/01	12/31/05	
Water Lines	7/4/01	12/31/05	
Fuel Containment Enclosure	7/4/01	12/31/05	
Mine Portals	-	-	
CWS Valve Box	9/10	9/10	
Vent Breakout Portals	-	-	

Three ventilation breakout portals will be located in Fish Creek which is a V shaped canyon with steep sides. As the outcrop is reached, soils encountered will be removed from inside the mine and stockpiled. When mining is complete the breakout portals will be sealed from inside the mine. The opening from the outcrop will be filled using the soils stored in the mine. Each portal will be backfilled for a depth of 40 feet. The soils will be placed with a load-haul-dump a (LHD) unit to ensure proper backfilling. For illustration of a typical breakout portal backfill, see Figure 5-3A.



PLAN VIEW



SECTION VIEW

FIGURE 5-3A TYPICAL BREAKOUT PORTAL

- d. Wood, paper, trash. All such items will be collected during the area cleanup during and after reclamation and then taken to the Nielson Construction Landfill for disposal. Wood items are identified as extraneous building material, timbers, block, wedges, and other mining material, and do not include any material occurring living or dead vegetation.

Note: The Nielson Construction Landfill is the designated disposal site for all non-coal solid waste items to be removed from the site.

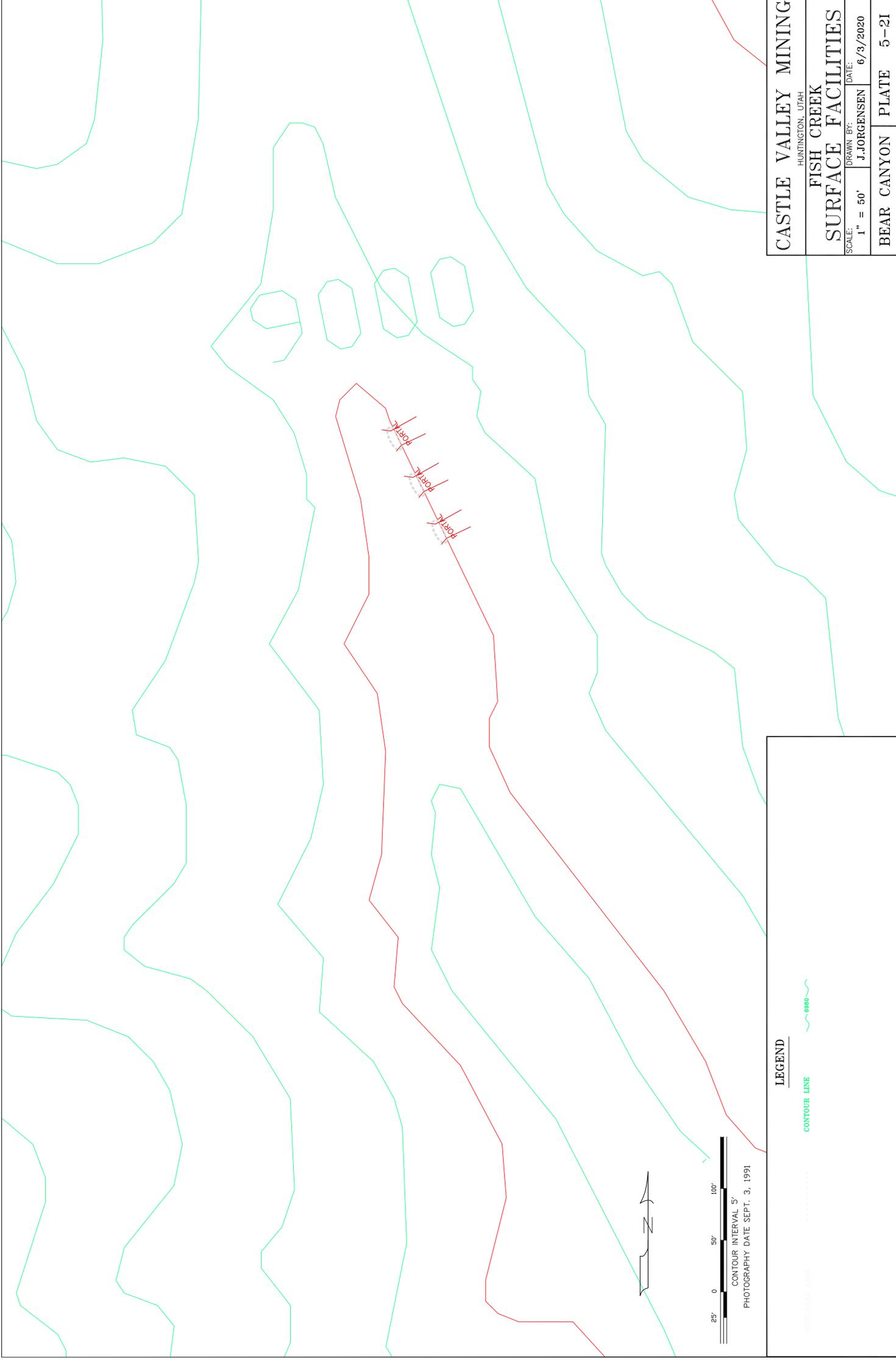
R645-301-542 Narrative, Maps, and Plans

542.100 Timetable

The following schedule of reclamation is proposed to be initiated within 90 days (weather permitting) of final abandonment of the mining operation:

	<u>Accumulated Time</u>
a. Seal Portals – 2-3 weeks	2- 3 weeks
b. Remove Structures – 34 weeks	36 -37 weeks
c. Soil Replacement and Ripping – 10 weeks	46-47 weeks
d. Channel Restoration – 25 weeks	71-72 weeks
e. Revegetation – 2 weeks	73 -74 weeks

The above reclamation tasks can, therefore, be completed withing ~~73~~ 74 weeks, weather permitting following the start of reclamation activities. Revegetation will be scheduled for completion in the fall of the final season of reclamation.



CASTLE VALLEY MINING
HUNTINGTON, UTAH
FISH CREEK
SURFACE FACILITIES

SCALE: 1" = 50'
 DRAWN BY: J. JORGENSEN
 DATE: 6/3/2020

BEAR CANYON PLATE 5-21

LEGEND

DEVELOPED AREA

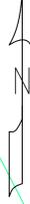
CONTOUR LINE

6880

25' 0 50' 100'

CONTOUR INTERVAL 5'

PHOTOGRAPHY DATE SEPT. 3, 1991



Bonding Calculations
Castle Valley Mining, LLC

Bond Summary

Direct Costs

Subtotal Demolition and Removal	\$902,869.00	\$ 906,720.00
Subtotal Backfilling and Grading	\$863,467.00	\$ 863,467.00
Subtotal Revegetation	\$342,321.00	\$ 291,875.00
Direct Costs	\$2,108,657.00	\$ 2,062,062.00

Indirect Costs

Mob/Demob	\$210,865.70	10.0%	\$206,206.00
Contingency	\$105,432.85	5.0%	\$103,103.00
Engineering Redesign	\$52,716.43	2.5%	\$51,552.00
Main Office Expense	\$143,388.68	6.8%	\$140,220.00
Project Maignement Fee	\$52,716.43	2.5%	\$51,552.00
Subtotal Indirect Costs	\$565,120.08	26.8%	\$552,633.00

Total Cost	\$2,673,777.08	\$2,614,695.00
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Escalation factor		0.0178
Number of years		5
Escalation	\$246,590.00	\$241,141.00

Reclamation Cost	\$2,920,367.08	\$2,855,836.00
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Bond Amount (rounded to nearest \$1,000) 2023 dollars	\$2,920,000.00	\$2,856,000.00
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R. S. Means Number	Description	Cost	Units
02 41 16.13 0100	Mixture Materials Bld., Large	0.38	C.F.
03 05 05.10 0060	Demolition, Concrete, Reinforcing	169.00	C.Y.
31 23 16 42 1300	Front end loader 3 CY	2.13	C.Y.
31 23 23.20 1020	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	6.40	C.Y.
02 41 16 17 4200	Disposal on site	10.95	C.Y.
01 54 33.20 5300	Dump Truck, 16 ton Payload	542.80	Day
Trhv	Truck Driver, Heavy	69.30	HR
02 41 13.17 5010	Pavement Removal (asphalt) 3 inch	5.75	S.Y.
02 41 16.13 0020	Steel Bld. Large	0.36	C.F.
02 41 19.27 0020	Torch Cutting Steel 1" plate	3.22	L.F.
02 41 19.27 0040	Torch Cutting Steel 1" bar	1.41	EA
01 54 33.60 2500	Truck Mounted Crane 25 ton	590.60	Day
CLAB	Common Building Laborers	60.70	
02 41 13.60 1700	Chain link fence 8'-10'	4.34	L.F.
23 05 05.10 3600	Mechanical equipment heavy	1250.00	Ton
02 41 13.23 3200	Steel Pipe 4" dia.	12.10	L.F.
31 23 16.42 0260	Excavation Bulk Bank 2 CY (322BL)	1.76	C.Y.
31 23 16.13 3080	Backfill Trench Minimal Haul 2 1/4 CY	2.45	C.Y.
02 41 13.80 0100	Utility Pole, Wood, 20'-30' High	315.00	EA
02 41 13.56 1900	Electrical Wire Removal	8.70	L.F.
01 54 33.20 0320	Cat 349F-L, 2-1/2 C.Y.	1411.00	Day
01 54 33.20 0320	Hourly Operating Cost	76.90	HR
Eq tv	Equipment Operator Shovel	84.60	HR
01 54 33.20 5310	Four axle dump, 25 ton, 18CY payload, 450HP	706.00	Day
01 54 33.20 5310	Hourly Operating Cost	50.00	HR
01 54 33.20 4810	980 M, EROPS, 7 CY payload	1780.00	Day
01 54 33.20 4810	Hourly Operating Cost	90.60	HR
Eqmd	Equipment Operator, Medium Equipmnet	81.05	HR
01 54 33.20 4360	D9R Semi U-EROPS	2291.00	Day
01 54 33.20 4360	Hourly Operating Cost	109.35	HR
01 54 33.40 7200	Pickup Truck Crew 4x4 1 Ton	126.00	Day
01 54 33.40 7200	Hourly Operating Cost	10.20	HR
01 54 33.40 6950	6,000 gal. H2O Truck Off Highway	1045.00	Day
01 54 33.40 6950	Hourly Operating Cost	70.16	HR
Skwk	Outside Foreman	83.20	HR
31 37 13.10 0200	Place riprap, 18" min. thickness mat only	103.00	S. Y.
02 41 13.15 0420	Hydrodemolition, concrete pavement 6"	8.90	S.F.
Mapel Leaf	Bear Canyon Grass	68.66	AC
Great Basin	Bear Canyon Forbs	151.90	AC
Great Basin	Bear Canyon Shrubs	159.00	AC
31 23 16.32 2830	300 HP Dozer w/ripper	0.55	C.Y.

31 25 14.16 0120	Revegetation mat, webbed	4.17 S.Y.
32 91 13.16 0200	Hay 1" Power mulcher, small	62.50 M.S.F.
32 93 43.10 0562	Bare Root Seedlings 11"to16" med. Soil	1.87 EA
32 22 19.14 0100	Tractor Spreader	28.50 MSF
32 22 19.14 0200	Hydro Spreader (equip & labor) B81 80MSF/Day	41.50 MSF
32 22 19.14 0400	Hand spread Seed (CLAB)	65.00 MSF
Sevenoaks Native	Bear Canyon Main Transplant	0.46 EA
Lancaster Drilling	Plug Wells	1.49 Ft
Jennchem	Seal Portals	14707.00 EA
City Sanitation	Current CVM Price	7.55 CY
01 54 33 20 4760	5.25 CY to 5.75 CY, 270 HP	982.20 Day
01 54 33 20 4760	Hourly Operating Cost	53.15 HR

Ref.	Description		Cost
	Scale House 01		25388
	Scalehouse Pavement 02		10854
	Shower House 03		177905
	Shop 04		33906
	Machine Shop 05		10107
	WHR Shop 06		7731
	Tipple 07		27220
	Substation 08		24370
	Coal Storage Bin 09		17224
	Lump Coal 10		10326
	Coal Recovery Bin 11		1170
	WHR Surge Bin 12		28482
	Ditch D 8D 13		1943
	Lump Coal Storage Pad 14		17886
	Equipment Wash Pad 15		3698
	Transformer Pad Shop 16		396
	Water Tanks 17		2228
	Fuel Tanks 18		3470
	Fuel Lines 19		4840
	Fans 20		11566
	Conveyor 21		122229
	Bld Tank Seam 22		0
	Septic Tanks 23		1355
	Culverts 24		15728
	Watchman Trailer 25		0
	Cap and Powder Mag 26		173
	Conveyor Tunnel 27		50733
	Plug Well 28		14304
	Seal Portals 29		44121
	Power Lines and Poles 30		91440
	Portals AMO2A No 31		0
	Culvert Removal No 32		5270
	Portals No 33		44121
	Hilfiker Retaining Wall No. 34		5740
	Sampling Station No. 35		577
	Air Jig 36		86368
	Ventilation Breakout Entries 37		3851
			906720
	Total		902869

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	
	Ventilation Breakout Entries 37																				
	Structure's Demolition Cost																				
	Structure's Vol. Demolished	Torch Cutting Steel 1" plate	02 41 19.27 0020	3.22	L.F.	77										L.F.		77	L.F.	248	
		Torch Cutting Steel 1" bar	02 41 19.27 0040	1.41	EA										288	EA		288	EA	406	
	Haul material into Mine																				
	Equipment Cost	5.25 CY to 5.75 CY, 270 HP	01 54 33 20 4760			982.20	53.15	0.1	81.05	229.55	1	229.55	\$/HR		56	Ton		26	Ton/HR	505	
	Labor Cost									60.70	4								8.8	HR	534
	Back Fill Portals																				
		5.25 CY to 5.75 CY, 270 HP	01 54 33 20 4760			982.20	53.15	0.1	81.05	229.55	1	229.55	\$/HR		480	CY		51	CY/HR	2158	
	Subtotal																			3851	
	Equipment's Disposal Cost																				
	Dismantling Cost																				
	Equipment's Vol. Demolished																				
	Loading Costs																				
	Transport Costs																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Concrete Demolition																				
	Demolition Cost																				
	Concrete's Vol. Demolished																				
	Loading Cost																				
	Transportation Cost																				
	Disposal Costs																				
	Subtotal																				
	Total																			3851	

Note:

1. Equipment cost is divided by 12 Hours to get a cost per hour.

	Equipment Cost	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Bear Canyon Mine Grading															
Riprap No. 12															
Place rep-rap 18" min.thickness mat only															
31 37 13.10 0200					103.00			\$/SY	6812			S.Y.			701636
Total															701636

AREA	TOTAL LENGTH	RECLAIMED LENGTH	& COMP	TOTAL RIPRAP (SY)	RECLAIMED RIPRAP (SY)
RC-1	320	320	100	125	125
RC-2	640	190	30	289	80
RC-3	1030	140	14	432	59
					<u>264</u>