

C/015/032 Incoming

#5174



GENWAL™
RESOURCES, INC.

P.O. Box 910, East Carbon, Utah 84520 794 North "C" Canyon Rd, 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

May 11, 2016

Attn: Daron Haddock
Permit Supervisor

RECEIVED

MAY 26 2016

Re: Genwal Resources, Inc. C/015/032
C16-003 NOV #21175 Response Task ID No. 5174

DIV. OF OIL, GAS & MINING

Dear Mr. Haddock,

On April 19, 2016, Genwal Resources Inc. was issued a citation at Crandall Canyon Mine for installing a 6' chainlink security fence around our office building to deter trespassers from entering the office/shop building, and also protect the public from potential hazards which lie within the building.

The required submittal has been approved by the Division, and attached you will find the clean copies to be stamped for approval.

If you have any questions or problems with this request, please feel free to call me directly at 435-888-4026.

Thank you

A handwritten signature in black ink, appearing to read 'Karin Madsen', is written over a horizontal line.

Karin Madsen
Engineering Tech
UtahAmerican Energy, Inc.

Application for Permit Processing Detailed Schedule of Changes to the MRP

C16-003 NOV #21175

Permit Number: ACT/015/032

Mine: Crandall Canyon Mine

Permittee: Genwal Resources, 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
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Chapter 5 page 5-43
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Plate 5-3
<input checked="" type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Bonding totals, material cost sheet and demolition sheet.
<input type="checkbox"/> ADD	<input type="checkbox"/> REPLACE	<input type="checkbox"/> REMOVE	Index page 5-vi note at bottom removed
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Suspended
5-27-16

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

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DIV. OF OIL, GAS & MINING

The roads are used to access the portal and substation areas and operations area as shown on Plate 5-3. Cut slopes of 0.25h:1v for competent bedrock, 0.5h:1v for fractured bedrock and 1h:1v for shallow surficial deposits less than four feet deep overlying bedrock are proposed for the portal access roads.

A slope stability investigation was submitted by Delta Geotechnical Consultants and is included as Appendix 5-19 with a safety factor of 0.72 for the shallow surficial deposits of the proposed 1:1 cut slopes. Since the safety factor does not comply with UMC 817.162 (c) requirements, cut slopes with 1:1 slopes will be rounded to 1.5:1 in the shallow superficial material. Appendix 5-16 is a stability analysis of the storage pad (upper pad) at the Crandall Canyon Mine prepared by EarthFax Engineering, Inc. A reclamation slope stability analysis has been prepared by JME Consultants and is included in Appendix 5-21. This analysis shows that the minimum static safety factor of 1.3 for the reclamation fill slopes will be met.

5.40 Reclamation Plan

NOTE: See Appendix 5-22(A) for the stand-alone reclamation plan for the East Mountain Emergency Drillpads and Access Roads. See Plate 1-1 for the location of these drillpads and access roads.

5.41 General

When no longer needed for mining operations, all entry ways or other openings to the surface from the underground mine will be sealed and backfilled. The permanent closures will be constructed to prevent access to the mine workings by people, livestock, and wildlife. Potential surface drainage will also be kept from entering the sealed entries.

Prior to final sealing of any openings, the BLM will require an on site inspection and a submission of formal sealing methods for approval of the BLM. The formal sealing methods will be presented as a plan including cross sections demonstrating the measures taken to seal or manage mine openings will comply with R645-301-529.100. At the time that the mine closure plan is submitted to the BLM, a copy will be forwarded to the Division for concurrence and approval and for addition to the mine plan on file. A copy will also be placed at the Emery County Recorder's office.

A formal plan will be submitted to the BLM for approval prior to final sealing of any openings. As per their on site inspection and plan approval, the openings will be sealed. All surface equipment, as well as structures, including all concrete foundations, will be removed by the applicant after the permanent cessation of operations.

MW-1 Supply Well Abandonment

Upon permanent cessation of mining operations, the water supply well, MW-1, will be permanently abandoned in accordance with regulations promulgated by the Utah Division of Water Rights. This will include filling of the well with a neat cement grout in accordance with the regulations.

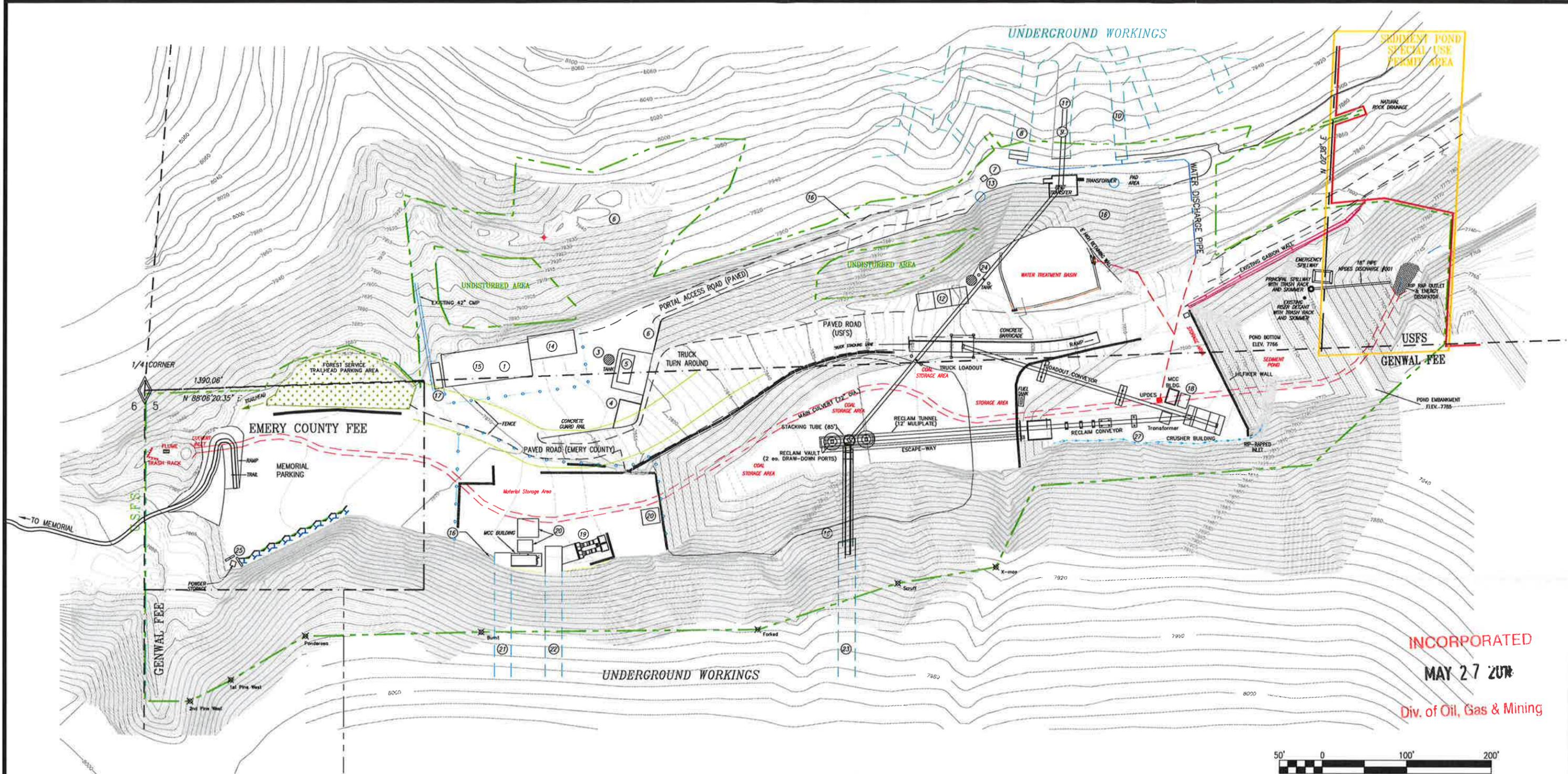
Temporary Cessation

If operations are to be temporarily suspended for 30 days or longer, the applicant will submit a notice of intention to the Division. This notice will include a description of the extent and nature of existing surface and underground disturbance prior to temporary cessation. The statement will also cover the type of reclamation which will have been accomplished to date and also include the type of ongoing monitoring, number of opening closures, water treatment activities and other topographic rehabilitative efforts which have been or will be undertaken during this period. The applicant will maintain and secure the surface facilities and mine openings.

GENWAL will implement the temporary cessation regulations as follows:

- (a) GENWAL shall effectively support and maintain all surface access openings to underground operations, and secure surface facilities in areas in which there are no current operations, but operations are to be resumed under an approved permit. Temporary abandonment shall not relieve GENWAL of its obligation to comply with any provisions of the approved permit.
- (b) Before temporary cessation of mining and reclamation operations for a period of thirty days or more, or as soon as it is down that a temporary cessation will extend beyond thirty days, GENWAL shall submit to the Division a notice of intention to cease or abandon operations. This notice shall include a statement of the exact number of surface acres and the horizontal and vertical extent of subsurface strata which have been in the permit area prior to cessation or abandonment, the extent and kind of reclamation of surface area which will have been accomplished, and identification of the backfilling, regrading, revegetation, environmental monitoring, underground opening closures, and water treatment activities that will continue during the temporary cessation.
- (c) Each mine entry which is temporarily inactive but has a further projected useful service under the approved permit application, shall be protected by barricades or other covering devices, fenced and posted with signs to prevent access into the entry and to identify the hazardous nature of the opening. These devices shall be periodically inspected and maintained in good operating condition by GENWAL.
- (d) Each exploration hole, other drill hole, bore hole, shaft, well or other exposed underground opening which has been identified in the approved permit application for use to return underground workings, or to be used to monitor ground water conditions, shall be temporarily sealed until required for actual use.
- (e) As a security measure, a 6' chainlink fence (located on plate 5-3) with barbed wire along the top will be installed around the perimeter of the main office building to deter trespassing by unauthorized persons, at any time during cessation it is deemed necessary to protect the property. Iron gates will also be installed to protect all doors on the main building and treatment plant building to keep unauthorized persons from entering the buildings.

G:\Current Drawings\MRP Maps\Crandall Canyon\2015 Mid-Term Review\Task 5067 3-21-16\Plate 5-3 REV 19.dwg, 11x17 Surface Facilities, 4/29/2016 10:44:41 AM, 1:1



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MAY 27 2016
 Div. of Oil, Gas & Mining



LEGEND:

SEDIMENT POND (SPECIAL USE PERMIT AREA)	
EXTENT OF DISTURBANCE	
10' CONTOUR	
JERSEY BARRIERS	
RE-ESTABLISHED USFS ROAD (DOUBLE-LANE)	
SAFETY BARRIERS	
FENCING	

- FACILITY LEGEND:**
- | | |
|-------------------------------|---------------------------------------|
| 1. Shop | 14. New Warehouse and Office Building |
| 2. Ventilation Fan | 15. 4500 Gallon Cullinary Water Tank |
| 3. Rockdust Silo | 16. Shotcrete |
| 4. Concrete Dumpster Pad | 17. Parts Shed |
| 5. Power Center | 18. Portable Shed |
| 6. Power Pole | 19. Ventilation Fan |
| 7. Offices & Bathroom (u'grd) | 20. Material Storage Sheds |
| 8. Intake Portal | 21. Intake Portal |
| 9. Belt Portal | 22. Return Portal |
| 10. Fan Portal | 23. Belt Portal |
| 11. Mine Belt | 24. Mag Tank |
| 12. Iron Treatment Shed | 25. Powder Storage |
| 13. Visual Disconnect | 26. Cap Storage |
| | 27. Concrete Ditch |



GENVAL™
 RESOURCES, INC.
 P.O. Box 1077, 794 North "C" Canyon Rd, Price Utah
 Telephone: (435) 888-4000

CRANDALL CANYON MINE SURFACE FACILITIES

REV: 19	ACAD: 5-3 REV19
DATE: 04-29-16	BY: PJW
SCALE: AS SHOWN	PLATE #: 5-3

T. 16 S., R. 7 E., SLBM

CHAPTER 5

LIST OF PLATES (continued)

<u>PLATE NUMBER</u>	<u>DESCRIPTION</u>
5-17A	Reclamation Cross Sections
5-18	Underground Bath House (As Built)
5-19	Hilfiker Welded Wire Wall Details (3 Sheets)
5-20	Original Surface Contour Map
5-17B	Reclamation Cross Sections
5-18	Underground Bathhouse, As Built
5-19	Typical Road Sections, 3 sheets
5-20	Original Surface Contour Map

Crandall Canyon Mine
C/015/032

Bond Amount

Direct Costs

Subtotal Demolition and Removal	\$755,541
Subtotal Backfilling and Grading	\$446,357
Subtotal Revegetation	\$134,427
Subtotal Direct Costs	<u>\$1,336,324</u>

Indirect Costs

Mob/Demob	\$133,632	10.0%
Contingency	\$66,816	5.0%
Engineering Redesign	\$33,408	2.5%
Main Office Expense	\$90,870	6.8%
Project Management Fee	\$33,408	2.5%
Subtotal Indirect Costs	<u>\$358,135</u>	26.8%

Subtotal \$1,694,459

Total \$1,694,459

Escalation Factor	0.012
Number of years	5
Escalation	\$101,668

Total \$1,796,127

Reclamation Cost 2020 \$1,796,127

Bond Amount (rounded to nearest \$1,00) \$1,796,000

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MAY 27 2008

Div. of Oil, Gas & Mining

Crandall Canyon Mine
C/015/032

Bond Amount

Cost factors

Means Number	Material	Unit Cost	Units
Concret Demo1	Concrete Demolition	11.72	CY
31 23 16.42 1300	Front End Loader 3 CY	1.67	CY
31 23 23.20 1025	12 CY (16 ton) Dump Truck 5 mi. rod.trip	10.54	CY
City Sanitation Price	City Sanitation	3.25	CY
02 41 16.13 0020	Steel bld. Large	0.28	CF
02 41 13.80 0100	Utility Pole	203.52	EA
02 41 13.30 0800	Guard Rail	12.30	LF
02 41 13.30 0860	Guard Post	12.78	EA
02 41 13.60 1700	Chain link, posts & fabric remove only	3.05	LF
23 05 05.10 3600	Mechanical equipment heavy	780.00	Ton
31 23 16.42 0260	Backhoe, hydraulic Bulk Bank Measure	1.43	CY
02 65 10.30 1029	9000 gal to 12000 gal tank	1050.00	EA
02 65 10.30 0130	9000 gal to 12000 gal tank	1320.00	EA
Nielson Con	Nielson Construction	7.64	Ton
31 23 23.20 1025	12 CY (16 ton) Dump Truck 1/2 mi. rod.trip	10.54	CY
02 41 16.17 4200	On Site Disposal	9.04	CY
02 41 13.56 1900	Wire Removal	5.46	LF
26 05 05.10 1900	Wire Removal	19.60	LF
26 05 05.10 0160	Conduit	5.45	LF
22 05 05.10 1140	Fixtures	94.00	EA
02 41 16.13 0080	Masonry bld. Large	0.30	CF
JennChem	Seal Portals	4320.00	EA
02 41 16.13 0100	Mixture of types, average	0.30	CF
	Plug Well	170.00	CY
02 41 16.13 0050	Concrete bld. Large	0.40	CF
31 23 16.42 0260	Backhoe, hydraulic Bulk Bank Measure	1.43	CY
02 41 13.17 5010	Pavement Removal, Bituminous 3"	4.67	SY
31 25 14.16 1000	Silt Fence	1.61	LF
31 37 13.10 0370	Riprap Dumped 300 lb. average	29.99	Ton
32 92 43.10 0560	Bare root seedinings 11" to 16" med. Soil	1.14	EA
32 92 19.14 0200	Hydro Spreader (equip. & labor)	41.39	MSF
Crandall 15321	Seed Non Riparian Area	342.84	\$/Ac
32 92 19.14 0200	Hydro Spreader (equip. & labor)	41.39	MSF
32 91 13.16 0250	Hay 1" Material Only	61.27	MSF
Crandall 15322	Transplant Non Riparian	165.00	\$/Ac
Crandall 15323	Transplant North Slope	1895.00	\$/Ac
Crandall 15324	Seed Riparian Area	246.34	\$/Ac
Crandall 15325	Transplant Riparian	639.00	\$/Ac
01 54 33.20 4360	D9R Semi-U EROPS (9-52) (2H2077)	132.60	
01 54 33 4360	Hourly Cost		
01 54 33.20 4870	988G II ((6-13) 1H2008) 2005	165.55	
01 54 33 4870	Hourly Cost		
01 54 33.20 5600	769D (21-11) (2nd2007)	82.50	
01 54 33 5600	Hourly Cost		

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MAY 27 2016

Div. of Oil, Gas & Mining

Crandall Canyon Mine
C/015/032

Bond Amount

2

01 54 33.20 0320	CAT 385B	102.55
01 54 33 0320	Hourly Cost	
01 54 33.20 5300	Dump Truck	61.00
01 54 33 5300	Hourly Cost	
04 54 33.20 0470	446D Backhoe Loaders	40.95
01 54 33 0470	Hourly Cost	
01 54 33.40 6950	6,000 Gal H2O Truck Diesel (2nd2008)	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	
	Foreman Average Outside	39.60
	Labor	37.60
	Truck Driver (Heavy)	40.05
	Heavy Equip. Operator (Med)	50.60
01 54 33.20 4310	D7R Semi-U EROPS	100.65
01 54 33 4310	Hourly Cost	
01 54 33 20 0300	Cat 350	173.40
01 54 33.20 0300	Hourly Cost	
01 54 33.20 0470	Cat 420	40.95
01 54 33 0470	Hourly Cost	
02 41 13.23 2930	Demolition 18" CMP	17.45 LF
31 23 16.13 0050	Excavate 3/8 CY excavator	7.13 CY
01 54 33 4710	Front end loader, 4WD, 3.5CY., 145 HP	33.25
	Environmental Fee (Per Load)	15.00 Load
JennChem	Labor	265.00 Hr
02 41 13.60 1700	Chainlink 6' tall	3.05 LF
02 41 13.62 1000	Fence posts in concrete	16.95 EA
02 41 13.62 1200	Barbed wire	0.27 LF
02 41 13.62 0100	Chainlink gate 10-12' wide	85.00 EA
02 41 13.66 0600	Metal gate 4'-6' high 3'-4' wide	67.70 EA
02 41 13.62 0300	Metal gate 8'x15'	135.50 EA

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Div. of Oil, Gas & Mining

Crandall Canyon Mine
C/015/032

Bond Amount

Demolition and Removal	
Shop 01	35334
Ventilation Fan 02	11128
Rock Dust Silo 03	1820
Concrete Dump Pad 04	7486
Power Center 05	21053
Power Poles 06	5858
Underground Bathhouse 07	8519
Portals 08	30059
Belt Portals 09	5003
Crusher Pad 10	4370
Mine Belt 11	1950
Silo 13	45269
Weight Shed 14	538
Bulk Oil 15	10281
Truck Pad 17	1093
General Storage 18	15550
Reclaim Hopper Belt 19	3900
Visual Disconnect 20	17
New Shop 21	13802
Shop Extension 22	4150
Shotcrete Slopes 23	1771
Fan Transformer 24	242
Chain Link Fence 25	366
Concrete Guard 26	2441
Retaining Wall 27	4634
Culverts 28	6756
Guard Rail 29	1604
Inlets 30	1322
Sed Pond Culvert 31	47
Gabion Retaining Wall 32	2914
Water Wells 33	0
Headwalls 34	5482
Overland Conveyor Supports 35	997
Reclaim Tunnel 36	2973
Feeder Boxes 37	3826
Reclaim Conveyor Supports 38	106
Crusher Platform Supports 39	1492
Feeder Conveyor Supports 40	106
Scale Pad 41	6878
New Scale House 42	2045
Proposed Bathhouse 43	0
Coal Silo 44	2827
Conveyor 45	8044
Parking Lot 46	64150
Rubber Liner 47	25350
Culvert Bedding Removal 48	143096
Off Site Dump Fee 49	159952
Drainage Control 50	67809
Water Treatment Area 51	7072
Burma Basin 52	468

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MAY 27 2018

Div. of Oil, Gas & Mining

Crandall Canyon Mine
C/015/032

Bond Amount

Security Fence 53

3591
755541

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MAY 27 2016

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