

#5930



14 May 2019

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

RE: Clean Copy Submittal, Castle Valley Mining, LLC, C/015/0025

Dear Sir:

This submittal is to replace the redline/strikeout pages in Chapter 8, Bond Costs and maps showing the addition of the air jig system for cleaning raw coal at Castle Valley Mine, LLC, Bear Canyon Mine. The drawings have been changed to include the cross-sections. The bond was changed showing an escalation factor of 2.32% for a 4-year period. Using the new factors, the bond is \$3,064,000.

Required Exhibit D to revise the Reclamation Agreement of the posted bond will be coming in the mail in the following days.

Your prompt attention in this matter would be greatly appreciated.

Sincerely,

Jaren Jorgensen
Engineer

A handwritten signature in red ink that reads "JAREN JORGENSEN". The signature is written in a cursive style with large, sweeping letters.

RECEIVED

MAY 28 2019

DIV OF OIL, GAS & MINING

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 Creek Mine

Permit Number: ACT 015/0025

Title: Air Jig Addition

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

The addition of an air jig system at the mine site for cleaning raw coal.

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

- | | |
|---|---|
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ <input 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 type="checkbox"/> Yes <input checked="" 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 checked="" 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 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? |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 24. Does the application include confidential information and is it clearly marked and separated in the plan? |

Please attach three (3) review copies of the application. If the mine is on or adjacent to Forest Service land please submit four (4) copies, thank you. (These numbers include a copy for the Price Field Office)

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 ENGINEER 05/24/2019 JAREN JORGENSEN
 Print Name Position Date Signature (Right-click above choose certify then have notary sign below)

Subscribed and sworn to before me this 24th day of May, 2019

Notary Public: Stacey Leigh Conover, state of Utah.

My commission Expires: November 13, 2022 }
 Commission Number: 703300 } ss:

Address: 110 E main }
 City: Castle Dale State: UT Zip: 84513 }



For Office Use Only:	Assigned Tracking Number:	Received by Oil, Gas & Mining RECEIVED MAY 28 2019 DIV OF OIL, GAS & MINING
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Bonding Calculations
Castle Valley Mining, LLC

Bond Summary

Direct Costs

Subtotal Demolition and Removal	\$902,869.00
Subtotal Backfilling and Grading	\$863,467.00
Subtotal Revegetation	\$438,173.00
Direct Costs	<u>\$2,204,509.00</u>

Indirect Costs

Mob/Demob	\$220,450.90	10.0%
Contingency	\$110,225.45	5.0%
Engineering Redesign	\$55,112.73	2.5%
Main Office Expense	\$149,906.61	6.8%
Project Maignement Fee	\$55,112.73	2.5%
Subtotal Indirect Costs	<u>\$590,808.41</u>	26.8%

Total Cost \$2,795,317.41

Escalation factor 0.0232
Number of years 4
Escalation \$268,573.00

Reclamation Cost \$3,063,890.41

Bond Amount (rounded to nearest \$1,000) \$3,064,000.00
2023 dollars

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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
02 41 13.20 0850	Precast concrete 3'-6" high x 2' wide	7.75 L.F.

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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 AM02A 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
	Total		902869

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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
	Air Jig #1																			
	Structure's Demolition Cost	Steel Bid, Large	02 41 16.13 0020	0.36	C.F.	62.67	47.67	38.5								FT		115385	C.F.	41539
	Structure's Vol. Demolished																			
	Rubble's Weight (exclude steel)																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Non Steel Truck																			
	Transportation Cost Non Steel Drive																			
	Disposal Cost Non Steel																			
	Steel's Weight																			
	Truck's Capacity																			
	Haulage																			
	Transportation Cost Steel Truck																			
	Transportation Cost Steel Truck Drive																			
	Disposal Cost Steel																			
	Subtotal																			41539
	Conveyors																			
	Feed Conveyor	Steel Bid, Large	02 41 16.13 0020	0.36	C.F.	365	6	4								FT		8760	C.F.	3154
	High Ash	Steel Bid, Large	02 41 16.13 0020	0.36	C.F.	85	5	4								FT		2040	C.F.	734
	Clean Coal	Steel Bid, Large	02 41 16.13 0020	0.36	C.F.	250	6	4								FT		8000	C.F.	2160
	Subtotal																			6048
	Air Jig and Conveyor Foundations																			
	Concrete Demolition																			
	Demolition Cost Air Jig	Demolition, Concrete, Reinforcing	03 05 05.10 0060	169.00	/CY	32.84	48.23	1								FT		148	CY	25012
	Demolition Cost Clean Coal	Demolition, Concrete, Reinforcing	03 05 05.10 0060	169.00	/CY	8	5	2								3 FT		9	CY	1521
	Demolition Cost Feed	Demolition, Concrete, Reinforcing	03 05 05.10 0060	169.00	/CY	8	5	2								4 FT		12	CY	2028
	Demolition Cost High Ash	Demolition, Concrete, Reinforcing	03 05 05.10 0060	169.00	/CY	8	5	2								3 FT		9	CY	1521
	Concrete's Vol. Demolished																	1.3		178
	Loading Cost	Front end loader 3 CY	31 23 16 42 1300	2.13	/CY															492
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 1020	6.40	/CY															1478
	Disposal Costs	Disposal on site	02 41 16 17 4200	10.95	/CF															2529
	Subtotal																			34581
	Power Station																			
	Dismantley Cost	Mechanical equipment heavy	23 05 05.10 3600	1250.00	Ton	40	9	9								TON		2	TON	2500
	Demolition Cost	Demolition, Concrete, Reinforcing	03 05 05.10 0060	169.00	/CY	40	9	0.5								FT		7	CY	1183
	Loading Cost	Front end loader 3 CY	31 23 16 42 1300	2.13	/CY													1.3		9
	Transportation Cost	12 CY (16 Ton) Dump Truck 1/2 mi. rnd. trip	31 23 23.20 1020	6.40	/CY															19
	Disposal Costs	Disposal on site	02 41 16 17 4200	10.95	/CF															58
	Subtotal																			99
	Concrete Barriers																			
	Concrete Demolition																			
	Demolition Cost	Precast concrete 3'-6" high x 2' wide	02 41 13.20 0850	7.75	L.F.	44										FT		44	FT	341
	Concrete's Vol. Demolished																			
	Loading Cost																			
	Transportation Cost																			
	Disposal Costs																			
	Subtotal																			341
	Total																			86368

Div. of Oil, Gas & Mining

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CASTLE VALLEY MINING, LLC
HUNTINGTON, UTAH

RECLAMATION AREA

SCALE: 1" = 50'
DRAWN BY: J.JORGENSEN
DATE: 5/2/19
BEAR CANYON PLATE 2-3C

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REV.	DATE	REMARKS	APPR.
1	10/22/93	Tank Seam Road, TS-10 Added (93B)	7/22/94
2	8/01/94	Lamphouses Removed/Portal Pad Recontoured	8/17/94
3	5/30/95	Tipple Structure Expansion/Rock Crusher Conveyor (95C)	9/12/95
4	9/13/95	Ditch D-10D Route Modification (95K)	9/18/95
5	12/02/95	Dist. Boundary Modified/Coal Recovery Bin Removed (95N)	12/18/95
6	2/23/96	Plate Updated With Tank Seam As-Builts	7/05/96
7	5/31/98	Wild Horse Ridge Disturbance Added	6/25/01
8	10/13/01	Added TS-4, TS-5 boundary and cross-sections, moved road (01A) Corrected Disturbed Boundary and Reclamation Boundary	11/13/01
9	8/01/02	Changed name from 8-5C to 2-3C	12/8/05
10	1/16/07	Loadout Expansion	8/07/07
11	9/09/13	Reclaimed Area	11/25/13
12	2/04/16	Change Disturbed Boundary	12/16/15
13	5/2/19	ADDED AIR JIG PLANT	
14			

LEGEND

Cross-Sections (Appendix 5-1)

DISTURBED AREA

AREA NOT REQUIRING RECONTOURING OR TOPSOIL WITHIN THE DISTURBED AREA

NOTE: WHERE DISTURBED AND RECLAMATION BOUNDARIES COINCIDE, ONLY THE RECLAMATION BOUNDARY IS SHOWN.

CONTOUR LINE

TOPSOIL SAMPLE LOCATIONS

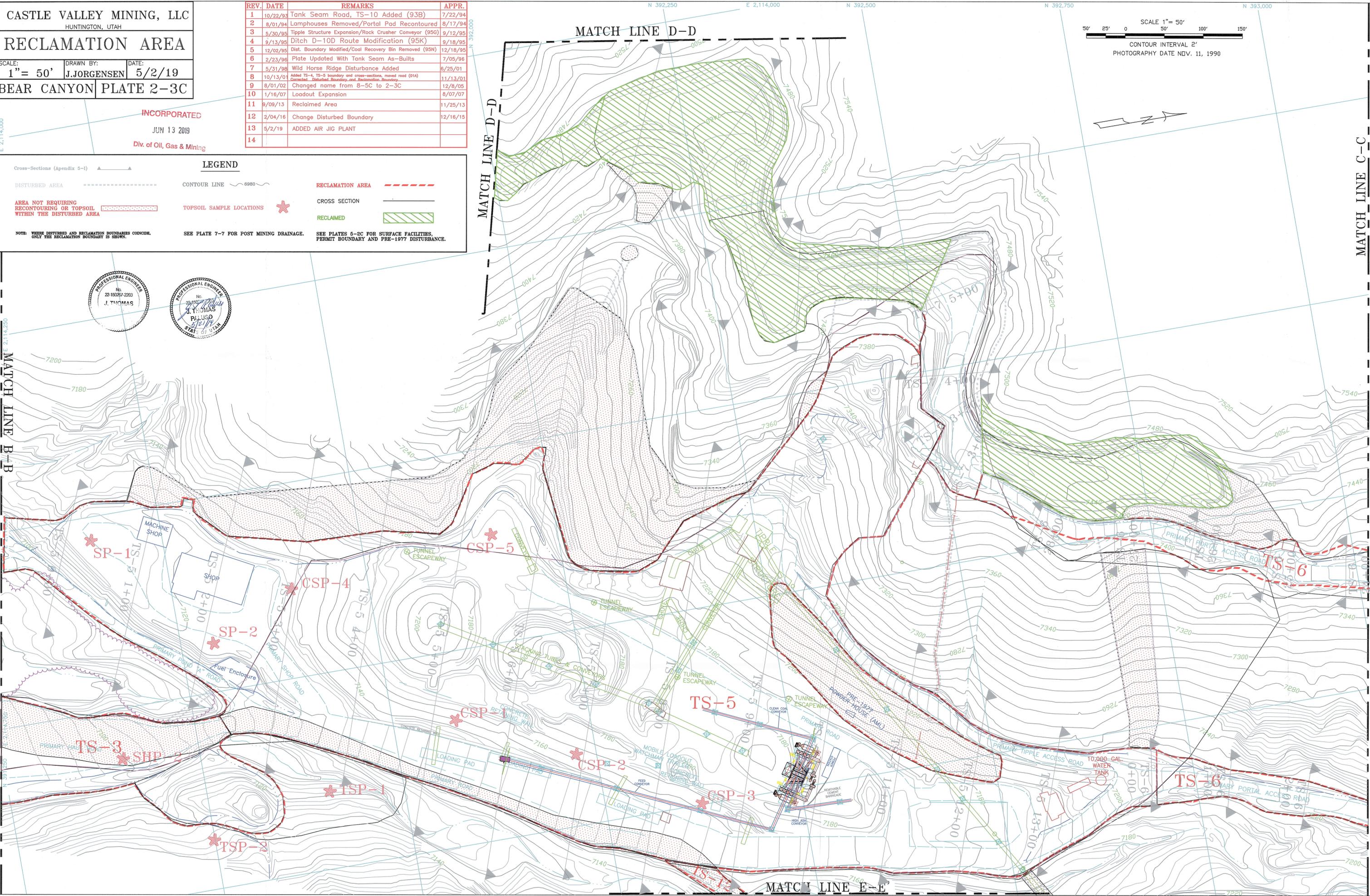
SEE PLATE 7-7 FOR POST MINING DRAINAGE.

RECLAMATION AREA

CROSS SECTION

RECLAIMED

SEE PLATES 5-2C FOR SURFACE FACILITIES, PERMIT BOUNDARY AND PRE-1977 DISTURBANCE.



SCALE 1" = 50'
CONTOUR INTERVAL 2'
PHOTOGRAPHY DATE NOV. 11, 1990

MATCH LINE B-B

MATCH LINE D-D

MATCH LINE D-D

MATCH LINE E-E

MATCH LINE C-C

CASTLE VALLEY MINING, LLC
HUNTINGTON, UTAH

SURFACE FACILITIES

SCALE: 1" = 50'
DRAWN BY: J.JORGENSEN
DATE: 5/2/19

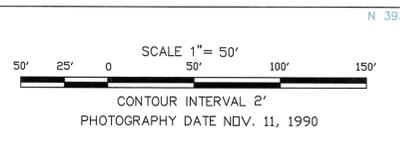
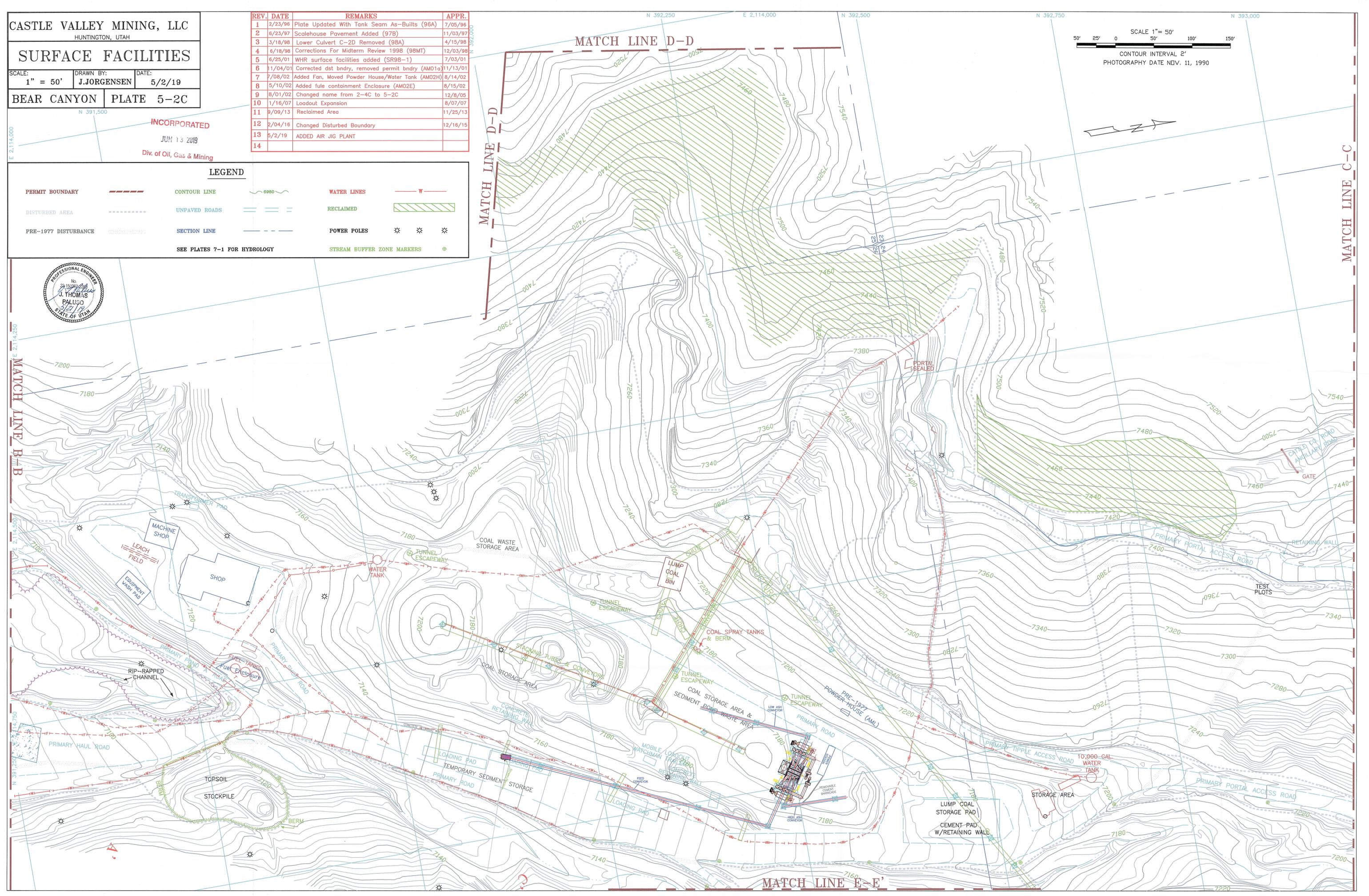
BEAR CANYON PLATE 5-2C

REV.	DATE	REMARKS	APPR.
1	2/23/96	Plate Updated With Tank Seam As-Builts (96A)	7/05/96
2	6/23/97	Scalehouse Pavement Added (97B)	11/03/97
3	3/18/98	Lower Culvert C-2D Removed (98A)	4/15/98
4	6/18/98	Corrections For Midterm Review 1998 (98MT)	12/03/98
5	6/25/01	WHR surface facilities added (SR98-1)	7/03/01
6	11/04/01	Corrected dst bndry, removed permit bndry (AM01a)	11/13/01
7	7/08/02	Added Fan, Moved Powder House/Water Tank (AM02H)	8/14/02
8	5/10/02	Added fule containment Enclosure (AM02E)	8/15/02
9	8/01/02	Changed name from 2-4C to 5-2C	12/8/05
10	1/16/07	Loadout Expansion	8/07/07
11	9/09/13	Reclaimed Area	11/25/13
12	2/04/16	Changed Disturbed Boundary	12/16/15
13	5/2/19	ADDED AIR JIG PLANT	
14			

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LEGEND

PERMIT BOUNDARY	--- ---	CONTOUR LINE	~ ~ ~ ~	WATER LINES	— — — —
DISTURBED AREA	UNPAVED ROADS	== ==	RECLAIMED	▨ ▨ ▨
PRE-1977 DISTURBANCE	SECTION LINE	— — — —	POWER POLES	* * *
		SEE PLATES 7-1 FOR HYDROLOGY		STREAM BUFFER ZONE MARKERS	⊙



MATCH LINE B-B

MATCH LINE D-D

MATCH LINE C-C

MATCH LINE E-E

CASTLE VALLEY MINING, LLC
HUNTINGTON, UTAH

POST-MINING TOPOGRAPHY

SCALE: 1" = 50'
DRAWN BY: J. JORGENSEN
DATE: 3/28/2019
PLATE 5-6C

REV.	DATE	REMARKS	APPR.
1	4/30/92	DIST. BOUND. MOD. (DO-92C, NOV 91-35-8-1)	7/22/92
2	7/29/92	LOADOUT TUNNEL ADDED	7/06/92
3	7/12/93	Discharge Line Dist. Area/Pre-Low Structure Added (93E)	9/16/93
4	10/22/93	Tank Seam Access Road Dist. Area Added (93B)	7/22/94
5	12/02/95	Fuel Line Disturbed Boundary Added (95N)	12/18/95
6	2/23/96	Plate Updated With Tank Seam As-Builts	7/05/96
7	6/25/01	Post-Mining Access Road Added (SR98-1)	7/03/01
8	10/13/01	Added X-Sections, Cuts to Remoth. Corrected contours and dat brdy (91A) Removed Permit Boundary	11/13/01
9	8/01/02	Changed name from 3-2C to 5-6C	12/8/05
10	9/09/13	Reclaimed Area	11/25/13
11	2/04/16	Reclaimed Disturbed Boundary	12/16/15
12	3/28/19	ADDED AIR JIG PLANT	
13			

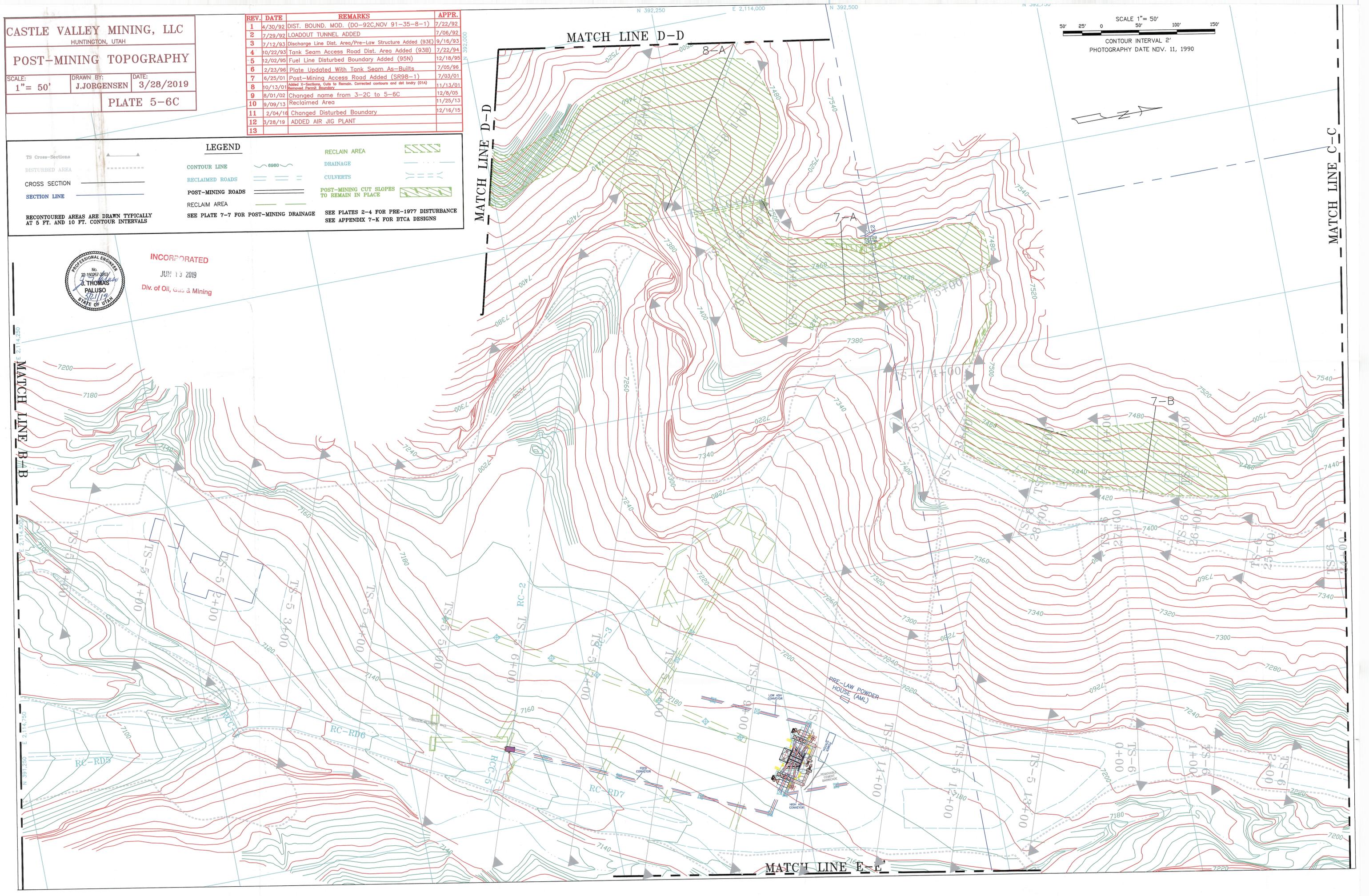
LEGEND

TS Cross-Sections	▲	RECLAIM AREA	▨
DISTURBED AREA	-----	DRAINAGE	—▲—
CROSS SECTION	———	CULVERTS	—X—
SECTION LINE	———	POST-MINING CUT SLOPES TO REMAIN IN PLACE	▨
		RECLAIM AREA	▨
		SEE PLATES 2-4 FOR PRE-1977 DISTURBANCE	
		SEE PLATE 7-7 FOR POST-MINING DRAINAGE	
		SEE APPENDIX 7-K FOR BTCA DESIGNS	

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PROFESSIONAL ENGINEER
No. 22-150267-2003
J. THOMAS
PALUSO
STATE OF UTAH

SCALE 1" = 50'
50' 25' 0 50' 100' 150'
CONTOUR INTERVAL 2'
PHOTOGRAPHY DATE NOV. 11, 1990



HYDROLOGY MAP

SCALE: 1" = 50'
DRAWN BY: J.JORGENSEN
DATE: 5/2/19

BEAR CANYON PLATE 7-1C

1	1/05/95	B.T.C.A. Area "E" Silt Fence Relocated (95A)	11/26/94
2	5/30/95	Tipple Structure Expansion/Rock Crusher Conveyor (95G)	9/12/95
3	9/13/95	Ditch D-10D Route Modification (95K)	9/18/95
4	12/02/95	Fuel Line Added/Coal Recovery Bin Removed (95N)	12/18/95
5	2/23/96	Plate Updated With Tank Seam As-Built (96A)	7/05/96
6	3/18/98	Lower Culvert C-2D Removed (98A)	4/15/98
7	12/30/99	1 Silt Fence / BTCA H Hatch Removed (AM00A)	2/10/00
8	6/25/01	Wild Horse Ridge Hydrology Added (SR98-1)	7/03/01
9	11/04/01	Corrected dst bndry, Removed Prmt bndry (AM01a)	11/13/01
10	6/01/02	Digitized Map	12/08/08
11	9/09/13	Reclaimed Area	11/25/13
12	2/04/16	Changed Disturbed Boundary	12/16/19
13	5/2/19	ADDED AIR JIG	



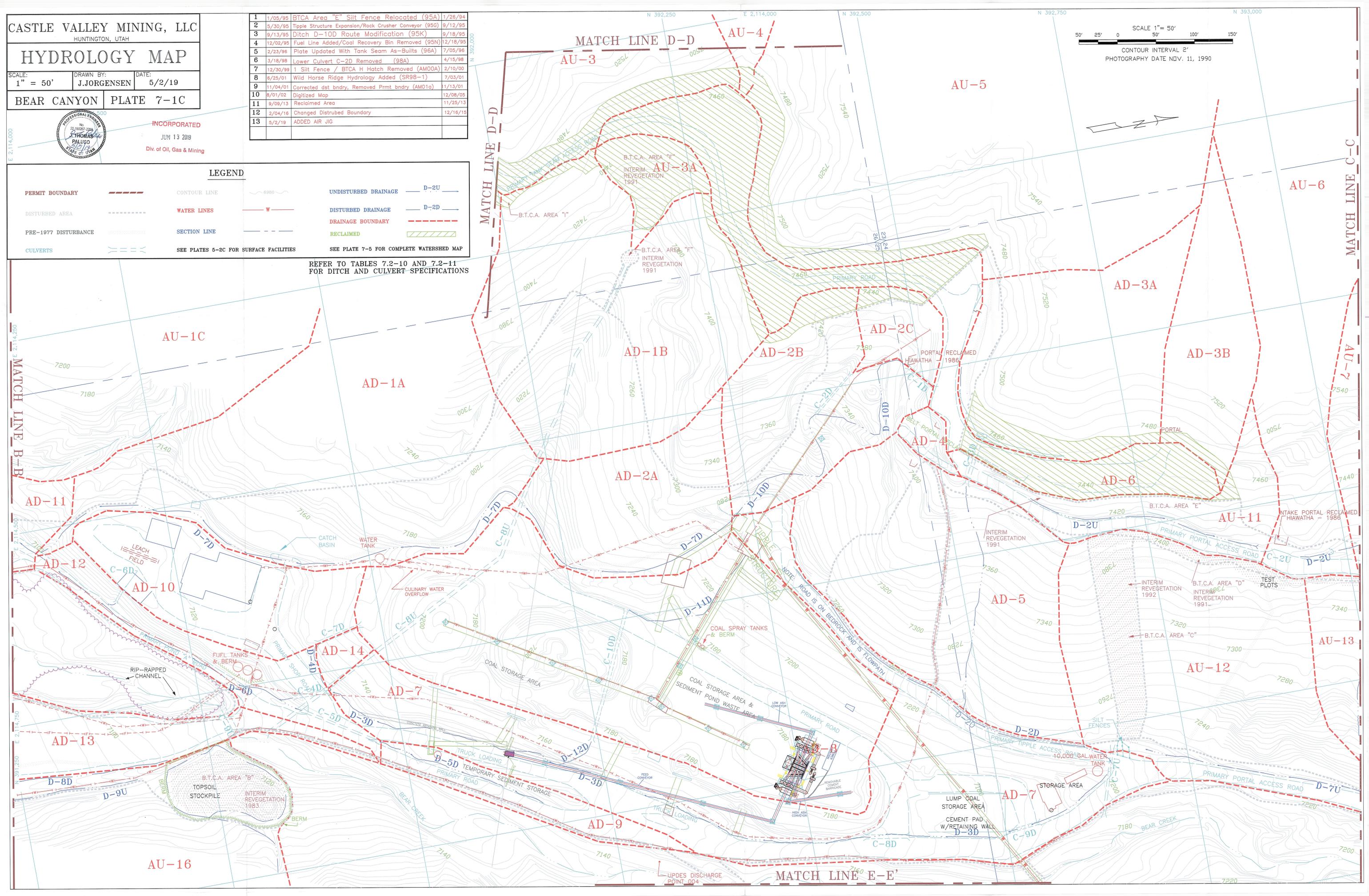
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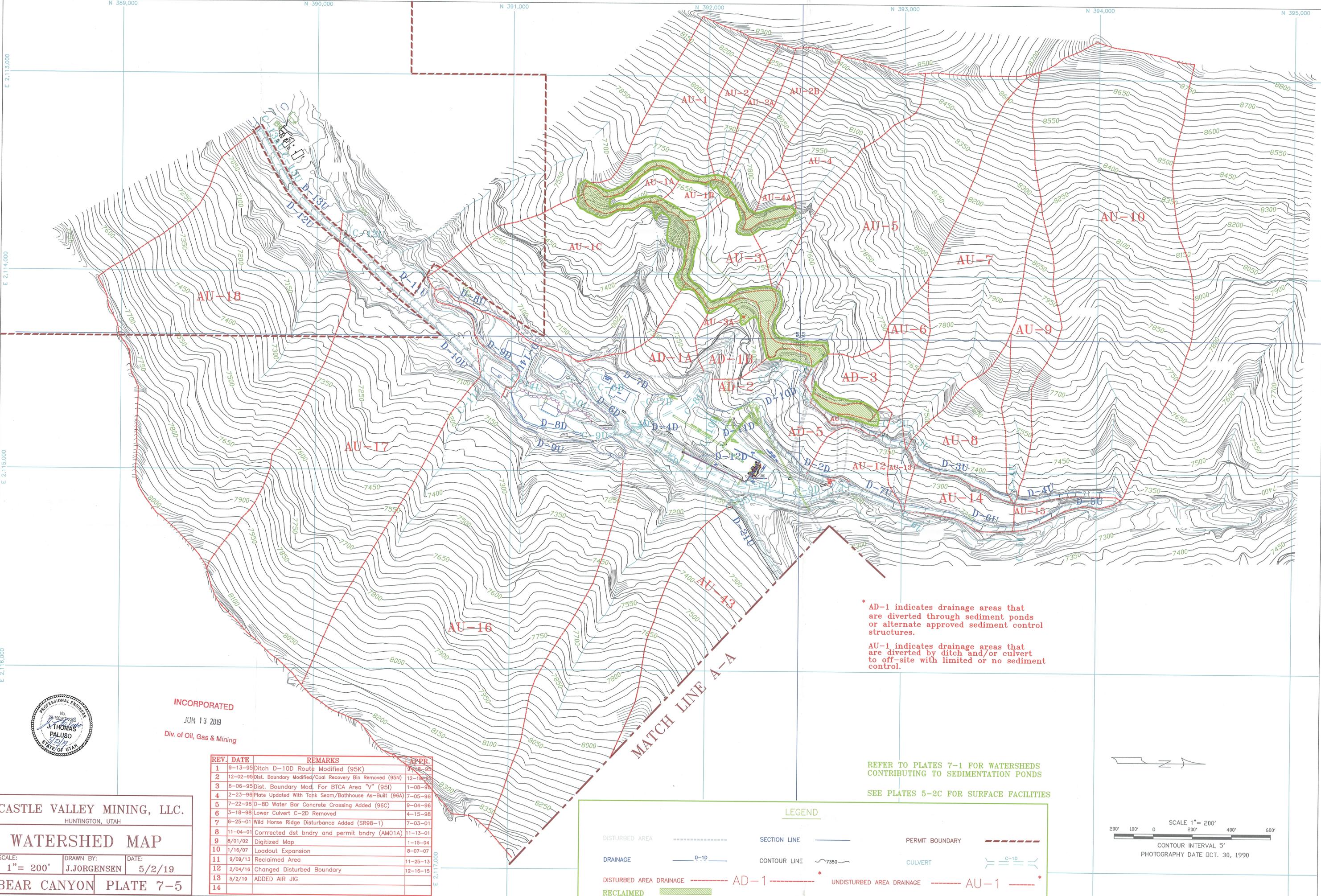
SCALE 1" = 50'
CONTOUR INTERVAL 2'
PHOTOGRAPHY DATE NOV. 11, 1990

LEGEND

PERMIT BOUNDARY	CONTOUR LINE	UNDISTURBED DRAINAGE
DISTURBED AREA	WATER LINES	DISTURBED DRAINAGE
PRE-1977 DISTURBANCE	SECTION LINE	DRAINAGE BOUNDARY
CULVERTS	SEE PLATES 5-2C FOR SURFACE FACILITIES	RECLAIMED
		SEE PLATE 7-5 FOR COMPLETE WATERSHED MAP

REFER TO TABLES 7.2-10 AND 7.2-11 FOR DITCH AND CULVERT-SPECIFICATIONS





* AD-1 indicates drainage areas that are diverted through sediment ponds or alternate approved sediment control structures.

AU-1 indicates drainage areas that are diverted by ditch and/or culvert to off-site with limited or no sediment control.

REFER TO PLATES 7-1 FOR WATERSHEDS CONTRIBUTING TO SEDIMENTATION PONDS

SEE PLATES 5-2C FOR SURFACE FACILITIES

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Div. of Oil, Gas & Mining



REV.	DATE	REMARKS	APPR.
1	9-13-95	Ditch D-10D Route Modified (95K)	9-13-95
2	12-02-95	Dist. Boundary Modified/Coal Recovery Bin Removed (95N)	12-18-95
3	6-06-95	Dist. Boundary Mod. For BTCA Area "V" (95I)	1-08-96
4	2-23-96	Plate Updated With Tank Seam/Bathhouse As-Built (96A)	7-05-96
5	7-22-96	D-8D Water Bar Concrete Crossing Added (96C)	9-04-96
6	3-18-98	Lower Culvert C-2D Removed	4-15-98
7	6-25-01	Wild Horse Ridge Disturbance Added (SR98-1)	7-03-01
8	11-04-01	Corrected dst bndry and permit bndry (AM01A)	11-13-01
9	8/01/02	Digitized Map	1-15-04
10	1/16/07	Loadout Expansion	8-07-07
11	9/08/13	Reclaimed Area	11-25-13
12	2/04/16	Changed Disturbed Boundary	12-16-15
13	5/2/19	ADDED AIR JIG	
14			

LEGEND

DISTURBED AREA: - - - - -

DRAINAGE: — 0-1D —

DISTURBED AREA DRAINAGE: - - - - - AD-1 - - - - - *

RECLAIMED: [Green Hatched Box]

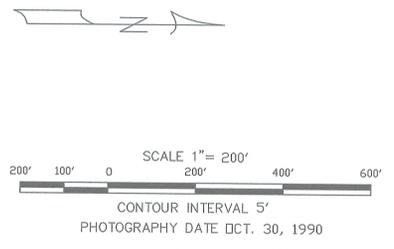
SECTION LINE: ————

CONTOUR LINE: ~ 7350 ~

UNDISTURBED AREA DRAINAGE: - - - - - AU-1 - - - - - *

PERMIT BOUNDARY: - - - - -

CULVERT: [C-1D Symbol]



CASTLE VALLEY MINING, LLC.
HUNTINGTON, UTAH

WATERSHED MAP

SCALE: 1" = 200'
DRAWN BY: J.JORGENSEN
DATE: 5/2/19

BEAR CANYON PLATE 7-5