

From: "Mark" <cwmining@etv.net>
To: <PAMGRUBAUGHLITTIG@utah.gov>
Date: 4/23/03 11:29AM
Subject: Abandoned Equipment

CO-OP MINING COMPANY

P.O. Box 1245
Huntington, Utah 84528
Office (435) 687-2450
FAX (435) 687-2084
April 23, 2003
Coal Program
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84114-5801

To Whom It May Concern,

Re: Application to Change Existing Mining Plan, Abandoned Equipment, Bear Canyon Mine, ACT/015/025

Attached is an electronic copy of an amendment on abandoned equipment.
I
am also mailing five hard copies of the amendment to your office.

If you have any questions, please call me at (435) 687-5238.

Thank You,

Mark Reynolds

Attchment(s)

CO-OP MINING COMPANY

P.O. Box 1245
Huntington, Utah 84528



Office (435) 687-2450
FAX (435) 687-2084

April 23, 2003

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

To Whom It May Concern,

Re: Application to Change Existing Mining Plan, Abandoned Equipment, Bear Canyon Mine, ACT/015/025

Enclosed are five DRAFT copies of an amendment to added the recent violations to the MRP, to fix the location of the powder and cap magazines, and to include the abandoned equipment in the MRP.

As discussed with Peter Hess of the Division of Oil Gas and Mining the Hiawatha Seam 1st North section of the Bear Canyon #1 mine was abandoned due to a roof fall. The roof fall buried some equipment that had to be abandoned. The area that was sealed off also included the water-monitoring site SBC-11.

All information requested by Mr. Hess has been included as well as other minor updates that needed to be added to the MRP.

If you have any questions, please call Mark at (435) 687-5238.

Thank You,

Wendell Owen
Resident Agent

Enclosure(s)

APPLICATION FOR COAL PERMIT PROCESSING

Permit Change New Permit Renewal Exploration Bond Release Transfer

Permittee: CO-OP MINING COMPANY

Mine: BEAR CANYON MINE

Permit Number: ACT/015/025

Title: Abandoned Equipment

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

To include abandoned equipment and recent violations in the MRP and other general updates

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

- Yes No 1. Change in the size of the Permit Area? Acres: _____ Disturbed Area: _____ increase decrease.
- Yes No 2. Is the application submitted as a result of a Division Order? DO# _____
- Yes No 3. Does the application include operations outside a previously identified Cumulative Hydrologic Impact Area?
- Yes No 4. Does the application include operations in hydrologic basins other than as currently approved?
- Yes No 5. Does the application result from cancellation, reduction or increase of insurance or reclamation bond?
- Yes No 6. Does the application require or include public notice publication?
- Yes No 7. Does the application require or include ownership, control, right-of-entry, or compliance information?
- Yes No 8. Is proposed activity within 100 feet of a public road or cemetery or 300 feet of an occupied dwelling?
- Yes No 9. Is the application submitted as a result of a Violation? NOV # N03-40-1-1 and N03-46-2-2
- Yes No 10. Is the application submitted as a result of other laws or regulations or policies?
Explain: _____
- Yes No 11. Does the application affect the surface landowner or change the post mining land use?
- Yes No 12. Does the application require or include underground design or mine sequence and timing? (Modification of R2P2)
- Yes No 13. Does the application require or include collection and reporting of any baseline information?
- Yes No 14. Could the application have any effect on wildlife or vegetation outside the current disturbed area?
- Yes No 15. Does the application require or include soil removal, storage or placement?
- Yes No 16. Does the application require or include vegetation monitoring, removal or revegetation activities?
- Yes No 17. Does the application require or include construction, modification, or removal of surface facilities?
- Yes No 18. Does the application require or include water monitoring, sediment or drainage control measures?
- Yes No 19. Does the application require or include certified designs, maps or calculation?
- Yes No 20. Does the application require or include subsidence control or monitoring?
- Yes No 21. Have reclamation costs for bonding been provided?
- Yes No 22. Does the application involve a perennial stream, a stream buffer zone or discharges to a stream?
- Yes No 23. Does the application affect permits issued by other agencies or permits issued to other entities?

Please attach four (4) review copies of the application. If the mine is on or adjacent to Forest Service land please submit five (5) 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.

Print Name

Sign Name, Position, Date

Subscribed and sworn to before me this _____ day of _____, 20____

Notary Public

My commission Expires: _____, 20____ }

Attest: State of _____ } ss:

County of _____

For Office Use Only:

**Assigned Tracking
Number:**

Received by Oil, Gas & Mining

Appendix 2-A
VIOLATION LIST

Trail Canyon Permit # ACT/015/021

~~No violation notices have been received for the above referenced permit No. in the three years preceding April, 2000.~~

Bear Canyon Permit # ACT/015/025

~~No violation notices have been received for the above referenced permit No. in the three years preceding April 200.~~

Violations received in the last 2 years are included in the following pages.

CO-OP MINING COMPANY

P.O. Box 1245
Huntington, Utah 84528

Office (435) 687-2450
FAX (435) 687-2084

January 29, 2003

Peter Hess
Utah Division of Oil, Gas & Mining
451 East 400 North, CEU Box 169
Price, Utah 84501-2699

Mr. Hess,

Re: No Access to Water Monitoring Wells

Nate Finley sampled the wells last year and then during the winter stopped working for us. This spring when Miles went to monitor the wells he could not find the hose connections that hooked onto the wells. We looked for them and determined that they had most likely been stolen.

Miles pulled the fittings from one of the wells and took it to Prax-Air in Price to have them find a connection that would fit the well. Prax-Air was having trouble finding the fitting and also had lost the one we had given them.

During this time Miles had quite working for us so Charles was unaware of the problem until it was time to collect the next sample. After finding out they lost the fitting and need another one to match it up we pulled a fitting from a 2nd well and took it to Prax-Air. After several months of searching they told us that it was not a standard fitting and that they were unable to locate a replacement fitting with from any of their distributors.

At this time I got involved and both Charles and I went to Prax-Air and told them to give us fitting that we could put on the well and a set of hoses that would attach to them. After disabling back flow prevention fittings and using several adapters we had something that we all felt would work.

Charles and then took the new fittings and the new hoses and tried to install the fittings and could not get them to go on to the wells. We took them back to Prax-Air and they measured the treads on the old fitting with a caliper and told us that although they had a first thought they were standard threads, they were in fact not standard threads and that they didn't have anything that could thread onto our monitoring wells.

I then tried to contact the consultant that had installed the wells, a Geo-Hunt Consulting. It appears that the company no longer exists, but I was able to find the owner, Greg Hunt. He told me that he had bought the monitoring wells from Baski Inc.

When I contacted Baski Inc. and gave them the number from the fitting we had pulled of our monitoring well they said that they could not find the number in their computers, but that it was a Swagelock fitting and gave me their number. Swagelock also could not find the number in their computer so I sent them pictures of the fitting along with it's measurements. They then asked if we could send them the fitting. When they received it they said it was a discontinued fitting, but they could replace it with one that would thread onto the wells. We are not waiting for the replacement fitting from them and will install them on the wells when the snow permits.

If you have any questions, please call me at (435) 687-2450.

Thank You,


Mark Reynolds



NO. N 03-90-1-1

notice of violation

To the following Permittee or Operator:

Name Co-op Mining Co.
 Mine Deer Canyon Mine Surface Underground Other
 County Emery State Utah Telephone (435) 687-2450
 Mailing Address P.O. Box 1295
 State Permit No. C/015/025
 Ownership Category State Federal Fee Mixed
 Date of inspection 12/19/2002 11:30 AM to 3:00 PM, 19____
 Time of inspection 12/22/2003 a.m. p.m. to 11:30 AM a.m. p.m.
 Operator Name (other than Permittee) _____
 Mailing Address _____

Under authority of the Utah Coal Mining and Reclamation Act, Section 40-10-1 et seq., *Utah Code Annotated*, 1953, the undersigned authorized representative of the Division of Oil, Gas & Mining has conducted an inspection of above mine on above date and has found violation(s) of the act, regulations or required permit condition(s) listed in attachment(s). This notice constitutes a separate Notice of Violation for each violation listed.

You must abate each of these violations within the designated abatement time. You are responsible for doing all work in a safe and workmanlike manner.

The undersigned representative finds that **cessation of mining is** **is not** expressly or in practical effect required by this notice. For this purpose, "mining" means extracting coal from the earth or a waste pile, and transporting it within or from the mine site.

This notice shall remain in effect until it expires as provided on reverse side of this form, or is modified, terminated or vacated by written notice of an authorized representative of the director of the Division of Oil, Gas & Mining. Time for abatement may be extended by authorized representative for good cause, if a request is made within a reasonable time before the end of abatement period.

Date of service/ mailing 2/11/03 Time of service/ mailing 12:30 a.m. p.m.

Wayne J. Swann
Permittee/Operator representative

Mine Manager
Title

Signature

Michael J. Suflik
Division of Oil, Gas & Mining representative

Environmental Scientist
Title

Inspector No. 70
Signature

Inspector No. 70
Identification Number

SEE REVERSE SIDE

WHITE-DOG M YELLOW-OPERATOR PINK-OSM GOLDENROD-NOV FILE

NOTICE OF VIOLATION NO. N 03 - 40 - 1 - 1

Violation No. 1 of 1

Nature of violation

Failure to perform and report groundwater well monitoring according to the approved Mine and Reclamation Plan (MRP).

Provisions of act, regulations or permit violated

R 695 - 300 - 143

R 695 - 301 - 731.210

R 695 - 301 - 731.212

Portion of operation to which notice applies

Water monitoring wells SDH-2, SDH-3, MW-114, MW-117 were not monitored at all during 2002. The MRP requires water levels be determined & reported during May or June, July, August, September, and October. This was not done at all four of the referenced wells.

Remedial action required (including any interim steps)

The Operator attributes the situation to faulty equipment. Therefore, permanently repair or replace the water level monitoring equipment for the affected wells. Conduct future monitoring as required in the MRP.

Abatement time (including interim steps)

As soon as physical access to the four sites can be achieved. NO LATER THAN May 12, 2003.

NO. N03-46-2-2

notice of violation

To the following Permittee or Operator:

Name CO-OP Mining Company
 Mine Bear Canyon #1, #3 Mines Surface Underground Other
 County Emery State Utah Telephone (435) 687-2450
 Mailing Address PO Box 1245, Huntington, Utah 84528
 State Permit No. C/015/025
 Ownership Category State Federal Fee Mixed
 Date of inspection 1/22/2003
 Time of inspection 8⁴⁰ a.m. p.m. to 11³⁰ a.m. p.m.
 Operator Name (other than Permittee) _____
 Mailing Address _____

Under authority of the Utah Coal Mining and Reclamation Act, Section 40-10-1 et seq., *Utah Code Annotated*, 1953, the undersigned authorized representative of the Division of Oil, Gas & Mining has conducted an inspection of above mine on above date and has found violation(s) of the act, regulations or required permit condition(s) listed in attachment(s). This notice constitutes a separate Notice of Violation for each violation listed.

You must abate each of these violations within the designated abatement time. You are responsible for doing all work in a safe and workmanlike manner.

The undersigned representative finds that **cessation of mining is** **is not** expressly or in practical effect required by this notice. For this purpose, "mining" means extracting coal from the earth or a waste pile, and transporting it within or from the mine site.

This notice shall remain in effect until it expires as provided on reverse side of this form, or is modified, terminated or vacated by written notice of an authorized representative of the director of the Division of Oil, Gas & Mining. Time for abatement may be extended by authorized representative for good cause, if a request is made within a reasonable time before the end of abatement period.

Date of service/ mailing 1/22/2003 Time of service/ mailing 11³⁰ a.m. p.m.

Mark Reynolds
 Permittee/Operator representative

Engineer
 Title

Mark Reynolds
 Signature

Peter Hess
 Division of Oil, Gas & Mining representative

Environmental Scientist III
 Title

Peter Hess
 Signature

#46
 Identification Number

SEE REVERSE SIDE

WHITE-DOG M YELLOW-OPERATOR PINK-OSM GOLDENROD-NOV FILE



NOTICE OF VIOLATION NO. N03-46-2-1

Violation No. 1 of 2 "Failure to Minimize to the Extent Possible Additional Contributions of Sediment to Stream Flow or to Runoff Outside the Permit Area"

Nature of violation

- 1) The permittee has recently enhanced the safety berms ~~at~~ along many of the access roads. The outslope of these berms have no treatment in place.
- 2) The new construction associated with ^{the} Bear Cyn #3 Mine overland conveyor is lacking adequate sediment controls. Much of this disturbance is untreated reporting to Bear Creek.

Provisions of act, regulations or permit violated

- 1) R 645-301-742.111
- 2) R 645-301-742.211
- 3) UCA 40-10-18 (11) (b), and (13).

Portion of operation to which notice applies

- 1) Berms paralleling the access roads (outslopes) to the Bear Canyon #1 and #3 Mines
- 2) The disturbance created by the Bear Canyon #3 Mine overland conveyor.

Remedial action required (including any interim steps)

- 1) Install methods to treat the ^{potential} outslope flows reporting to Bear Creek.
- 2) Implement the currently approved sediment control plan for the #3 Mine conveyor corridor. If inadequate, re-evaluate that plan and submit an adequate amendment to the Division, such that all runoff

Abatement time (including interim steps)

- 1) Treatment along all exposed berms must be in place by February 5, 2003 @ 17:00 Hours.
- 2) Adequate controls or treatments must be in place by February 21, 2003 @ 17:00 Hours.

WHITE-DOGMI YELLOW-OSM PINK-PERMITTEE/OPERATOR GOLDENROD-NOV FILE

DOGMI

an equal opportunity employer

11/85

→ from the disturbed area is properly treated.



NOTICE OF VIOLATION NO. N03-46-2-2
"Failure to Maintain Diversions"

Violation No. 2 of 2

Nature of violation

i) The permittee has failed to maintain several culverts along the access road to the Bear Canyon #2 Mine (Tank seam). This includes material buildup, boulders partially obstructing inlets, and flexible conduits being disconnected from the rigid under-road culverts

Provisions of act, regulations or permit violated

R 645 - 301 - 742, 312

Portion of operation to which notice applies

- 1) The inlet to the undisturbed culvert "C-17" is obstructed.
- ~~2) The flexible outlet on culvert C-18U has become detached.~~
- 2a) The flexible outlets on culverts C-18U and C-20U have become detached.
- 3) The 8" pipe at the Hiawatha Intake portal (C-2U) has filled with material such that approximately 50% of its x-section is obstructed.

Remedial action required (including any interim steps)

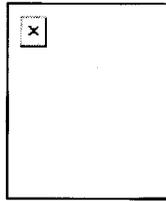
- 1) Remove the boulders obstructing inlet of culvert C-17.
- 2) Reattach the flexible conduits to the outlets of underroad culverts C-18U & C-20U.
- 3) Clean or flush the material from culvert C-2U.

Abatement time (including interim steps)

The permittee must make all repairs by February 5, 2003 @ 17:00 Hours.

CO-OP MINING COMPANY

P.O. Box 1245
Huntington, Utah 84528



Office (435) 687-2450
FAX (435) 687-2084

February 4, 2003

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

Re: NOV # N03-46-2-2, Bear Canyon Mine, C/015/025

We have been unable to cover all berms along the WHR access road with erosion control matting due to a shortage in our stock of the matting.

We are formally requesting an extension to abate the NOV until February 19, This should allow adequate time to replenish our stock of the matting and cover the berms.

It should be noted that covering the berms with erosion control matting is the only repair that has not been completed.

If you have any questions, please call me at (435) 687-5238.

Thank You,

Mark Reynolds,
Environmental Coordinator



MODIFICATION OF
NOTICE OF VIOLATION / CESSATION ORDER--

Failure to Minimize to the Extent Possible Additional Sediment... or to Runoff Outside of Permit Area
To the following Permittee or Operator:

Name CO-OP Mining Co. / Bear Canyon #3 Mine

Mailing Address P.O. Box 1245 Huntington, Utah 84528

State Permit No. C/015/025

Utah Coal Mining & Reclamation Act, Section 40-10-1 et seq., Utah Code Annotated (1953):

Notice of Violation No. N 03-46-2-1, 1 of 2 dated Jan. 22 ~~or~~ 2003

~~Cessation Order No. C~~ dated ~~---~~ ---

Part 1 of 2 is modified as follows: abatement time to install treatment on berms is extended from 2/5/2003 @ 17:00 Hours
Reason for modification is until 2/19/2003 @ 17:00 Hours.

Part --- of --- is modified as follows: ---

Reason for modification is the permittee has made a written request to the Division requesting additional time to

Part --- of --- is modified as follows: install the erosion control matting on the areas remaining of the #3 Mine Road.

Date of service/ mailing 2/4/2003 Time of service/ mailing 3⁴⁵ a.m. p.m.

Date of inspection 1/22/2003

Mark Reynolds Permittee/Operator representative Title Engineer

Mailed / Faxed from PFO/DOG M
Signature

Peter Hess Division of Oil, Gas & Mining Title Environmental Scientist III

Peter Hess
Signature



~~VACATION/TERMINATION OF~~
~~NOTICE OF VIOLATION/CESSATION ORDER~~

*N03-46-2-2, 1 of 2 "Failure to Minimize to the Extent Possible
Additional Contributions of Sediment to Stream Flow, or to Runoff
To the following Permittee or Operator: outside of the Permit Area".*

Name CO-OP Mining Company

Mailing Address PO Box 1245, Huntington, Utah 84528

State Permit No. C/015/025

Utah Coal Mining & Reclamation Act, Section 40-10-1 et seq., Utah Code Annotated (1953):

Notice of Violation No. N 03-46-2-2, 1 of 2 dated 1/22 192003

~~Cessation Order No. C~~ dated ~~_____~~ 19_____

Part 1 of 2 is vacated terminated because the permittee has fulfilled
the requirements to abate the violations.

Part _____ of _____ is vacated terminated because _____

Part _____ of _____ is vacated terminated because _____

Date of service/ mailing 2/11/2003

Time of service/ mailing 2³⁰ a.m. p.m.

Mark Reynolds
Permittee/Operator representative

Engineer
Title

Signature

Peter Hess
Division of Oil, Gas & Mining

Environmental Scientist III
Title

Peter Hess
Signature



UTAH NATURAL RESOURCES Oil, Gas & Mining

3 Triad Center · Suite 350 · Salt Lake City, UT 84180-1203 · 801-538-5340

VACATION/TERMINATION OF NOTICE OF VIOLATION/CESSATION ORDER

"Failure to Maintain Diversions" N/03-46-2-2

2 of 2

To the following Permittee or Operator:

Name CO-OP Mining Co. / Bear Canyon #2 Mine

Mailing Address PO Box 245 Huntington, Utah 84528

State Permit No. C/015/025

Utah Coal Mining & Reclamation Act, Section 40-10-1 et seq, Utah Code Annotated (1953):

Notice of Violation No. N 03-46-2-2, dated 2 of 2 Jan. 22, 2003.

Cessation Order No. C - dated - 47 -

Part 2 of 2 is vacated terminated because the permittee has made the necessary repairs to the diversions designated as C-10U, C-18U, C-20U, and C-2U

Part _____

Post-It® Fax Note	7671	Date	1/27/03	# of pages	1
To	Mark Reynolds	From	Peter Hess		
Co./Dept	CW Mining	Co.	PFO DOGM		
Phone #		Phone #			
Fax #		Fax #			

Part _____

Date of service/mailling 1/27/2003 Time of service/mailling 2:58 a.m. p.m.

Mark Reynolds Permittee/Operator representative Engineer Title

Mailed / Faxed from PFO / DOGM Signature

Peter Hess Division of Oil, Gas & Mining Environmental Scientist Title

Peter Hess Signature

III

The affects of subsidence in the permit area, on regional or local groundwater flow, are expected to be minor and of short duration. Localized diversions or interceptions of short duration only are expected due to the plastic flow of shaley units and to both development and tightening of existing fractures which occur due to unbalanced compressive-tensile forces associated with subsidence. The reclamation plan proposes to control post-mining subsidence which is expected to be a maximum of 5.5 feet assuming all three seams are mined, with no subsidence to occur in a varying 100 to 200 ft wide corridor from outcrop areas and permit boundary areas, as well as under escarpments.

In the portion of Federal Lease U-0243 16 to be permitted, mining will take place in the Tank Seam only, which will limit any subsidence to a maximum of 1.9 feet. In the event mining reaches far enough North to mine at an elevation below Bear Creek, an adequate barrier will be left to completely prevent any impact on Bear Creek. This barrier is shown on Plate 3-3 and described in Appendix 3-C.

7.1.5.2 Quality

The potential impacts to water quality include contamination of water due to rock dust usage, **abandoned equipment**, the usage of hydrocarbons, and contamination from road salting. These potential water quality impacts are discussed in detail in Appendix 7-J, Section 9.0 (PHC) **and Appendix 7-P**.

Rock dust which is used for the suppression of coal dust may potentially impact the groundwater flowing through the mine by the dissolution of the rock dust constituents into the water. This could result in increase concentrations of TDS or sulfates. Gypsum rock dust has been known to result in high TDS concentrations, therefore Co-Op has implemented the use of limestone rock dust. Mine water discharged into Bear Creek is monitored for TDS, as well as the in-mine water monitoring wells, to ensure increased concentrations do not result for the mining activities.

Hydrocarbons (in the form of fuels, greases, and oils) are stored and used on-site for the mining equipment. Spillage of these materials could potentially contaminate the groundwater in the permit area. Section 9.0 of the PHC (Appendix 7-J) discusses in detail the program which Co-Op has implemented to prevent contamination of the groundwater from these sources. Road salting is also discussed. [Abandoned equipment is discussed in Appendix 7-P.](#)

7.1.6 Mitigation and Control Plans

No treatment of groundwater occurrence or other control measures in the present mine have been required. Interference of the groundwater regime has consisted of interception of local perched zones within the Blackhawk formation, with the significant portion of the flow coming from a sandstone channel located at the North end of the Blind Canyon Seam workings.

No treatment of groundwater occurrence or other control measures have been required or are expected to be required for the permit area. See the discussion on mine dewatering in Section 7.1.4.3 and on potential impacts in Appendix 7-J.

Table 7.1-8 Water Monitoring Matrix: Operational Phase of Mining

Location	Jan	Feb	Mar	Apr	May	June	July	Aug ³	Sept	Oct	Nov	Dec
Streams												
BC-1 (Upper Bear Creek)		oper.			oper.	field	field	oper.	field	oper.		
BC-2 (Lower Bear Creek)		oper.			oper.	field	field	oper.	field	oper.		
BC-3 (Lower Rt Fork Bear Creek)		oper.			oper.	field	field	oper.	field	oper.		
BC-4 (Upper Rt Fk. Bear Creek)		oper.			oper.	field	field	oper.	field	oper.		
MH-1 (McCadden Hollow Creek)						field ⁵	field	field		field		
FC-1 (Left Fork Fish Creek)						field ⁵	field	field		field		
Springs												
SBC-3 (Creek Well)		oper.			oper.			oper.		oper.		
SBC-4 (Big Bear Springs) ⁴		oper.			oper.			oper.		oper.		
SBC-5 (Birch Spring) ⁴		oper.			oper.			oper.		oper.		
SBC-9A (Hiawatha Seam)		oper.			oper.			oper.		oper.		
SBC-11 (Hiawatha Seam)		oper.			oper.			oper.		oper.		
SBC-12 (16-7-13-1)						field ⁵	field	field		field		
SBC-14 (WHR-6)		oper.			oper.			oper.		oper.		
SBC-15 (WHR-5)						field ⁵	field	field		field		
SBC-16 (WHR-4)						field ⁵	field	field		field		
SBC-17 (16-7-24-4)		oper.			oper.			oper.		oper.		
SMH-1 (FBC-6)						field ⁵	field	field		field		
SMH-2 (FBC-5)						field ⁵	field	field		field		
SMH-3 (FBC-13)						field ⁵	field	field		field		
SMH-4 (FBC-4)						field ⁵	field	field		field		
Wells												
SDH-2 (Well, Sec. 11, T16S, R7E)						level ⁵	level	level	level	level		
SDH-3 (Well, Sec. 10, T16S, R7E)						level ⁵	level	level	level	level		
MW-114 (Well, Sec 18, T16S, R8E)						level ⁵	level	level	level	level		
MW-117 (Well, Sec 12, T16S, R8E)						level ⁵	level	level	level	level		

- Notes:
1. See Tables 7.1-7 and 7.2-5 for listing of water quality monitoring parameters.
 2. oper. = operational base. = baseline
 3. Baseline parameters taken in August of year 5 prior to each permit renewal.
 4. SBC-4 and SBC-5 shall also be tested for oil and grease.
 5. First sample to be taken in May or June, when Gentry Mountain is accessible.

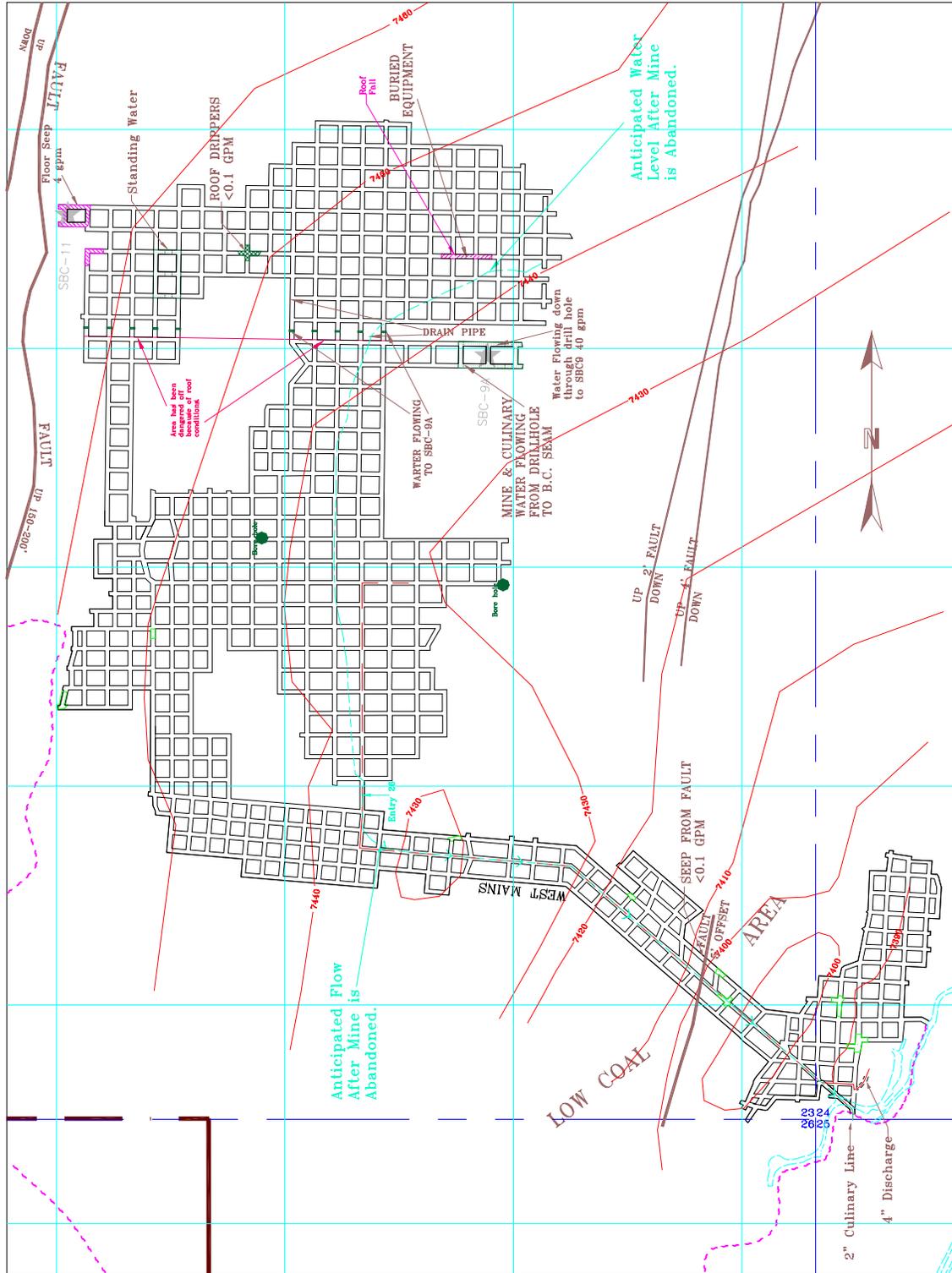
Table 7.1-9 Past and existing monitoring sites

Site ID	Description	Status
Springs		
SBC-1	Under Ground Seep ¹	Dried up early 1988, and monitoring was discontinued.
SBC-2	Portal Well ²	Dry from 1987. Caved in, lost (2) quarters and relocated in 1991.
SBC-3	Creek Well	Active
SBC-4	Huntington Spring	Active
SBC-5	Birch Spring	Active
SBC-6	COP Development Spring ³	Dried up in 1987, with no flow through 2000. Monitoring discontinued in 2000.
SBC-12	Bear Creek Source (16-7-13-1)	Active
SBC-14	Right Fork Spring WHR-6	Active
SBC-15	Right Fork Spring WHR-5	Active
SBC-16	Fish Creek Spring WHR-4	Active
SBC-17	Upper Bear Spring 16-7-24-4	Active
SMH-1	MH Left Fork Spring (FBC-6)	Active
SMH-2	MH Water Trough (FBC-5)	Active
SMH-3	MH/Trail Ridge Spring (FBC-13)	Active
SMH-4	MH Right Fork Spring (FBC-4)	Active
In-Mine Sources		
SBC-7	Sump #1	Dried up and discontinued in 2000.
SBC-8	Sump #2	Dried up and discontinued in 2000.
SBC-9	Sump #3 ^{4 6}	Abandoned in 1999 due to retreat mining and replaced by SBC-13.
SBC-9A	Hiawatha Seam 1 st North	Activated in Oct. 2002 when a borehole was drill up to the old SBC9 site.
SBC-10	Sump #4	Flow first measured Dec. 1991. Monitoring initiated Jan. 1992. In July, 1995, retreat mining progressed passed this sump, making it inaccessible. Monitoring was discontinued in August, 1995. Flows from this area have subsequently flowed through the pillared area and out of the 1 st East pillared section.
SBC-11	Hiawatha Seam 1 st North	Active, In April of 2002 this site was activated when water started seeping from the Bear Canyon Fault. Abandoned in Jan 2003 due to roof fall.
SBC-13	1 st East Pillared Section ⁵	Abandoned in April 2002 due to retreat mining and replaced by SBC-9A
Wells		
DH-1A	2nd W. Monitor Well	Abandoned in 2001 due to retreat mining.
DH-2	3rd W. Monitor Well ⁶	Abandoned in 1999 due to retreat mining.
DH-3	1st E. Monitor Well ⁶	Abandoned in 1993 due to retreat mining and was replaced by DH-4.
DH-4	3rd W. Bleeder Monitor Well ⁶	Abandoned in 1999 due to retreat mining.
SDH-2	Well, Sec. 11, T16S, R7E	Active
SDH-3	Well, Sec. 10, T16S, R7E	Active
MW-114	Wild Horse Ridge Monitor Well	Active
MW-117	Gentry Mtn. Monitor Well	Active

Appendix 7-P Abandoned Equipment

On January 14, 2003 a roof fall occurred in the Hiawatha seam of the #1 Bear Canyon Mine. This roof fall buried a coal hauler, a distribution box, and a shop trailer. After the roof fall all remaining equipment was removed from the section and the area was sealed off. This is a concern for groundwater contamination since water monitoring site SBC-11 is in the area and there are floor and roof seeps in the area. The entry where the equipment was left is higher than the surrounding entries so water should flow around it. Also drainpipes were installed in the seals close to SBC-11 and also at a lower elevation than the abandoned equipment so water should drain out of the area before reaching the level of the equipment. The water is currently draining from the area through the pipes into monitoring site SBC-9A. Because of hazardous roof conditions in that area it will be abandoned in 2003 or 2004 and the water will be allowed to fill until it reaches entry 26 at which point it will drain to the portals. Co-Op Mining Company uses the water for mine and culinary use and will continue to monitor it for the life of the mine. The anticipated path of the water is illustrated on the following diagram. A copy of the MSHA accident report has also been included. The area of the roof fall is also shown on Plate 7-10B.

Figure 7P-1 Hiawatha Seam Mine Water



U.S. Department of Labor
Mine Safety and Health Administration



Approved For Use Through 06/30/92, OMB Number 1219-0007

Section A—Identification Data

MSHA ID Number 42-01697 Contractor ID _____ Report Category Metal/Nonmetal Mining Coal Mining Check here if report pertains to contractor.

Mine Name _____ Company Name CW Mining Company Bear Canyon #1

Section B—Complete for Each Reportable Accident Immediately Reported to MSHA

1. Accident Code (circle applicable code—see instructions) 01—Death 02—Serious Injury 03—Entrapment
04—Inundation 05—Gas or Dust Ignition 06—Mine Fire 07—Explosives 08—Roof Fall
09—Outburst 10—Impounding Dam 11—Hoisting 12—Offsite Injury

2. Name of Investigator Ken Defta 3. Date Investigation Started

Month	Day	Year
1	14	03

 4. Steps Taken to Prevent Recurrence of Accident section was abandoned

Section C—Complete for Each Reportable Accident, Injury or Illness

5. Circle the Codes Which Best Describe Where Accident/Injury/Illness Occurred (see instructions)
(a) Surface Location: 02 Surface at Underground Mine 30 Mill, Preparation Plant, etc. 03 Strip/Open Pit Mine 04 Surface Auger Operation
05 Culm Bank/Refuse Pile 06 Dredge Mining 12 Other Surface Mining 17 Independent Shops (with own MSHA ID) 99 Office Facilities
(b) Underground Location: 01 Vertical Shaft 02 Slope/Inclined Shaft 03 Face 04 Intersection 05 Underground Shop/Office 06 Other
(c) Underground Mining Method: 01 Longwall 02 Shortwall 03 Conventional Stopping 05 Continuous Mining 06 Hand 07 Caving 08 Other

6. Date of Accident

Month	Day	Year
1	14	03

 7. Time of Accident 6:45 am pm 8. Time Shift Started 6:00 am pm

9. Describe Fully the Conditions Contributing to the Accident/Injury/Illness, and Quantify the Damage or Impairment
Roof fall in ~~the~~ 12' left entry at #4 and #5
X-cut approx. 130' x 20' x 20' high. A coal hauler, A
D-Box and A shop trailer were lost in the fall.

10. Equipment Involved _____ Type _____ Manufacturer _____ Model Number _____

11. Name of Witness to Accident/Injury/Illness _____ 12. Number of Reportable Injuries or Illnesses Resulting from This Occurrence _____

13. Name of Injured/III Employee _____ 14. Sex Male Female 15. Date of Birth

Month	Day	Year

16. Last Four Digits of Social Security Number _____ 17. Regular Job Title _____ 18. Check if this injury/illness resulted in death. 19. Check if injury/illness resulted in permanent disability (include amputation, loss of use, & permanent total disability).

20. What Directly Inflicted Injury or Illness? _____ 21. Nature of Injury or Illness _____

22. Part of Body Injured or Affected _____ 23. Occupational Illness (circle applicable code—see instructions) 21 Occupational Skin Diseases
22 Dust Diseases of the Lungs 23 Respiratory Conditions (toxic agents) 24 Poisoning (toxic materials)
25 Disorders (physical agents) 26 Disorders (repeated trauma) 29 Other

24. Employee's Work Activity When Injury or Illness Occurred	Experience		Years	Weeks
	25. Experience in This Job Title	26. Experience at This Mine		

Section D—Return to Duty Information *Answer 30 & 31 when case is closed*
 28. Permanently Transferred or Terminated (if checked, complete items 29, 30, & 31) 29. Date Returned to Regular Job at Full Capacity (or item 28)

Month	Day	Year

 30. Number of Days Away from Work (if none, enter 0) 31. Number of Days Restricted Work Activity (if none, enter 0)

Person Completing Form (name) Ken Defta Title Superintendent
Date This Report Prepared (month, day, year) 1/17/03 Area Code and Phone Number (435) 687-5777

MSHA Form 7000-1, July 91 (Revised)

For Official Use Only
Degree _____
Accident Type _____
Accident Class _____
Scheduled Charge _____
Keyword _____

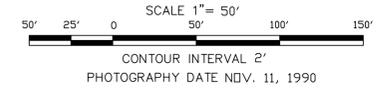
CO-OP MINING CO.
HUNTINGTON, UTAH

SURFACE FACILITIES

SCALE: 1" = 50'
DRAWN BY: C. Reynolds
DATE: 8/26/91

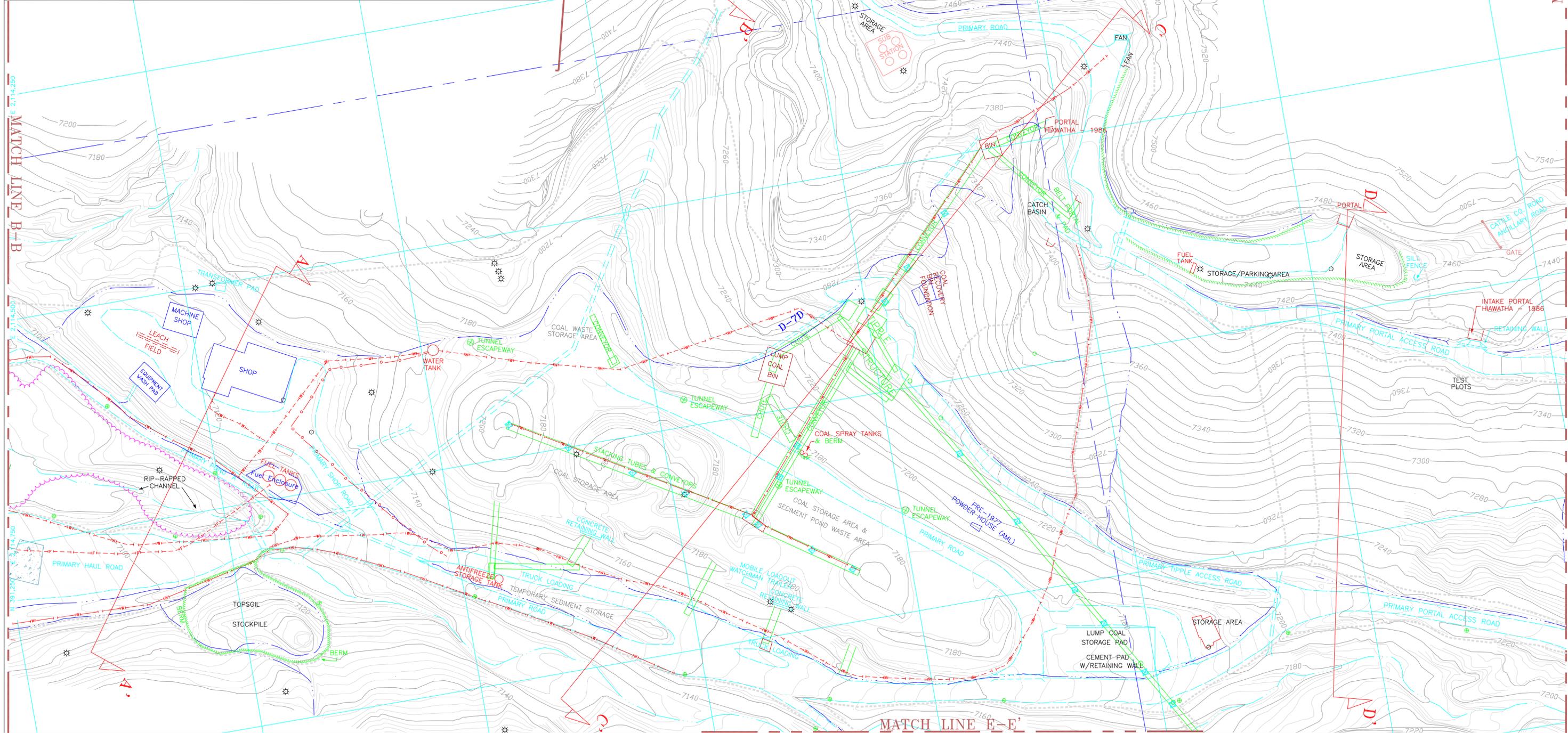
BEAR CANYON PLATE 2-4C

REV.	DATE	REMARKS	APPR.
1	12/02/95	Fuel Line Added/Coal Recovery Bin Removed (95N)	12/18/95
2	2/23/96	Plate Updated With Tank Seam As-Builts (96A)	7/05/96
3	6/23/97	Scalehouse Pavement Added (97B)	11/03/97
4	3/18/98	Lower Culvert C-2D Removed (98A)	4/15/98
5	6/18/98	Corrections For Midterm Review 1998 (98MT)	12/03/98
6	6/25/01	WHR surface facilities added (SR98-1)	7/03/01
7	11/04/01	Corrected dat bndry, removed permit bndry (AM01a)	11/13/01
8	7/08/02	Added Fan, Moved Powder House/Water Tank (AM02H)	8/14/02
9	5/10/02	Added fule containment Enclosure (AM02E)	8/15/02
10	4/17/03	Removed cap and posder magazine (AM03B)	



CROSS-SECTIONS LOCATED ON PLATE 3-1

LEGEND	
PERMIT BOUNDARY	CONTOUR LINE
DISTURBED AREA	UNPAVED ROADS
PRE-1977 DISTURBANCE	SECTION LINE
CULVERTS	SEE PLATES 7-1 FOR HYDROLOGY
WATER LINES	DRAINAGE
POWER POLES	STREAM BUFFER ZONE MARKERS



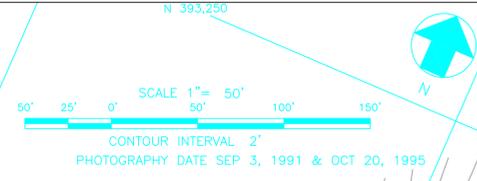
CO-OP MINING CO.
HUNTINGTON, UTAH

SURFACE FACILITIES

SCALE: 1" = 50'
DRAWN BY: C. Reynolds
DATE: 6-25-01

BEAR CANYON PLATE 2-4F

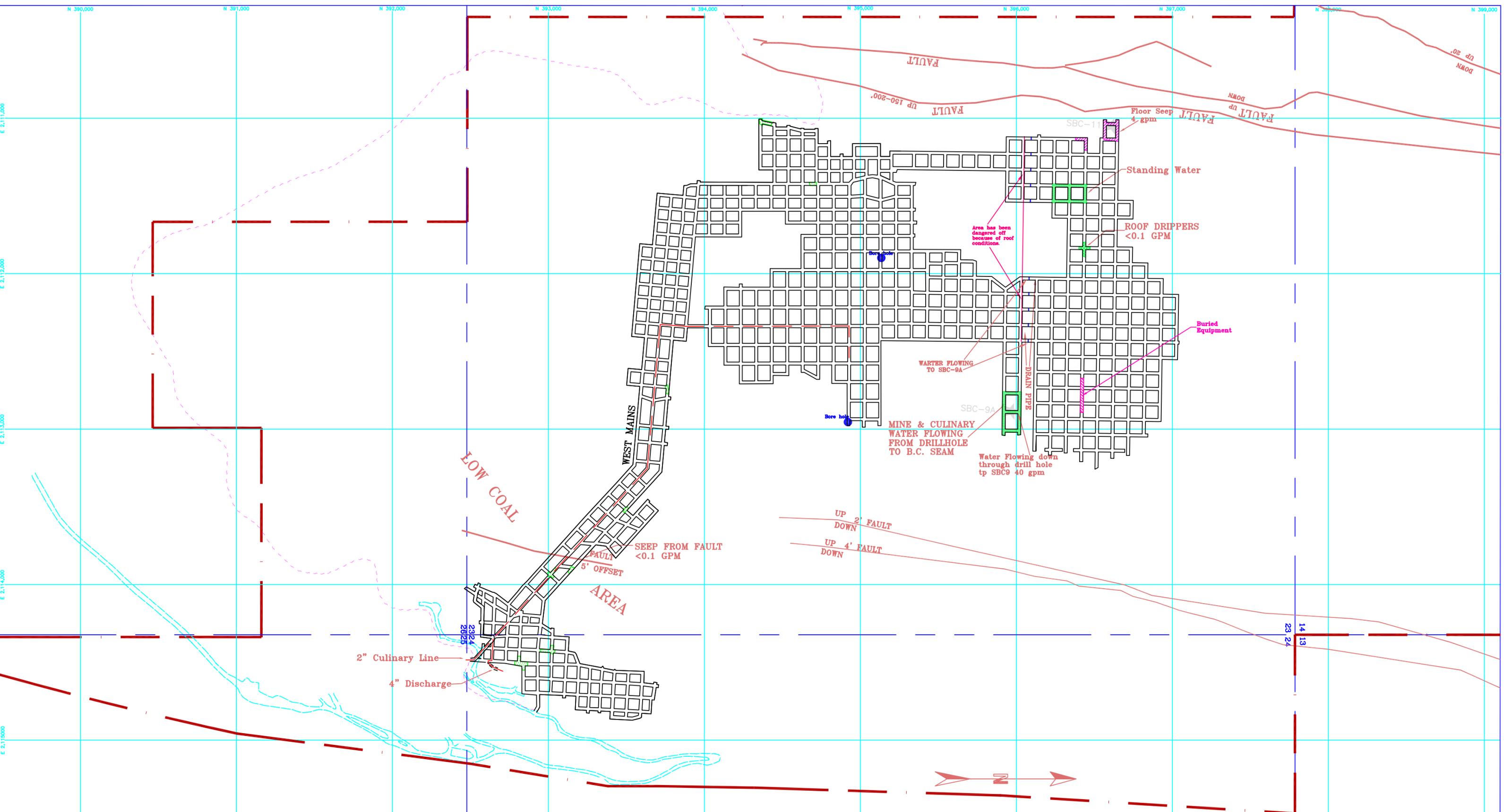
REV.	DATE	REMARKS	APPR.
1	6/25/01	WHR surface facilities added (SR98-1)	7/03/01
2	4/17/03	Added Cap and Powder Magazine (AM03B)	
3			
4			
5			
6			
7			
8			
9			
10			



LEGEND

- PERMIT BOUNDARY: [Thick dashed line]
- DISTURBED AREA: [Red dashed line]
- PRE-1977 DISTURBANCE: [Dotted line]
- CULVERTS: [Blue dashed line with cross-ticks]
- CONTOUR LINE: [Thin solid line]
- UNPAVED ROADS: [Blue dashed line]
- SECTION LINE: [Blue dashed line]
- SEE PLATES 7-1 FOR HYDROLOGY: [Blue dashed line]
- PAVEMENT: [Stippled pattern]
- WATER LINES: [Line with 'W']
- DRAINAGE: [Blue dashed line]
- POWER POLES: [Star symbol]
- STREAM BUFFER ZONE MARKERS: [Green circle with cross]





I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS MAP IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DATE _____ SIGNATURE _____

LEGEND			
MINE WORKINGS		STANDING WATER	
PILLARED AREA		ROOF DRIPPERS	
FAULT		FLOOR SEEPS	
MINE WATER LINE		WATER SAMPLE POINT	
PERMIT BOUNDARY		SBC-9	
COAL OUTCROP			

CO-OP MINING CO.
MINE WATER SURVEY

SCALE: 1" = 500' DRAWN BY: C. Reynolds DATE: 04-17-03

BEAR CANYON PLATE 7-10B

HIAWATHA SEAM STRIKE - N 19° 45' Dip 2%