

015/018



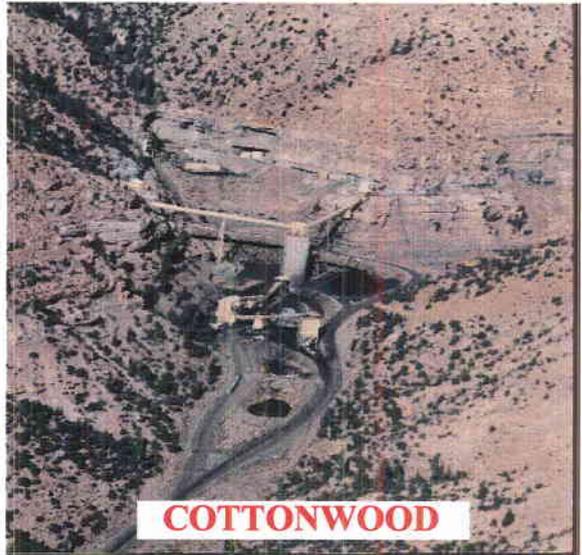
PACIFICORP



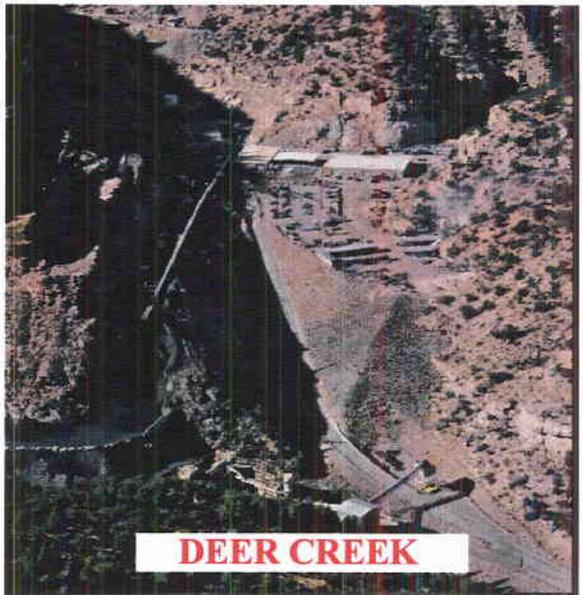
***PACIFICORP/ENERGY
WEST MINING CO.***

HIGHWALL SURVEY

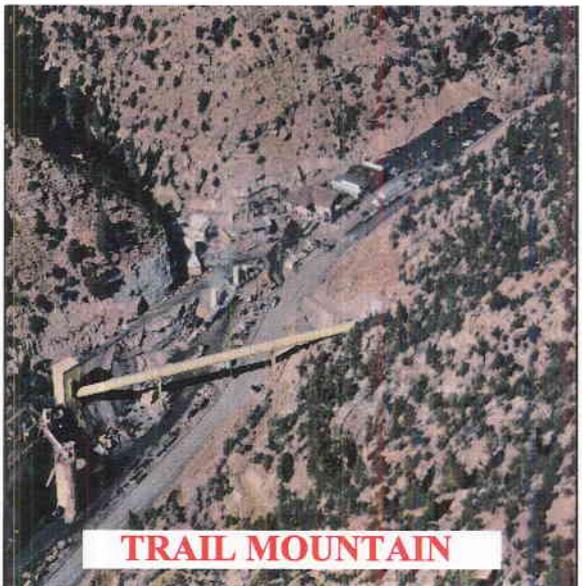
MARCH 1997



COTTONWOOD

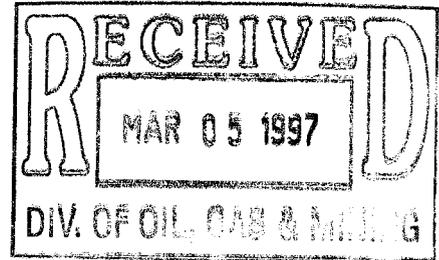


DEER CREEK



TRAIL MOUNTAIN

**HIGHWALL STUDY
TABLE OF CONTENTS**



DES-BEE-DOVE MINES

Highwall study sheets, identification, references, and description

Main reference drawing, Surface Facility Map-CS1660B

Supporting Maps, Other breakout areas

CS1661A

CS1662A

Supporting Map with Dates depicting portals of Deseret Mine

Supporting documents with dates

TRAIL MOUNTAIN MINE

Highwall study sheets, identification, references, and description

Trail Mountain Mine Surface Facilities Map-TMS1657D

Supporting document of mine operations before SMCRA ruling

DEER CREEK MINE

Highwall study sheets, identification, references, and description

Deer Creek Mine Surface Facilities Map-DS1653A

Maps depicting breakout areas

Meetinghouse Canyon Breakout-DS1654A

9th East Breakout-DS1656A

Rilda Canyon Breakout-DS1656A

Deer Creek Fan Shaft -CDC-72-003

COTTONWOOD/WILBERG MINE

Highwall Study Sheets, identification, references and description

TABLE OF CONTENTS

COTTONWOOD/WILBERG MINE CONTINUED

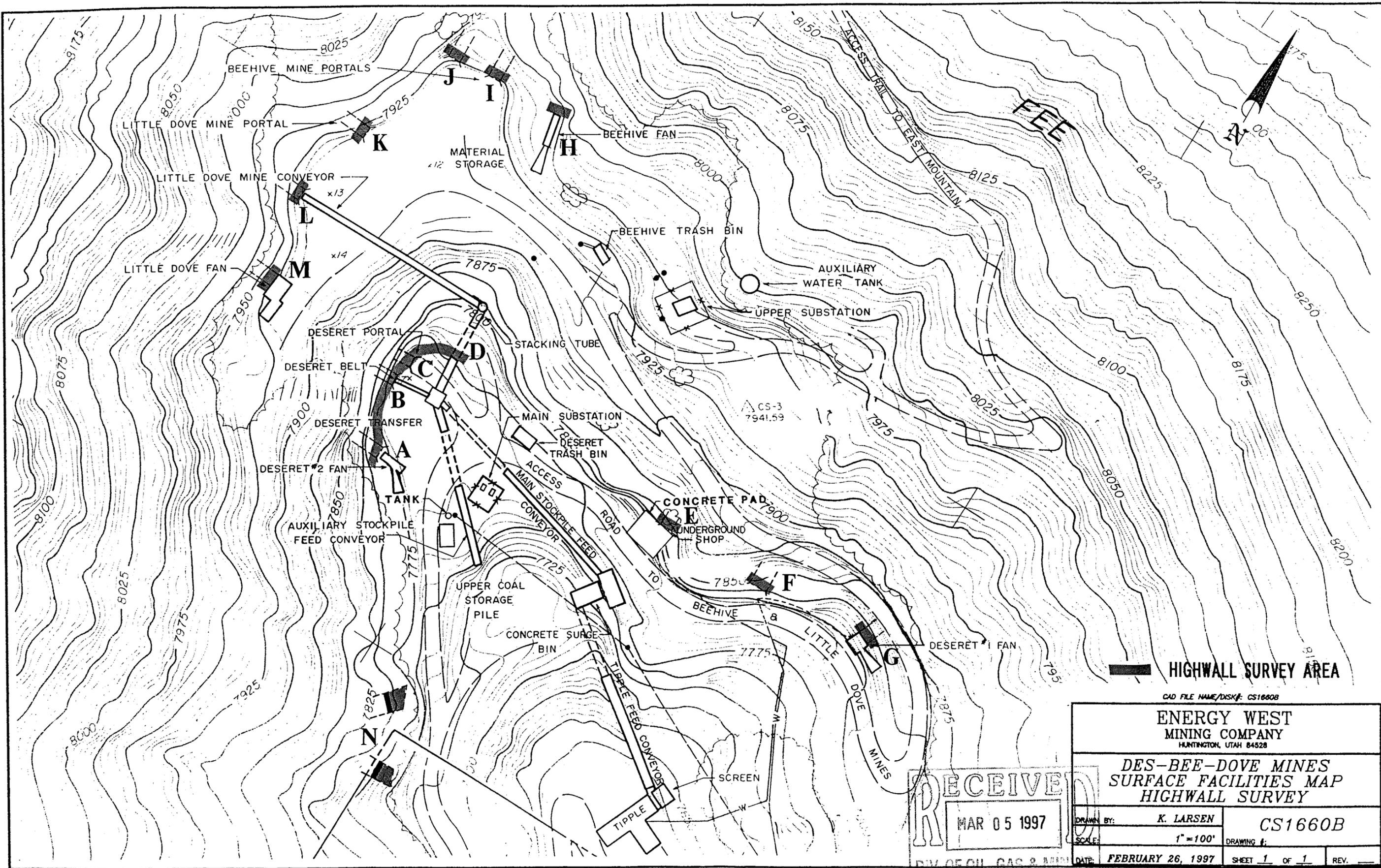
Main reference map, Cottonwood Surface Facilities Map KS1658D

Cottonwood Canyon Breakouts-KS1659D

Cottonwood Fan Portal Area- 3-14

Reference: supporting map of Wilberg Mine, dated before 1977.

Documents of Wilberg Mine operations before 1977



HIGHWALL SURVEY AREA

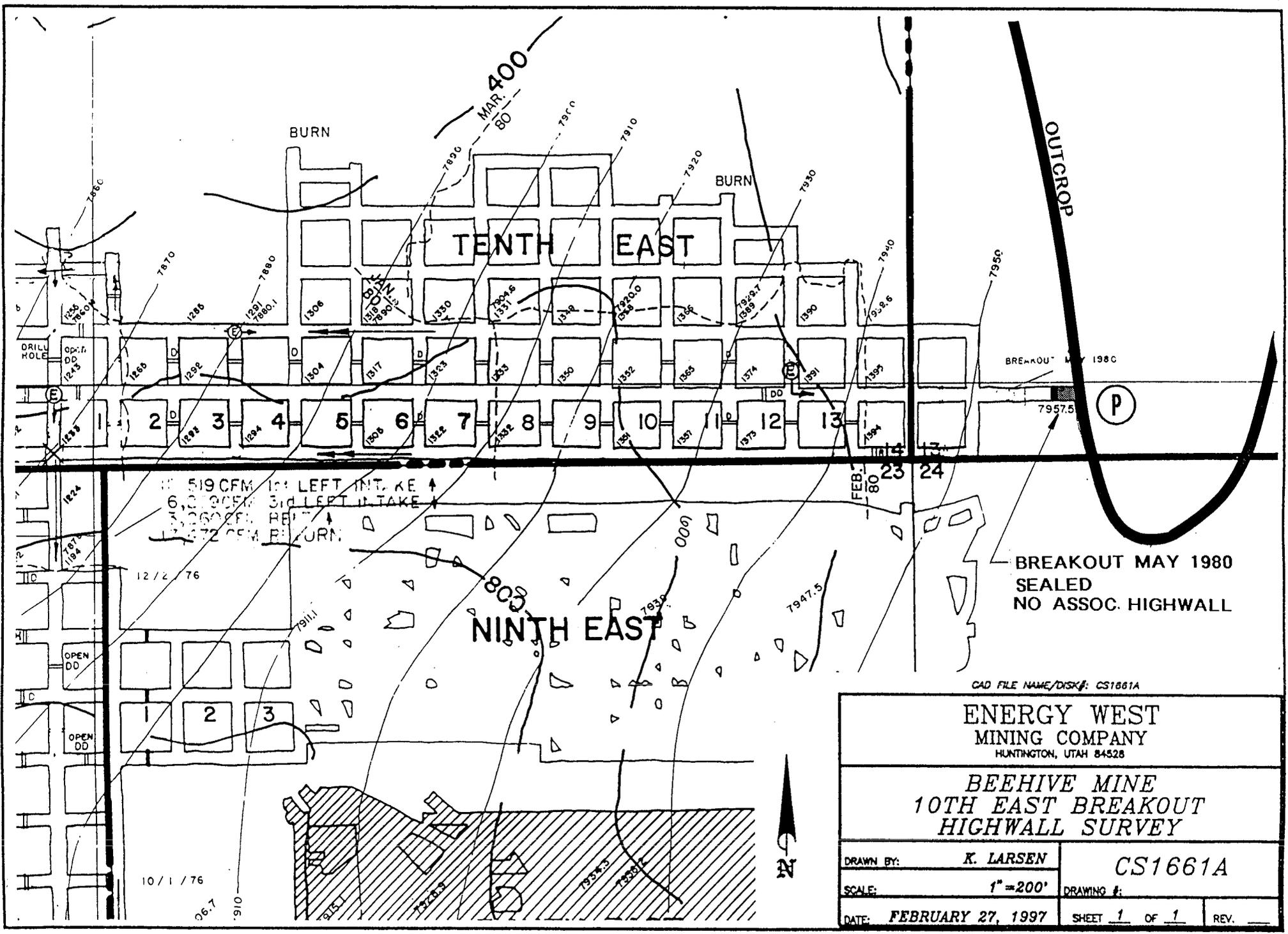
CAD FILE NAME/DISK#: CS1660B

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

**DES-BEE-DOVE MINES
SURFACE FACILITIES MAP
HIGHWALL SURVEY**

RECEIVED
MAR 05 1997

DRAWN BY:	K. LARSEN	CS1660B
SCALE:	1" = 100'	DRAWING #:
DATE:	FEBRUARY 26, 1997	SHEET 1 OF 1
DIV. OF OIL, GAS & MIN.		REV. _____



CAD FILE NAME/DISK#: CS1661A

ENERGY WEST
MINING COMPANY
 HUNTINGTON, UTAH 84528

BEEHIVE MINE
10TH EAST BREAKOUT
HIGHWALL SURVEY

DRAWN BY: **K. LARSEN**

CS1661A

SCALE: **1" = 200'**

DRAWING #:

DATE: **FEBRUARY 27, 1997**

SHEET **1** OF **1**

REV. _____

27

26

NW 1/4 of SW 1/4 of 26

1978
261,360 tons
pulling
pillars

1977
261,360 tons
pulling
pillars

I do hereby state that I am a licensed Engineer
in the State of Utah, and certify this map to be
true and correct to the best of my knowledge

Sub D Miller

date 4-2-74

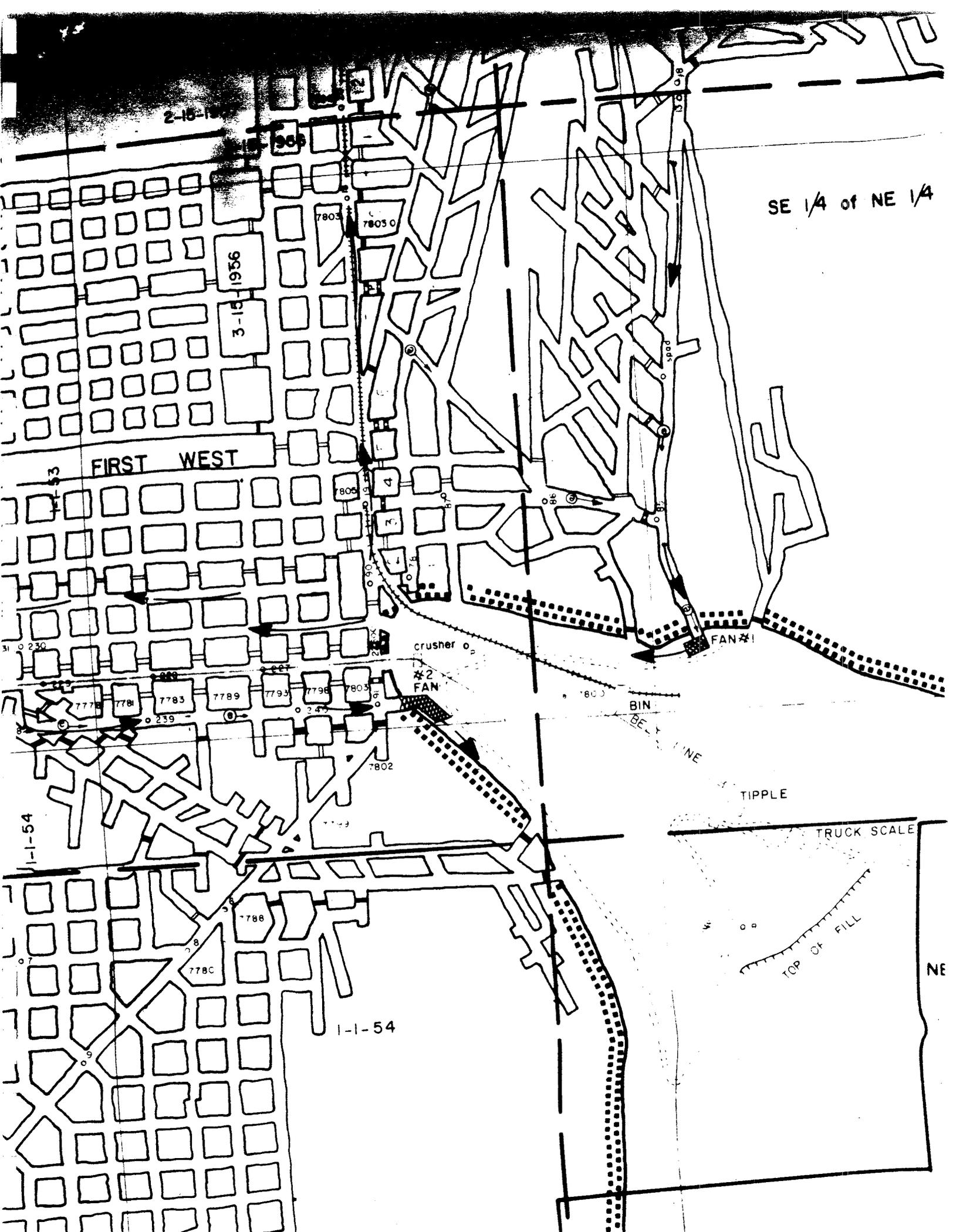
license number 3597

DESERET MINE AMERICAN COAL CO.

Scale 1"=200'

Date Extended 4-2-74

Drawn by H. Miller



2-16-15

1956

3-15-1956

SE 1/4 of NE 1/4

FIRST WEST

1-1-53

crusher

*2 FAN

BIN BELT LINE

TIPPLE

TRUCK SCALE

TOP OF FILL

NE

1-1-54

1-1-54



United States Department of the Interior

MINING ENFORCEMENT AND SAFETY ADMINISTRATION
COAL MINE HEALTH AND SAFETY
POST OFFICE BOX 1507
DENVER, COLORADO 80202

DISTRICT 9

August 17, 1976

In Reply Refer To:
EMS - H&S 3-1-7

Mr. Jerald K. Pollock, Engineering Dept.
American Coal Company
P.O. Box 308
Huntington, Utah

Re: Beehive and Deseret Mines
I.D. Nos. 42-00082 and 42-00988
Ventilation Plans

Dear Mr. Pollock:

The ventilation system and methane and dust control plan for the subject mines has been approved in accordance with Section 75.316, 30 CFR 75. The plan is subject to revision at any time and shall be reviewed by the operator and MESA at least once every six months. Before any changes are made in the approved ventilation system, they shall be submitted to and approved by the District Manager prior to being implemented.

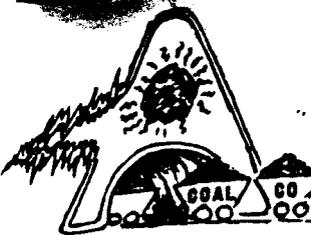
This plan supersedes any previously approved plans and a copy of this plan shall be made available to the miners.

Sincerely yours,

John W. Barton
District Manager

Enclosure





AMERICAN

P. O. BOX 310
HUNTINGTON, UTAH 84528

ENGINEER'S WEEKLY REPORT

Week Ending 4/15/77

DES-BEE-DOVE

Little Dove Mine

Mine Power

Harmond Electric has completed the electrical contract for Little Dove.

Conveyor Drive

After completion of driving the portal and installation of the liner plate, the foundation will be poured.

Steel Fabrication

H&J contract is complete.

Mining

The fan portal has been advanced 50 feet and the liner plate has been installed. The belt portal has been driven 50 feet and the liner plate has been driven. The man and material portal has been faced off. Work the past week has been relatively slow because of the lack of a roof bolter. The one from Peabody was sent to Ut-Am for overhaul. It was delivered to the site 4/14/77. Next week work should advance much faster with the bolter. The new liner plate should be shipped on 4/18/77.

General Construction

Parking Lot
Extension

Money for the grading, drainage and excavation has been approved. Our surveyors will slope stake the parking lot Monday, 4/15/77. The excavation will start after the surveying is completed. John Nielson has been awarded the contract for Phase I, which includes the excavation, drainage and grading. Money for Phase II is circulating for approval.

Bulk Rock Dust

Mine Service is currently updating and servicing the master tanks and compressors. The pipe has been delivered to the mine by MSA.

Outside Material
Handling

Kilborn Engineering is working on final design.

UDOGM HIGHWALL SURVEY

February 25, 1997

MINE NAME Trail Mountain

PERMIT NUMBER ACT/015/009

1. Provide each highwall used in connection with the mine and provide a description of its location and extent. (reference maps where highwall is shown)
 - A. Trail Mtn. Fan Portal--Portal was modified in 1993, highwall and adjacent slopes were created to greater extent.
 - B. Diesel Roadway Portal--New breakout in 1993, highwall enhanced and side slopes modified.
 - C. Belt Portal--Enhancement, little work above portal, 1993.
 - D. Return Portals adjacent to Belt Portal--Collar added in 1994, no work above on slopes, these portals are from previous mine developments. Pre-1977.
 - E. Portals, two old openings south of the belt portal. Pre-1977
 - F. Return Entry, Southern end of ancillary road, breakout in May 1991
See Mine Maps for extents and description.

2. Provide verification of highwall and adjacent outslope creation dates. (At a minimum determine whether it was created before or after May 3, 1977.)

A-B-C and adjacent highwalls, modified in 1993. See mine maps enclosed

D- includes two portals-Highwall to top of seam, Pre-1977, See enclosed documents.

E-includes two portals-Pre-1977, See documents enclosed.

F-one portal, May 1991, collar installed, little work above coal seam. No real disturbance as highwall.

3. Provide a reference to the Mining and Reclamation Plan (MRP) which discusses the final reclamation and elimination or retention of the identified highwalls. If no reference exists, state "none".

See Vol. 1, pgs. 3-57, 3-60, 3-61, 3-62 etc. of the Trail Mtn. permit. Pg. 3-62, 3.5.4.2 discusses highwall plans.

COAL - 1417d

Form Dated July 8, 1981

PROOF READ JG - BP

MINERAL LEASE NO. 22603

MINERAL LEASE APPLICATION NO. 22603

GRANT: SCH

UTAH STATE LEASE FOR
COAL

NOTICE OF LEASE AMENDMENT

WHEREAS, Trail Mountain Coal Company are the record owner and Lessee of Utah State Coal Lease 22603, dated February 8, 1965; and

WHEREAS, said lease was originally issued upon condition that at the end of each 20 year period succeeding the first day of the year in which said lease was issued, such readjustment of terms and conditions may be made therein as Lessor may determine to be in the best interest of the State; and

WHEREAS, the aforementioned 20 year period was January 1, 1985, and Lessor has determined that it is in the best interest of the State to modify said lease to the extent and in the manner hereinafter provided;

NOW THEREFORE, notice is hereby given that the above-described lease is hereby modified and amended as follows, effective January 1, 1986.

THIS UTAH STATE MINERAL LEASE AND AGREEMENT entered into and executed in duplicate as of the 8th day of February, 1985, by and between the STATE OF UTAH, acting by and through the BOARD OF STATE LANDS & FORESTRY and DIVISION OF STATE LANDS & FORESTRY, DEPARTMENT OF NATURAL RESOURCES, with the office located at 355 West North Temple, 3 Triad Center, Suite 400, Salt Lake City, Utah 84180, hereinafter called the "LESSOR," and

Trail Mountain Coal Company
c/o Diamond Shamrock Coal Company
1200 First Security Plaza
Lexington, KY 40507

(whether one or more individuals, corporation, or other entities) with business office or address as shown above, hereinafter called the "LESSEE,"

-2-

WITNESSETH:

That the State of Utah as Lessor, for and in consideration of the fees, rents, royalties, and any other financial consideration paid or required to be paid by Lessee, and the terms and conditions to be performed by Lessee as hereinafter set forth, does hereby GRANT AND LEASE to the Lessee the exclusive right and privilege to explore for, drill for, mine, remove, and dispose of the particular mineral described in Article I hereof, hereinafter called the "leased substances," situated within the boundaries of the following-described tract of land (extending vertically downward from the surface) in Emery County, State of Utah, to-wit:

Township 17 South, Range 6 East, SLB&M
Section 36: All

containing 640.00 acres, more or less.

This Mineral Lease is granted for and in consideration of and subject to all of the terms, provisions, and conditions hereinafter set forth:

ARTICLE I. MINERALS COVERED BY THIS LEASE

This Mineral Lease covers the following-described leased mineral substances within the boundaries of the above-described lands, to-wit:

COAL, which shall mean and include black or brownish-black solid fossil fuel that has been subjected to the natural processes of coalification, and which falls within the classification of coal by rank: I Anthracite, II Bituminous, III Sub-Bituminous, IV Lignitic.

In the event Lessee, or the operator or any contractor for Lessee, shall discover within said lands some mineral or minerals other than the mineral or leased substance covered by this lease, Lessee shall promptly notify the Lessor of the kind or nature of such mineral not included in this lease.

ARTICLE II. PRIMARY TERM AND POSSIBLE EXTENSION OF TERM OF LEASE

This lease is granted for a primary term of TEN (10) years commencing on the first day of the month following the date hereinabove first written and as long thereafter as the leased substances shall be produced in commercial quantities from the above-described lands, on condition that Lessee shall perform the terms and provisions required to be performed by Lessee including payment of rents and royalties within the times required herein; provided however, that it is expressly agreed that at the end of each period of ten (10) years following the effective date of this lease, the State of Utah as Lessor shall have the right to readjust the terms and conditions of this lease as may then be determined to be in the best interest of the State of Utah as trustee-owner of the mineral estate. In the event of failure or refusal of the Lessee to accept

UDOGM HIGHWALL SURVEY

February 25, 1997

MINE NAME DEER CREEK

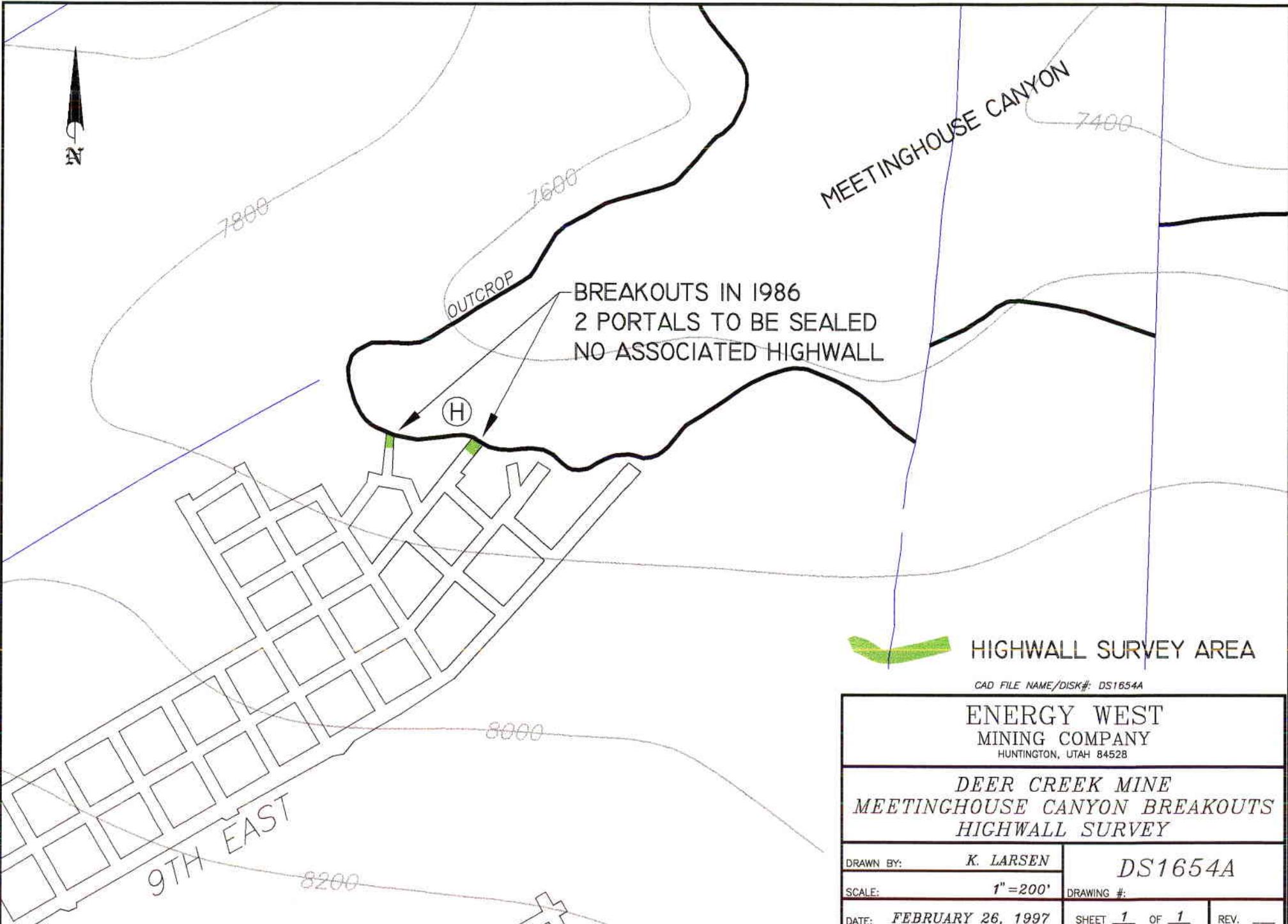
PERMIT NUMBER ACT/015/018

1. Identify each highwall used in connection with the mine and provide a description of its location and extent. (reference maps where highwall is shown)
 - A. B. C.- Deer Creek Main Portals--behind the office area and shops Blind Canyon Seam
 - D.- Belt Portal, old track entry. behind the office, bath house bldg. B.C. S.
 - E.- Main Fan Shaft--directly above the office building area, B.C.S.
 - F.- Old McKinnon fan portal- south terrace area, B.C.S.
 - G.- 9th East breakouts above the Wilberg Mine--3 portals, B.C.S.
 - H.- 9th East breakouts, Meetinghouse Canyon , Blind canyon seam.
 - I.- Rilda Canyon breakouts--two portals, Rilda Canyon, not much disturbance caused by the breakout, some work above for the tunnel liner and concrete collars. Blind Canyon
Note: (See reference maps for extents)

2. Provide verification of highwall and adjacent cutslope creation dates. (At a minimum determine whether it was created before or after May 3, 1978)
 - A, B, C D,- Main portals of Deer Creek Mine--developed before 1970, Permit indicates on pgs. 2-136, volume 1, pg. 3-55 volume 2, work on storage and parking area 1972. Work performed during 1989, modifications to portals.
 - E.- Main Fan, is a shaft, bored out in Aug. 1977, No seam exposed. See pg. 3-59, vol. 2, part 3. (See Centennial Development Drawing CDC-72-003)
 - F.- Old McKinnon fan portal, prior to the 70's, some of the oldest workings in mine. Fan removed. Two eastern portals are sealed and backfilled.
 - G.- 9th East portals above Wilberg mine, mine map indicates breakouts in May of 1977.
 - H.- 9th East portals in Meetinghouse Canyon, mine map indicates breakouts in 1986.
 - I.- Rilda Canyon breakouts were in 1995.

3. Provide a reference to the Mining and Reclamation Plan (MRP) which discusses the final reclamation and elimination or retention of the identified highwalls. If no reference exists, state none".

See Volume 2, pgs. 4-5, 4-6, 4-7 of the permit.



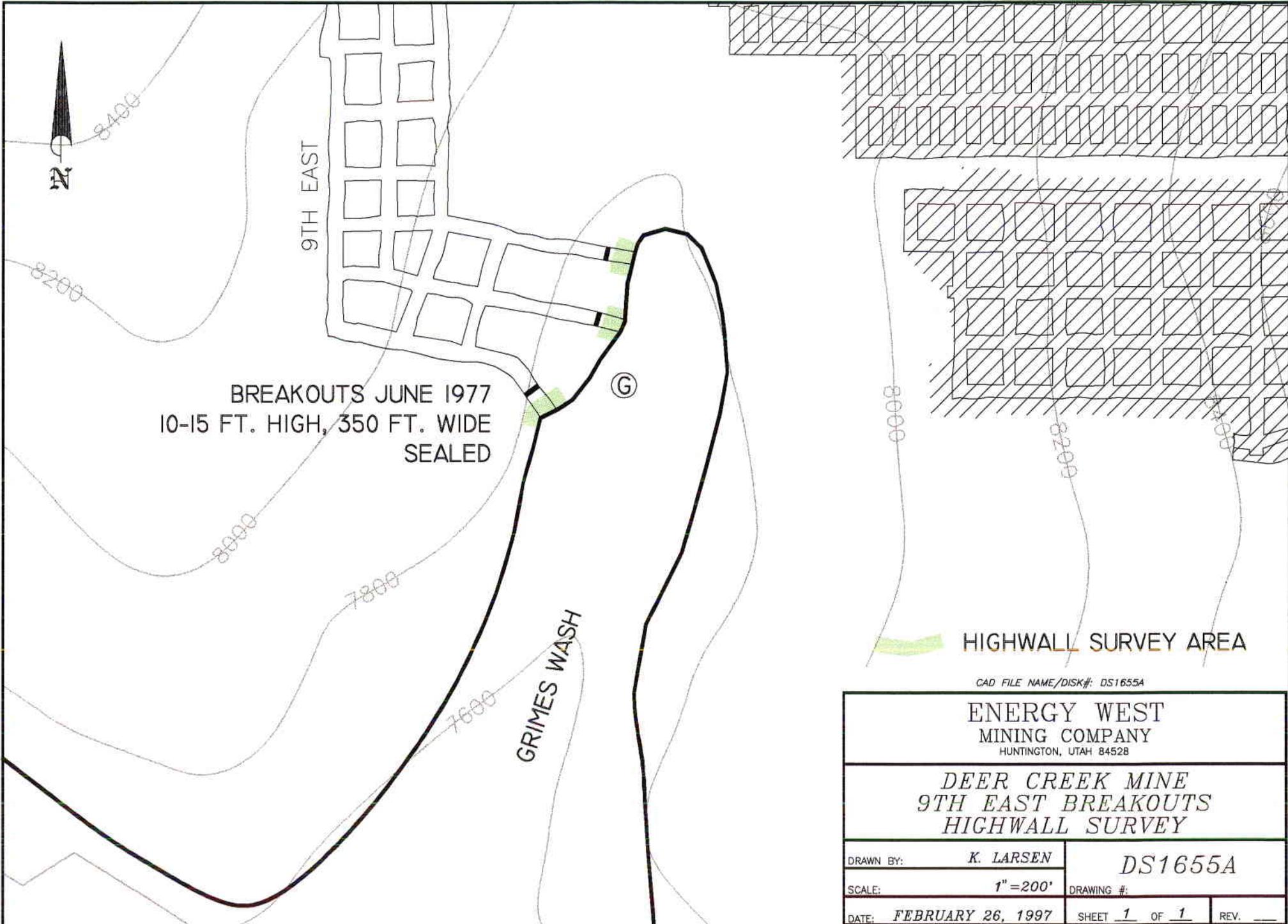
HIGHWALL SURVEY AREA

CAD FILE NAME/DISK#: DS1654A

**ENERGY WEST
MINING COMPANY**
HUNTINGTON, UTAH 84528

*DEER CREEK MINE
MEETINGHOUSE CANYON BREAKOUTS
HIGHWALL SURVEY*

DRAWN BY:	K. LARSEN	DS1654A	
SCALE:	1" = 200'	DRAWING #:	
DATE:	FEBRUARY 26, 1997	SHEET	1 OF 1 REV. ___



BREAKOUTS JUNE 1977
 10-15 FT. HIGH, 350 FT. WIDE
 SEALED

9TH EAST

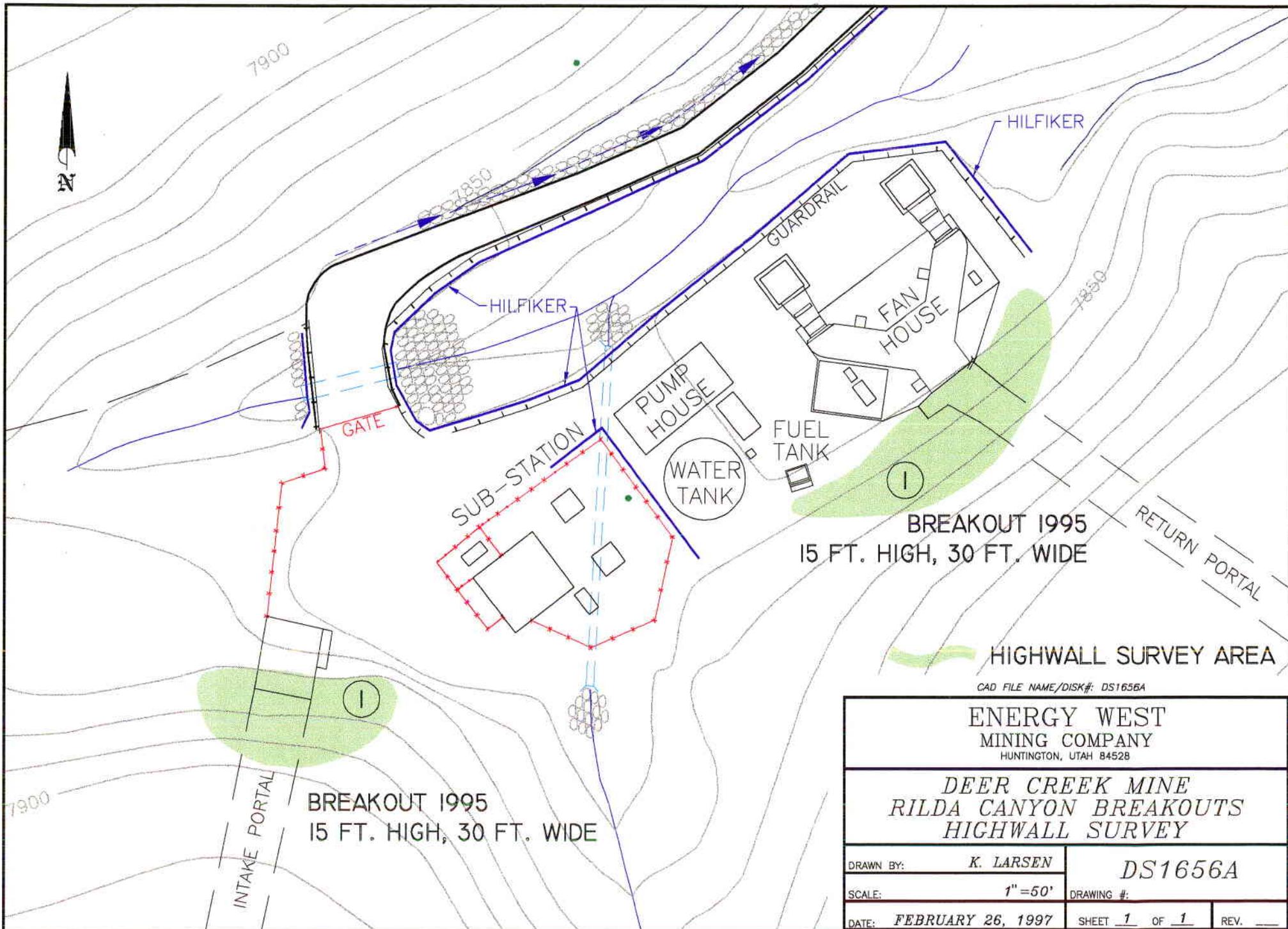
GRIMES WASH

Ⓒ

HIGHWALL SURVEY AREA

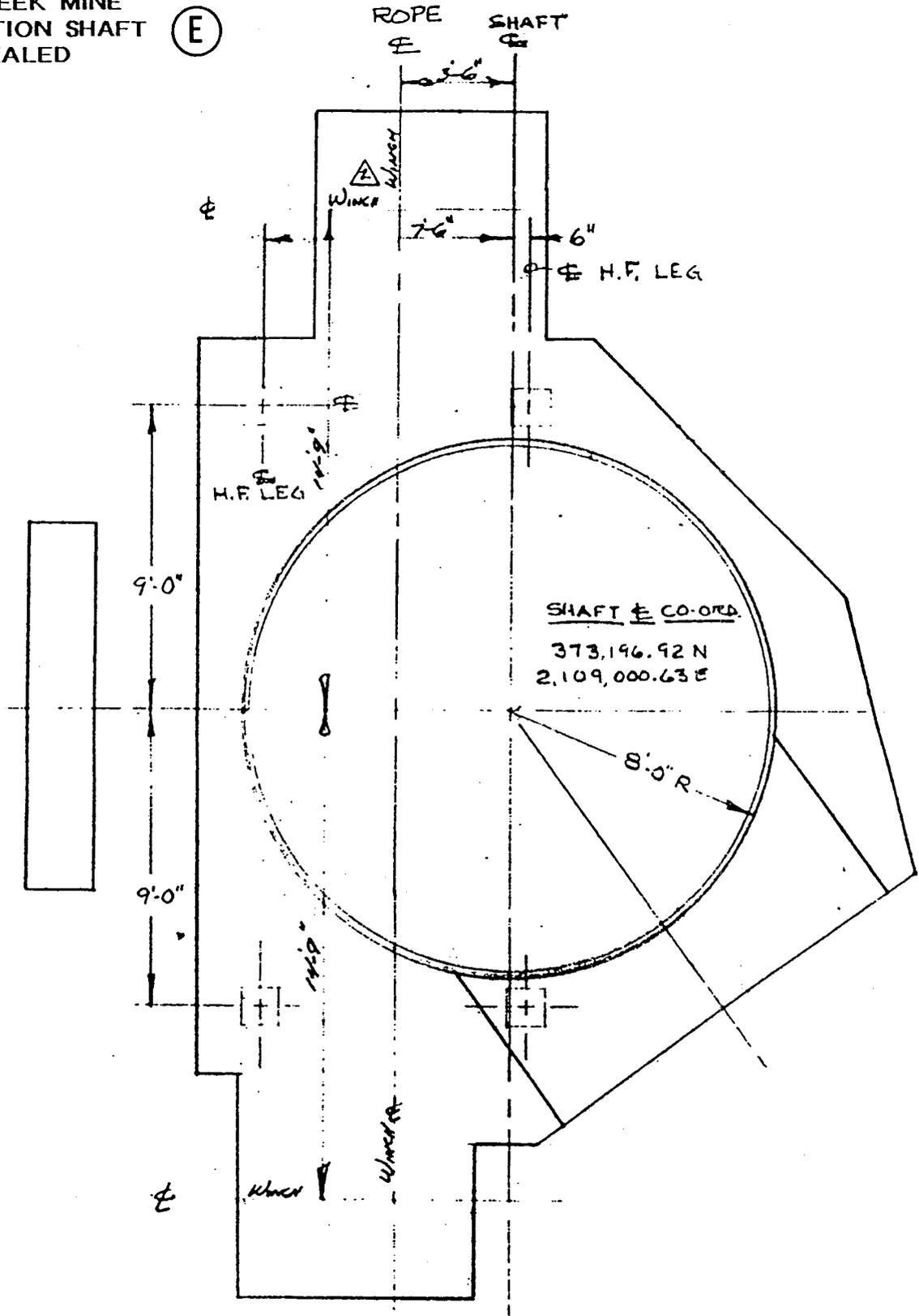
CAD FILE NAME/DISK#: DS1655A

ENERGY WEST MINING COMPANY HUNTINGTON, UTAH 84528		
<i>DEER CREEK MINE</i> <i>9TH EAST BREAKOUTS</i> <i>HIGHWALL SURVEY</i>		
DRAWN BY:	K. LARSEN	DS1655A
SCALE:	1" = 200'	
DATE:	FEBRUARY 26, 1997	SHEET 1 OF 1
		REV. ___



DEER CREEK MINE
VENTILATION SHAFT
TO BE SEALED

(E)



 CENTENNIAL DEVELOPMENT COMPANY MINING • CONTRACTING • ENGINEERING 3808 SOUTH WEST TEMPLE, SALT LAKE CITY, UTAH 84115		
SCALE: 1/4" = 1'	APPROVED BY:	DRAWN BY: J. W. [unclear]
DATE: 2 AUG 77		REVISED:
SITE PLAN		
UTAH POWER & LIGHT CO. DEER CREEK VENTILATION SHAFT		DRAWING NUMBER ECC-77-063

DOGM HIGHWALL SURVEY

February 28, 1997

MINE NAME Cottonwood/Wilberg

PERMIT NUMBER ACT/015/019

1. Identify each highwall used in connection with the mine and provide a description of its location and extent. (reference maps where highwall is shown) Note: See reference map for extents. Coal Seam is the Hiawatha

- A.- Wilberg Mine Fan--located on access road to Deer Creek 9th East portals. Hiawatha
- B.- Wilberg Fan Portal,- before '84 fire, portal now sealed and fan removed. same area.
- C.- Belt Portal in Wilberg-
- D.- Intake Portal Wilberg-
- E.- Underground offices-
- F.- Old Portals- shop area
- G.- Old Portals- behind water tank area.
- H.- Portals for Wilberg before fire.- Now sealed, North East of waterfall area.
- I. - Mine access tunnel to Cottonwood Mine Portals. Adjacent to waterfall, South
- J. - Cottonwood intake portals, . Pad area for storage and access.
- K.- Cottonwood Fan access tunnel - Southerly from the waterfall area.
- L.- Cottonwood Fan Portal - Hiawatha coal seam, south of the waterfall area.
- M.-Cottonwood Belt Portal - same seam, further to south of fan portal.
- N. -Cottonwood Canyon Portal, new openings for use to Trail Mtn. Mine. Diesel roadway.
- O.-Cottonwood Canyon Fan Portal Area. Belt Portal from Trail to Cottonwood, Tube Conveyor.
- P.- Cottonwood Canyon Fan Portal Faceoff- Reclamation in 1997. See attached drawing.
- Q.-Miller Canyon Breakouts
- R.-Channel Canyon Breakouts

2. Provide varification of highwall and adjacent cutslope creation dates. (At a minimum determine whether it was created before or after May 3, 1978.)

As indicated on the map areas A,C,D,F,G are Pre-1977, around the time of 1973 or earlier
Refer to documents enclosed for dates, old maps etc.

- B.-Wilberg Fan Portal broke out in 1978-79, Hiawatha seam height only, sealed in '85
- E.- Underground office areas having several openings, completed in 1975-76 era.
- H.- Wilberg breakouts May 1977, solid rock face above, only seam height.
- I.- Cottonwood Pad and intake access tunnels, drove in 1982-83 era. only seam height in Hiawatha seam.
- J.- Cottonwood Mine intake portals mined in 1982 and 1985. Seam height only, full rock

2. Continued

face above.

K.- Cottonwood Fan access tunnels, drove in 1982-83 era. Seam height only .

Some work on the highwall above, on the fan side of tunnel.

L.- Cottonwood Fan Portal drove out in 1984. Some loose rock removed from above.

M.-Cottonwood Mine Belt Portal, 4th East, drove out in 1984. Some rock removed from above.

N.- Cottonwood Canyon belt portal drove out in 1995. Some work above, not much.

O.- Cottonwood Canyon Diesel portal drove from the outside, in 1995. Some highwall above.

P.- Cottonwood Canyon Fan Faceoff- 1980,

Q.- Millers Canyon Breakouts 1981, already sealed, Hiawatha seam, no highwall is associated with opening.

R.- Channel Canyon Breakouts 1989, already sealed, Hiawatha seam, no highwall is associated with opening.

- 3.** Provide a reference to the Mining and Reclamation Plan (MRP) which discusses the final reclamation and elimination or retention of the identified highwalls. If no reference exists, state " none".

Refer to Vol. 2, Pg. 4-2, 4-3, of the permit.

Cottonwood Canyon Fan Portal Final Reclamation pg. 4-4.1, See fan portal face off, x-sections in packet 4-6, 4-7, of volume 6, of permit. attached map, 3-14, Fig. 1.

Reclamation Map

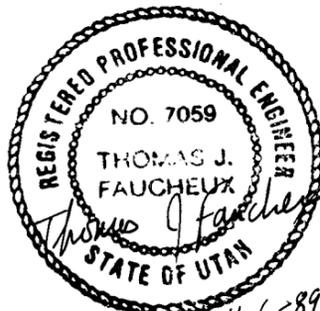
"None"

Areas of mine A through H, are Pre-1978 time frame, those from I through O are Post 1978,

FINAL RECLAMATION - MASS BALANCE

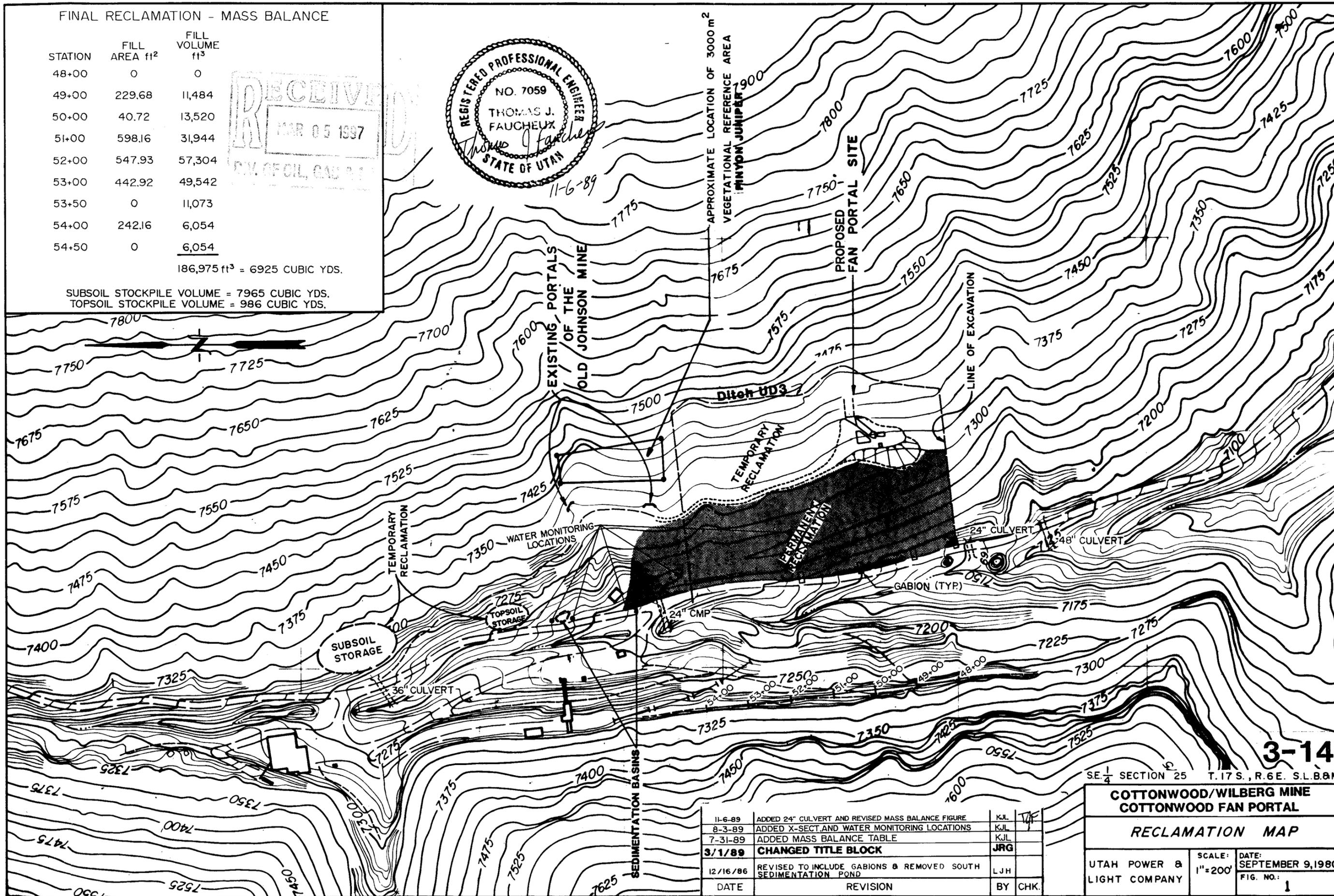
STATION	FILL AREA ft ²	FILL VOLUME ft ³
48+00	0	0
49+00	229.68	11,484
50+00	40.72	13,520
51+00	598.16	31,944
52+00	547.93	57,304
53+00	442.92	49,542
53+50	0	11,073
54+00	242.16	6,054
54+50	0	6,054

RECEIVED
MAR 05 1987
DIV. OF OIL, GAS & MINES



186,975 ft³ = 6925 CUBIC YDS.

SUBSOIL STOCKPILE VOLUME = 7965 CUBIC YDS.
TOPSOIL STOCKPILE VOLUME = 986 CUBIC YDS.



3-14

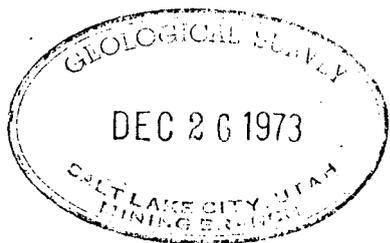
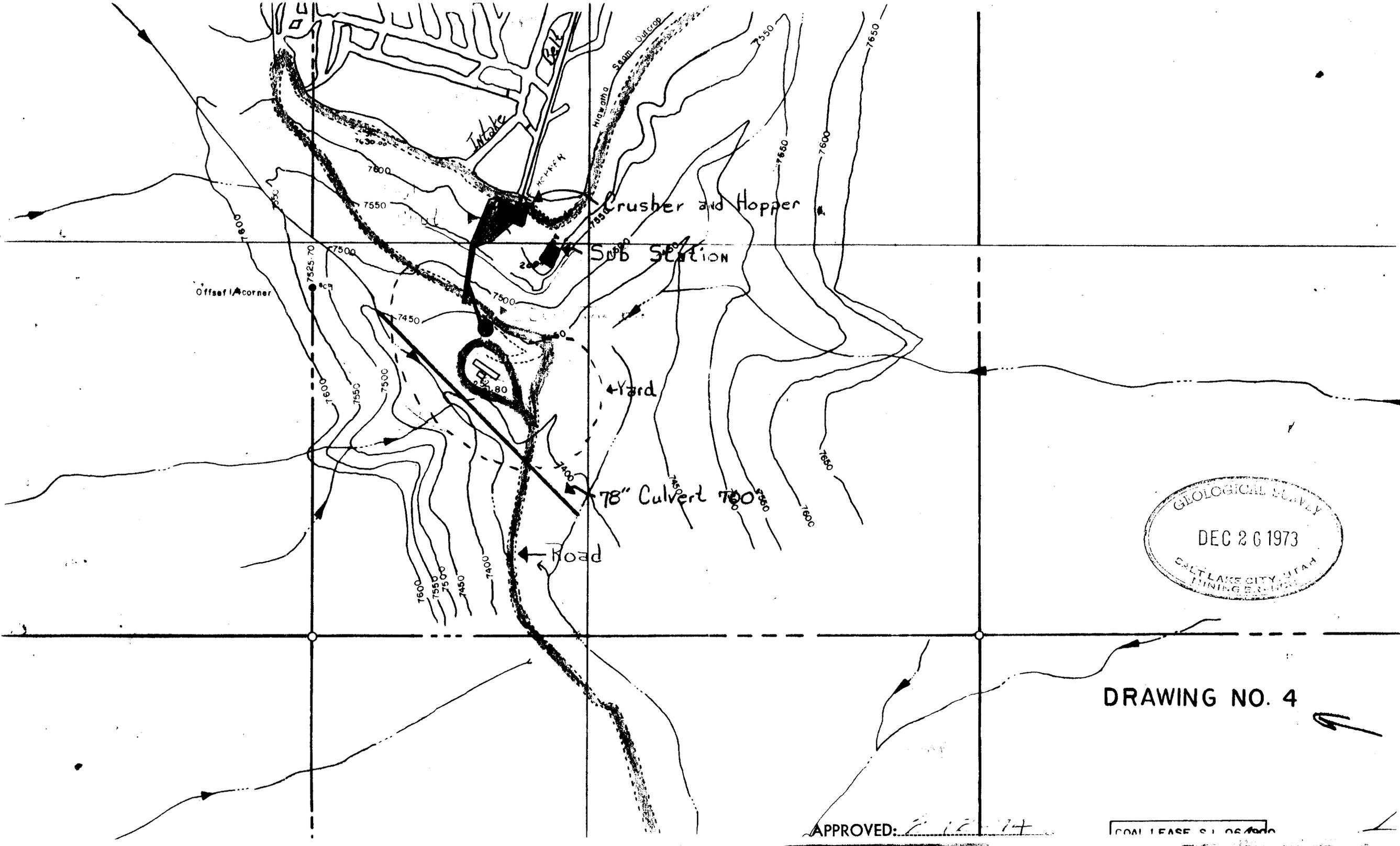
SE 1/4 SECTION 25 T.17 S., R.6 E. S.L.B.&M

COTTONWOOD/WILBERG MINE
COTTONWOOD FAN PORTAL

RECLAMATION MAP

UTAH POWER & LIGHT COMPANY	SCALE: 1"=200'	DATE: SEPTEMBER 9, 1980
		FIG. NO. 1

DATE	REVISION	BY	CHK.
11-6-89	ADDED 24" CULVERT AND REVISED MASS BALANCE FIGURE	KJL	JRG
8-3-89	ADDED X-SECT AND WATER MONITORING LOCATIONS	KJL	
7-31-89	ADDED MASS BALANCE TABLE	KJL	
3/1/89	CHANGED TITLE BLOCK	JRG	
12/16/86	REVISED TO INCLUDE GABIONS & REMOVED SOUTH SEDIMENTATION POND	LJH	



DRAWING NO. 4

APPROVED: [Signature]

COAL LEASE S. 1 OF 1000

PEABODY COAL COMPANY

SUBSIDIARY OF KENNECOTT COPPER CORPORATION

DEER CREEK MINE

BOX 588

HUNTINGTON, UTAH 84528

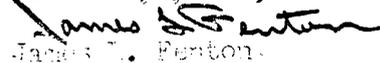
March 18, 1974

Mr. George McLaughlin
Forest Supervisor
U.S. Forest Service
Supervisors Office
350 East Main
Price, Utah 84501

Dear Mr. McLaughlin:

This letter is to inform you that we plan to start reopening the Wilberg Mine beginning the week of March 25, 1974. If there are any questions or problems feel free to contact me, so that they can be resolved.

Sincerely yours,



James T. Penton
Assistant Area Engineer

PEABODY COAL COMPANY

SUBSIDIARY OF KENNECOTT COPPER CORPORATION

DEER CREEK MINE

BOX 588

HUNTINGTON, UTAH 84528

March 18, 1974

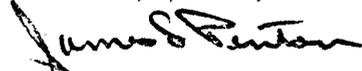
Mr. Jackson W. Moffitt
Office of the Area Mining Supervisor
Conservation Division
8426 Federal Building
125 South State Street
Salt Lake City, Utah 84143

Dear Mr. Moffitt:

This is to inform you that we will be starting work over at the Wilberg Mine the week of March 27, 1974. I have sent a letter stating this fact to the District Supervisor, L. Price also.

I would like to thank you for all the help you have given in helping us get the agreement to reopen the Wilberg Mine.

Sincerely yours,



James J. Pecton
Assistant Area Supervisor

PEABODY COAL COMPANY
INTER-COMPANY MEMORANDUM

TO: Mr. Sherwood Surrall

DATE: August 30, 1974

FROM: Jim Fenton

Re: Progress Report on the Wilberg Mine

The contract for the yard excavation and installation of the 78" diameter pipe was awarded. Work by the contractor commenced on July 10, 1974. The work was temporarily halted on August 7, 1974, due to the late arrival of the steel for the pipe. The pipe is now being fabricated and hopefully work can resume on its installation. The contractor has completed the upgrading of the access road, has the trench excavated for the pipe, hauled in the necessary fill to be placed around the pipe, and has 90% of the yard cut to grade. He has also completed the scaling down and blasting of the boulders which overhung the mine portals. The contractor has completed approximately 60% of the work.

A larger cattle guard has been placed in the main road to the mine, with Peabody supplying the cattle guard and the county supplying the labor and equipment.

The contract for the electrical work on the substation has been awarded, but no work has yet been started.

The 140 form for the outside structures and equipment has been made up and is awaiting the approved signatures. This work is being done by the Design Department.

All plans for the reopening that were submitted to MESA have been approved except the training and retraining plan. They had some questions about our starting date for the plan, and the qualifications of some of the instructors.

The mine is still sealed and no date has been set to break the seals.

Utah Power and Light has surveyed a preliminary route to pipe the mine discharge water from the Wilberg Mine to American Coal Company's Church Mine. At the present I do not know what size line they are planning to put in or when they expect to complete it.

