

BEAVER CREEK Coal Company

Post Office Box 1378
Price, Utah 84501
Telephone 801 637-5050



March 31, 1988

Mr. Lowell Braxton
Administrator
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

RECEIVED
MAR 31 1988
DIVISION OF OIL
GAS & MINING
PRICE, UTAH

RE: 1987 Annual Report
Huntington Canyon No.4 Mine
INA/015/004
Carbon County, Utah

Dear Mr. Braxton:

Enclosed is the Annual Report for Coal Mining and Reclamation Operations for 1987 for the Huntington Canyon No.4 Mine.

If you have any questions or need any further information, please let me know.

Respectfully,

Dan W. Guy,
Manager, Permitting & Compliance

DWG/cr

cc: Johnny Coffey
File 4-P-5-1-1

BEAVER CREEK COAL COMPANY
1987 ANNUAL REPORT
HUNTINGTON CANYON NO.4 MINE

[Revised January 1988]

COAL MINING AND RECLAMATION OPERATIONS FOR 1987
(Authority UMC 784)

(Must be submitted to the Division by March 31, 1988)

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
3 Triad Center, Suite 350
355 West North Temple
Salt Lake City, UT 84180-1203
(801) 538-5340

Operator: Beaver Creek Coal Company

Mine Name: Huntington Canyon No.4 Mine

Mailing Address: P.O. Box 1378, Price, Utah 84501

Company Representative: Dan W. Guy

Permit Number: INA/015/004

Date of Most Recent Permanent Program Permit: 4/16/85

Quantity of Coal Mined (tonnage) 1987: N/A (Mine Closed)

Attach Updated Mine Sequence Map. N/A

All monitoring activities during the report period must be submitted with this report (including, but not limited to):

- A. Summarized Water Monitoring Data (Included)
- B. Precipitation or Other Climatological Data (N/A)
- C. Subsidence Monitoring Report (Included)
- D. Vegetation Data (test plots) or Revegetation Success Monitoring (includes interim and final) (Included)
- E. Permit Stipulation Status (Included)

jr
1426R/1

CERTIFICATES OF INSURANCE

Revised November, 1987.

CERTIFICATE OF LIABILITY INSURANCE

Issued to:
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
--oo00oo--

THIS IS TO CERTIFY THAT:

Insurance Company of North America

(Name of Insurance Company)

1600 Arch Street, Philadelphia, PA 19101

(Home Office Address of Insurance Company)

HAS ISSUED TO:

BEAVER CREEK COAL CO.

(Name of Permit Applicant)

HUNTINGTON CANYON No.4 MINE

(Mine Name)

INA/015/004

(Permit Number)

CERTIFICATE OF INSURANCE:

HDO GO 969065-7

(Policy Number)

1-1-88

(Effective Date)

UNDER THE FOLLOWING TERMS AND CONDITIONS:

As Per UMC/SMC Part 800.60 Terms and Conditions for Liability Insurance;

- A. The Division shall require the applicant to submit as part of its permit application a certificate issued by an insurance company authorized to do business in the state of Utah certifying that the applicant has a public liability insurance policy in force for the surface coal mining and reclamation operations for which the permit is sought. Such policy shall provide for personal injury and property damage protection in an amount adequate to compensate any persons injured or property damaged as a result of the surface coal mining and reclamation operations, including the use of explosives and who are entitled to compensation under the applicable provisions of state law. Minimum insurance coverage for bodily injury and property damage shall be \$300,000 for each occurrence and \$500,000 aggregate.
- B. The policy shall be maintained in full force during the life of the permit or any renewal thereof, including the liability period necessary to complete all reclamation operations under this chapter.

CERTIFICATE OF LIABILITY INSURANCE

C. The policy shall include a rider requiring that the insurer notify the Division whenever substantive changes are made in the policy including any termination or failure to renew.

IN ACCORDANCE WITH THE ABOVE TERMS AND CONDITIONS, and the Utah Code Annotated 40-10-1 et seq., the Insurance Company hereby attests to the fact that coverage for said Permit Applicant is in accordance with the requirements of the State of Utah and agrees to notify the Division of Oil, Gas and Mining in writing of any substantive change, including cancellation, failure to renew, or other material change. No change shall be effective until at least thirty (30) days after such notice is received by the Division.

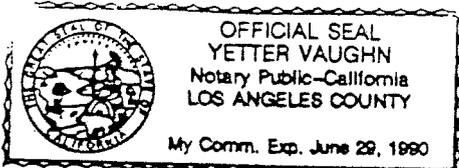
UNDERWRITING AGENT:

<u>M. J. Morehouse</u> (Agent's Name)	<u>213-739-4630</u> (Phone)
<u>Insurance Company of North America</u> (Company Name)	
<u>3333 Wilshire Blvd</u> (Mailing Address)	<u>Los Angeles, CA 90010</u> (City, State, Zip Code)

The undersigned affirms that the above information is true and complete to the best of his or her knowlege and belief, and that he or she is an authorized representative of the above-named insurance company.

1-27-88 M.J. Morehouse - Account Manager
(Date, Signature and Title of Authorized Agent of Insurance Company)

Signed and sworn before me by M. J. MOREHOUSE
(Name)
this 27th day of JANUARY, 1988.



Yetter Vaughn
(Signature)

June 29, 1990
(Date)

My Commission Expires:



September 24, 1986

Mr. Robert H. Hagen, Director
Office of Surface Mining
Albuquerque Field Office
219 Central Avenue, N.W.
Albuquerque, New Mexico 87102

Dear Mr. Hagen:

Re: Documentation for Huntington #4 Bond Release, Huntington #4, Beaver Creek Coal Company, INA/015/004, Folder #5, Emery County, Utah

Enclosed are copies of the documentation you requested regarding the Huntington #4 Mine Phase I bond release in your letter dated July 24, 1986. The Forest Service concerns regarding the berm along the access road have been addressed by Beaver Creek (phone call to Ira Hatch, 9-17-86).

The Division and the Office of Surface Mining approved new bonding requirements for coal mining and reclamation operations (effective December 3, 1985). The section UMC 800.40, entitled "Requirements to Release Performance Bonds" contains the specific requirements for bond release rather than UMC 807.11 and 807.12 as referred to on page 2 of your letter.

The Division documentation attached addressing the requirements of UMC 800.40 includes the following:

1. Letters sent by Beaver Creek Coal Company as required by UMC 800.40(A)(2).
2. The proof of publication and dates of publication as required by UMC 800.40(A)(2).
3. The resolution of public comments (USFS letter). (Beaver Creek Coal Company has addressed the road concerns of the U.S.F.S. and removed the berms).
4. The discussion of the bond release inspection and notification of the surface owners to participate in the inspection (UMC 800.40(B)(1)).
5. The Division's inspection and decision based upon the requirements of UMC 800.40(B)(1).

Page 2

Robert H. Hagen

INA/015/004 #5

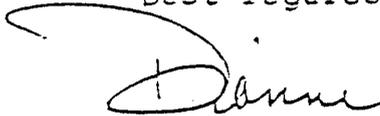
September 24, 1986

6. The Division's letter (sent Certified Mail) to notify the municipality in which the surface coal mining operation is located, of the bond release [UMC 800.40(E)] [UMC 800.40(B)(2)].

The Division hereby finds that the conditions needed for Phase I bond release have been met. Please provide your formal concurrence with this action. The Division will then notify Beaver Creek Coal Company and the Federal Insurance Company of the decision to release 60 percent of the bond or \$216,062.40 [UMC 800.40(B)(2)].

If you have any questions about the documentation for this bond release, please let me know. Thank you.

Best regards,



Dianne R. Nielson
Director

Enclosure(s)

PGL/djh

cc: D. Guy, BCCC

K. May

L. Braxton

J. Whitehead

P. Grubaugh-Littig

8808R/15



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangert, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

November 10, 1986

Mr. Dan Guy, Manager
Permitting & Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

Dan

Dear Mr. Guy:

Re: Phase I Bond Release, Beaver Creek Coal Company,
Huntington #4 Mine, INA/015/004, Folder #5, Emery County,
Utah

The Division hereby approves the Phase I bond release of \$216,062.40, or 60 percent of the bond for the Huntington #4 Mine. This bond release is effective as of November 10, 1986.

Thank you for your cooperation.

Best regards,

Lowell P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program

PGL/djh
cc: P. Grubaugh-Littig
J. Whitehead
8808R/8



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Sangster, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

255 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

November 10, 1986

Ms. Mary Cristaudo
Bonding Representative
Grant Hatch & Associates, Inc.
P. O. Box 11809
Salt Lake City, Utah 84147

Dear Ms. Cristaudo:

Re: Phase I Bond Release, Beaver Creek Coal Company,
Huntington #4 Mine, INA/015/004, Folder #5, Emery County,
Utah

The Division hereby approves the Phase I bond release of \$216,062.40, or 60 percent of the bond for the Huntington #4 Mine. This bond release is effective as of November 10, 1986.

Thank you for your cooperation.

Best regards,

A handwritten signature in cursive script that reads "Lowell P. Braxton".

Lowell P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program

PGL/djh
cc: D. Guy, BCCC
P. Grubaugh-Littig
J. Whitehead
8808R/9



Date: December 9, 1986

Subject: Bond No. 8082-89-88
State of Utah

From/Location: Myrna L. Cooke AP 4175

To/Location: Dan W. Guy Beaver Creek Coal

As we discussed, enclosed are two Riders decreasing the amount of the captioned bond, one of which must be signed by the Obligee and returned to Chubb in the enclosed envelope.

Both copies must be signed by Beaver Creek prior to submitting to the State.

MLC:cs/mguy
Enclosures

Sent to Dan Little
of D&M for
signature - 12/29/86.



FEDERAL INSURANCE COMPANY

RIDER to be attached to and form a part of Reclamation Performance Bond No. 8082-89-88 wherein FEDERAL INSURANCE COMPANY is named as Surety, on behalf of Beaver Creek Coal Company as Principal, in favor of

The State of Utah, Division of Oil, Gas and Mining, and the in the sum of Three Hundred Sixty Thousand, One Hundred Four and No/100 dated 3/25/85 effective 3/25/85 (\$360,104.00). Dollars

Department of the Interior, Office of Surface Mining

IT IS HEREBY UNDERSTOOD AND AGREED that effective the 10th day of November, 1986 the penalty of this bond is decreased from Three Hundred Sixty Thousand, One Hundred Four and NO/100 Dollars (\$360,104.00) to One Hundred Forty Four Thousand Forty One and 60/100 Dollars (\$144,041.60) to losses occurring after the 10th day of November, 1986

Provided, however, that the liability of the Principal and Surety hereon shall not be cumulative or in any event exceed the larger amount referred to herein.

The attached bond shall be subject to all its agreements, limitations and conditions except as herein expressly modified.

Signed, sealed and dated this 1st day of December 1986

Beaver Creek Coal Company By: [Signature] President (Principal)

Federal Insurance Company By: [Signature] Frank E. Robertson, Attorney-in-Fact

ACCEPTED The State of Utah, Division of Oil, Gas and Mining, and the U.S. Department of the Interior, Office of Surface Mining By: (Copies)

STATE OF CALIFORNIA

COUNTY OF Los Angeles

} ss:

On this 1st day of December in the year Nineteen Hundred Eighty Six

before me, Norma A. Raygoza, a Notary Public, State of California, duly commissioned and sworn, personally appeared Frank E. Robertson

personally known to me (or proved to me on the basis of satisfactory evidence) to be the Attorney-in-Fact of the corporation that

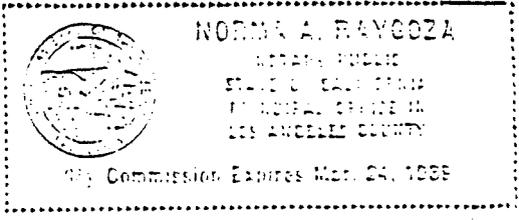
executed the within instrument, and also known to me to be the person who executed the within instrument on behalf of the corporation therein named, and acknowledged to me that such corporation executed the same. Federal Insurance Company

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the State of California County of Los Angeles

_____ on the date set forth above in this certificate.

Norma A. Raygoza
Notary Public, State of California

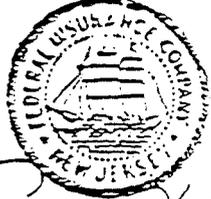
My commission expires March 24, 1989

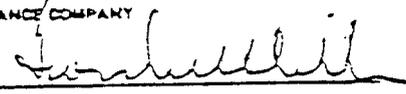


Know all Men by these Presents, that the FEDERAL INSURANCE COMPANY, Inc. has constituted and appointed, and does hereby constitute and appoint Frank E. Robertson, E.J. Nielsen, Paul Wickersham, William Mitchell, Patrick F. Evans and Norma A. Raygoza of Los Angeles, California

as its true and lawful Attorney-in-Fact to execute under such designation in its name and to affix its corporate seal to and deliver for and on its behalf as a surety thereon or otherwise, bonds or obligations given or executed in the course of its business, and any instruments amending or altering the same, and consents to the modification or alteration of any instruments referred to in said bonds or obligations.

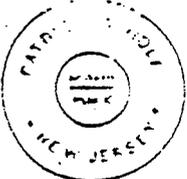
In Witness Whereof, the said FEDERAL INSURANCE COMPANY has, pursuant to its By-Laws, caused these presents to be signed by its Assistant Vice-President and Assistant Secretary and its corporate seal to be hereunto affixed this 10th day of July 19 85

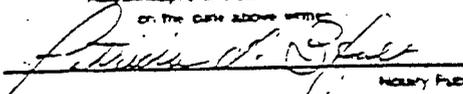
Corporate Seal:

Richard D. O'Connor
Assistant Secretary

FEDERAL INSURANCE COMPANY
By: 
George McClellan
Assistant Vice-President

STATE OF NEW JERSEY }
County of Somerset: } SS.

On this 10th day of July 19 85, before me personally came Richard D. O'Connor to me known and by me known to be Assistant Secretary of the FEDERAL INSURANCE COMPANY, the corporation described in and which executed the foregoing Power of Attorney, and the said Richard D. O'Connor being by me duly sworn, did depose and say that he is Assistant Secretary of said FEDERAL INSURANCE COMPANY and knows the corporate seal thereof; that the seal affixed to the foregoing Power of Attorney is such corporate seal and was thereunto affixed by authority of the Board of Directors of said Company, and that he signed said Power of Attorney as Assistant Secretary of said Company by his authority, and that he is acquainted with George McClellan and knows him to be the Assistant Vice-President of said Company, and that the signature of said George McClellan subscribed to said Power of Attorney is in the genuine handwriting of said George McClellan and was thereunto subscribed by authority of said Board of Directors and in his presence

Notarial Seal:


Acknowledged and sworn to before me
on the date above written:

Notary Public

CERTIFICATION
PATRICIA A. HOLT
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires March 14, 1990

STATE OF NEW JERSEY }
County of Somerset: } SS.

I, the undersigned, Assistant Secretary of the FEDERAL INSURANCE COMPANY, do hereby certify that the following is a true excerpt from the By-Laws of the said Company as adopted by its Board of Directors on March 11, 1953 and most recently amended March 11, 1953 and that this By-Law is in full force and effect.

ARTICLE XVIII.

Section 2. All bonds, underwritings, contracts and other instruments other than as above for and on behalf of the Company which it is authorized by law or its charter to execute, may and shall be executed in the name and on behalf of the Company either by the Chairman or the Vice-Chairman or the President or a Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations, except that any one or more officers or authorized designations in any resolution of the Board of Directors or the Executive Committee, with any power of attorney executed as provided for in Section 3 below, may execute any such bond, underwriting or other obligation as provided in such resolution or power of attorney.

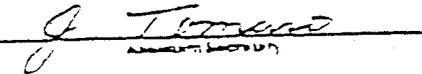
Section 3. All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the Vice-Chairman or the President or a Vice-President or an Assistant Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or intaglio.

I further certify that said FEDERAL INSURANCE COMPANY is duly licensed to transact fidelity and surety business in each of the States of the United States of America, District of Columbia, Puerto Rico, and each of the Provinces of Canada with the exception of Prince Edward Island, and is and duly licensed to become surety on bonds, underwritings, etc., permitted or required by law.

I, the undersigned Assistant Secretary of FEDERAL INSURANCE COMPANY, do hereby certify that the foregoing Power of Attorney is in full force and effect.

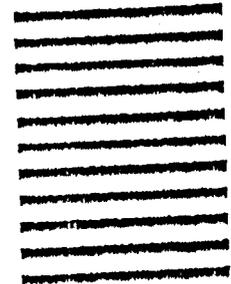
I do hereby certify that the foregoing Power of Attorney is in full force and effect.
Witness my hand and the seal of said Company at Walling, N.J., this 1st day of December 19 86

Corporate Seal:



Assistant Secretary



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 1097 PLAINFIELD, NJ
POSTAGE WILL BE PAID BY ADDRESSEE

CHUBB GROUP OF INSURANCE COMPANIES
3200 WILSHIRE BOULEVARD
LOS ANGELES, CALIFORNIA 90010-9990

LORENA RAYGONZA
SECURITY DEPT.

11V 7051A



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangertel, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

170 North Temple - 3700 Center - Suite 350 - Salt Lake City, UT 84180-1203 - 801-538-5340

January 2, 1987

Mr. Dan Guy, Manager
Permitting & Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

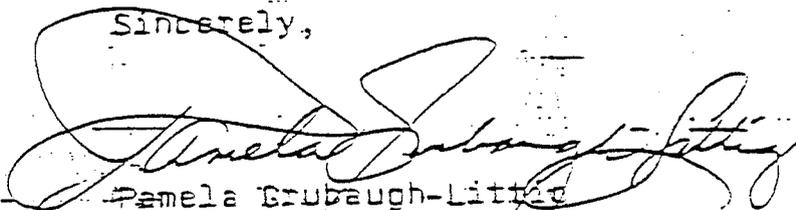
Dear Mr. Guy:

Re: Rider to Bond #8082-89-88, Huntington #4, Beaver
Creek Coal Company, INA/015/004, Folder #5, Emery
County, Utah

Attached is a copy of the rider to bond
#8082-89-88 for your files.

Thank you again for your cooperation.

Sincerely,


Pamela Grubaugh-Littig
Reclamation Engineer

djh
Attachment
cc: J. Whitehead
8808R/5



RECEIVED
DEC 31 1986

FEDERAL INSURANCE COMPANY

DIVISION OF
OIL GAS & MINING

RIDER to be attached to and form a part of Reclamation Performance
Bond No. 8082-89-88 wherein
FEDERAL INSURANCE COMPANY
is named as Surety, on behalf of
Beaver Creek Coal Company
as Principal, in favor of

U.S. Department of the Interior, Office of Surface Mining

The State of Utah, Division of Oil, Gas and Mining, and the
in the sum of Three Hundred Sixty Thousand, One Hundred Four and No/100
dated 3/25/85 effective 3/25/85 (\$360,104.00) Dollars

IT IS HEREBY UNDERSTOOD AND AGREED that effective the 10th day of November, 1986
the penalty of this bond is decreased
from Three Hundred Sixty Thousand, One Hundred Four and NO/100 Dollars (\$360,104.00)
to One Hundred Forty Four Thousand Forty One and 60/100 Dollars (\$144,041.60)
as to losses occurring after the 10th day of November, 1986

Provided, however, that the liability of the Principal and Surety hereon shall not be cumulative or in any event
exceed the larger amount referred to herein.

The attached bond shall be subject to all its agreements, limitations and conditions except as herein expressly
modified.

Signed, sealed and dated this 1st day of December, 1986

Beaver Creek Coal Company
By: *Joseph Herickhoff*, President
(Principal)

Federal Insurance Company
By: *Frank E. Robertson*
Frank E. Robertson, Attorney-in-Fact

ACCEPTED The State of Utah, Division of Oil, Gas and Mining, and the U.S. Department of the Interior, Office of Surface Mining

By: *Debra R. Nelson*, Director, Utah Division of Oil, Gas and Mining
12-31-86

RECEIVED
DEC 31 1986

DIVISION OF
OIL, GAS & MINING

STATE OF CALIFORNIA

COUNTY OF Los Angeles

} ss:

On this 1st day of December in the year Nineteen Hundred Eighty Six

before me, Norma A. Rzygoza, a Notary Public, State

of California, duly commissioned and sworn, personally appeared Frank E. Robertson

personally known to me (or proved to me on the basis of satisfactory evidence) to be the Attorney-in-Fact

of the corporation that executed the within instrument, and also known to me to be the person

who executed the within instrument on behalf of the corporation therein named, and acknowledged

it that such corporation executed the same. Federal Insurance Company

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal in the

State of California County of Los Angeles

_____ on the date set forth above in this certificate.

Norma A. Rzygoza
Notary Public, State of California

My commission expires March 24, 1989

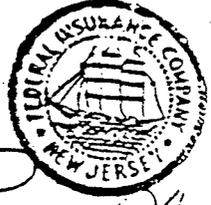
 NORMA A. RAYGOZA
NOTARY PUBLIC
STATE OF CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY
My Commission Expires Mar. 24, 1989

ATTORNEY

... and appointed, and does hereby constitute and appoint Frank E. Robertson, E.J. Nielsen, Paul Wickersham, William F. Mitchell, Patrick F. Evans and Norma A. Raygoza of Los Angeles, California

in its true and lawful Attorney-in-Fact to execute under such designation in its name and to affix its corporate seal to and deliver for and on its behalf as any thereon or otherwise, bonds or obligations given or executed in the course of its business, and any instruments amending or altering the same, and consents to the modification or alteration of any instruments referred to in said bonds or obligations.

In Witness Whereof, the said FEDERAL INSURANCE COMPANY has, pursuant to its By-Laws, caused these presents to be signed by its Assistant Vice-President and Assistant Secretary and its corporate seal to be hereunto affixed this 10th day of July 19 85



Richard D. O'Connor Assistant Secretary

FEDERAL INSURANCE COMPANY By George McClellan Assistant Vice-President

NEW JERSEY of Somerset } SS.

10th day of July 19 85 before the personally came Richard D. O'Connor to me known and by me known to be Assistant Secretary of the FEDERAL INSURANCE COMPANY, the corporation described in and which executed the foregoing Power of Attorney, and the said Richard D. O'Connor being by the duly sworn, did depose and say that he is Assistant Secretary of the FEDERAL INSURANCE COMPANY and knows the corporate seal thereof; that the seal affixed to the foregoing Power of Attorney is such corporate seal and was thereunto affixed by authority of the By-Laws of said Company, and that he signed said Power of Attorney as Assistant Secretary of said Company by law authority; and that he is acquainted with George McClellan and knows him to be the Assistant Vice-President of said Company and that the signature of said George McClellan subscribed to said Power of Attorney is in the genuine handwriting of said George McClellan and was thereunto subscribed by authority of said Company in his presence.



NEW JERSEY of Somerset } SS.

Acknowledged and Sworn to before me on the date above written Patricia A. Holt Notary Public

CERTIFICATION

PATRICIA A. HOLT NOTARY PUBLIC OF NEW JERSEY My Commission Expires March 14, 1990

Richard D. O'Connor, Assistant Secretary of the FEDERAL INSURANCE COMPANY, do hereby certify that the following is a true excerpt from the By-Laws of the said Company as adopted by its Board of Directors and most recently amended March 11, 1983 and that the By-Law is in full force and effect.

"ARTICLE XVIII.

Section 2. All bonds, underwritings, contracts and other instruments other than as above for and on behalf of the Company which it is authorized by law or its charter to execute, may be executed in the name and on behalf of the Company either by the Chairman or the Vice-Chairman or the President or a Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations, except that any one or more officers or attorneys-in-fact designated in any resolution of the Board of Directors or the Executive Committee, jointly with the Secretary or an Assistant Secretary, may execute any such bond, underwriting or other obligation as provided in such resolution or power of attorney. The signature of such officers may be engraved, printed or typed.

Section 3. All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the Vice-Chairman or the President or a Vice-President or an Assistant Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or typed.

I, said FEDERAL INSURANCE COMPANY is duly licensed to transact honest and surety business in each of the States of the United States of America, District of Columbia, Puerto Rico and each of the Territories and Possessions of the United States of America, and is also duly licensed to become surety on bonds, underwritings, etc., permitted or required by law.

Richard D. O'Connor, Assistant Secretary of FEDERAL INSURANCE COMPANY, do hereby certify that the foregoing Power of Attorney is in full force and effect. 10 and the seal of said Company at Warren, N.J., this 1st day of December 19 86



J. Thomas Assistant Secretary

United States
Department of
Agriculture

Forest
Service

Manti-LaSal
National Forest

599 West Price River Drive
Price, Utah 84501

Reply to: 2820

Date: January 20, 1987

Mr. Lowell Braxton
State of Utah Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Mr. Braxton:

Beaver Creek Coal Company has successfully completed road narrowing and maintenance work on Forest Development Road #50245 in Mill Fork Canyon as required by the Forest under the Road Use Permit issued on September 9, 1982. All terms and conditions of the permit are now in compliance except for successful reestablishment of vegetation in the disturbed areas.

We recommend that a sufficient portion of Beaver Creek Coal Company's mine bond be retained pending successful reestablishment of vegetation on the four acres of disturbance associated with the partial road reclamation.

Sincerely,

/s/ William H. Boley

for
REED C. CHRISTENSEN
Forest Supervisor

cc: R.Holbrook - OSM, Beaver Creek Coal Co., D-3

Reply to: 2820 Leases and Permits
7730 Transportation System

Date: October 30, 1986

Subject: Transmittal of Contract Daily Diaries and District
Recommendations, Mill Fork Road - Beaver Creek Coal Co.

To: Forest Supervisor

Beaver Creek Coal Company has successfully completed the required work for their road narrowing and maintenance project in Mill Fork Canyon. Inspections were conducted on 9/5/86, 9/10/86 and 10/10/86 for compliance with the terms of the Road Use Permit issued 9/1/82 (see attached Contract Daily Diaries). All of the terms of the permit are now in compliance except for successful reestablishment of vegetation on disturbed areas. This will take some time to accomplish.

Pursuant to your letter of 12/20/85 (see attached), I recommend that the permit be terminated and the file closed. No bond was required for the subject permit. DOGM/OSM should be informed of Forest Service acceptance of Beaver Creek's work. I recommend that DOGM/OSM hold a sufficient portion of Beaver Creek's mine bond pending successful reestablishment of vegetation on the four acres of disturbance associated with the partial road reclamation.

Contact Walt Nowak or myself if any questions or problems arise on this matter.

/s/ Ira W. Hatch

IRA W. HATCH
District Ranger

cc: Beaver Creek Coal Company

(Revised December 1984)

Bond Number 8082-89-88Permit Number ACT/015/004Mine Name Huntington Cyn. #4 Mine

STATE OF UTAH
 DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF OIL, GAS AND MINING
 355 West North Temple
 3 Triad Center, Suite 350
 Salt Lake City, Utah 84180-1203
 (801) 538-5340

THE MINED LANDS RECLAMATION ACT

BOND

The undersigned Beaver Creek Coal Company as principal, and Federal Insurance Company as surety, hereby jointly and severally bind ourselves, our heirs, administrators, executors, successors and assigns unto the State of Utah, Division of Oil, Gas and Mining, and the U. S. Department of the Interior, Office of Surface Mining in the penal sum of Three Hundred Sixty Thousand, One Hundred Four dollars (\$ 360,104.00). Such sum shall be payable to one, but not both, of the above-named agencies.

The principal estimated in the Mining and Reclamation Plan filed with the Division of Oil, Gas and Mining on the 20th day of June, 19 83; that 12.5 acres of land will be disturbed by this mining operation in the State of Utah. A description of the disturbed land is attached hereto as Exhibit "A."

When the Division has determined that the principal has satisfactorily reclaimed the above-mentioned lands affected by mining in accordance with the approved Mining and Reclamation Plan and has faithfully performed all requirements of the Mined Land Reclamation Act, and complied with the Rules and Regulations adopted in accordance therewith, then this obligation shall be void; otherwise it shall remain in full force and effect until the reclamation is completed as outlined in the approved Mining and Reclamation Plan.

If the approved plan provides for reclamation of the land affected on a piecemeal or cyclic basis, and the land is reclaimed in accordance with such plan, then this bond may be reduced periodically.

In the converse, if the plan provides for a gradual increase in the area of the land affected or increased reclamation work, then this bond may accordingly be increased with the written approval of the surety company.

The Division shall only accept the bond of a surety company if the bond is noncancellable by the surety at any time for any reason including, but not limited to nonpayment of premium or bankruptcy of the permittee during the period of liability.

NOTE: Where one signs by virtue of Power of Attorney for a surety company, such Power of Attorney must be filed with this bond. If the principal is a corporation, the bond shall be executed by its duly authorized officers with the seal of the corporation affixed.

Beaver Creek Coal Company
Principal (Company)

By J.A. Herickhoff
Company Official - Position
J.A. Herickhoff
General Manager

DATE: March 25, 1985

FEDERAL INSURANCE COMPANY
Surety (Company)

By Norman D. Squires
Official of Surety - Position
Norman D. Squires, Attorney-in-Fact
447 East First South
Salt Lake City, Utah 84111

DATE: March 25, 1985

APPROVED AS TO FORM:

By _____
Assistant Attorney General

AFFIDAVIT OF QUALIFICATION

Norman D. Squires, being first duly sworn, on oath deposes and says that she is the (officer of agency) Attorney-in-Fact of said Company, and that she is duly authorized to execute and deliver the foregoing obligations; that said Company is authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations.

(Signed) *Norman D. Squires*
Norman D. Squires

Subscribed and sworn to before me this 25th day of March, 1985.

Mary Cristando
NOTARY PUBLIC

My Commission Expires:
July 4, 1987.

POWER OF ATTORNEY

Know all Men by these Presents, That the FEDERAL INSURANCE COMPANY, 15 Mountain View Road, Warren, New Jersey, a New Jersey Corporation has constituted and appointed, and does hereby constitute and appoint Norman D. Squires, Richard G. Taylor and George L. Williams, Salt Lake City, Utah

true and lawful Attorney-in-Fact to execute under such designation in its name and to affix its corporate seal to and deliver for and on its behalf as agent or otherwise, bonds of any of the following classes, to-wit:

1. bonds and Undertakings filed in any suit, matter or proceeding in any Court, or filed with any Sheriff or Magistrate, for the doing or not doing of anything specified in such Bond or Undertaking.
2. Surety bonds to the United States of America or any agency thereof, including those required or permitted under the laws or regulations relating to Customs or Internal Revenue; License and Permit Bonds or other indemnity bonds under the laws, ordinances or regulations of any State, City, Town, Village, Board or other body or organization, public or private; bonds to Transportation Companies, Lost Instrument bonds; Lease bonds, Workers' Compensation bonds, Miscellaneous Surety bonds and bonds on behalf of Notaries Public, Sheriffs, Deputy Sheriffs and similar public officials.
3. Bonds on behalf of contractors in connection with bids, proposals or contracts.

In Witness Whereof, the said FEDERAL INSURANCE COMPANY has, pursuant to its By-Laws, caused these presents to be signed by its Assistant Vice-President and Assistant Secretary and its corporate seal to be hereto affixed this 12th day of December 19 83

Corporate Seal:



Richard D. O'Connor
Richard D. O'Connor
Assistant Secretary

FEDERAL INSURANCE COMPANY

By

George McClellan
George McClellan
Assistant Vice-President

STATE OF NEW JERSEY
County of Somerset

SS.

On this 12th day of December 19 83, before me personally came Richard D. O'Connor to me known and by me known to be Assistant Secretary of the FEDERAL INSURANCE COMPANY, the corporation described in and which executed the foregoing Power of Attorney, and the said Richard D. O'Connor being by me duly sworn, did depose and say that he is Assistant Secretary of the FEDERAL INSURANCE COMPANY and knows the corporate seal thereof; that the seal affixed to the foregoing Power of Attorney is such corporate seal and was thereto affixed by authority of the By-Laws of said Company, and that he signed said Power of Attorney as Assistant Secretary of said Company by like authority; and that he is acquainted with George McClellan and knows him to be the Assistant Vice-President of said Company, and that the signature of said George McClellan subscribed to said Power of Attorney is in the genuine handwriting of said George McClellan and was thereto subscribed by authority of said By-Laws and in deponent's presence.

Notarial Seal:



STATE OF NEW JERSEY
County of Somerset

SS.

Acknowledged and Sworn to before me
on the date above written.

Alice Leonard
Alice Leonard
Notary Public

CERTIFICATION

ALICE LEONARD
NOTARY PUBLIC OF NEW JERSEY,
My Commission Expires June 28, 1988

The undersigned, Assistant Secretary of the FEDERAL INSURANCE COMPANY, do hereby certify that the following is a true excerpt from the By-Laws of the said Company as adopted by its Board of Directors on March 11, 1953 and most recently amended March 11, 1963 and that this By-Law is in full force and effect.

"ARTICLE XVIII

Section 2. All bonds, undertakings, contracts and other instruments other than as above for and on behalf of the Company which it is authorized by law or its charter to execute, may and shall be executed in the name and on behalf of the Company either by the Chairman or the Vice-Chairman or the President or a Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations, except that any one or more officers or attorneys-in-fact designated in any resolution of the Board of Directors or the Executive Committee, or in any power of attorney executed as provided for in Section 3 below, may execute any such bond, undertaking or other obligation as provided in such resolution or power of attorney.

Section 3. All powers of attorney for and on behalf of the Company may and shall be executed in the name and on behalf of the Company, either by the Chairman or the Vice-Chairman or the President or a Vice-President or an Assistant Vice-President, jointly with the Secretary or an Assistant Secretary, under their respective designations. The signature of such officers may be engraved, printed or lithographed.

Further certify that said FEDERAL INSURANCE COMPANY is duly licensed to transact fidelity and surety business in each of the States of the United States of America, District of Columbia, Puerto Rico, and each of the Provinces of Canada with the exception of Prince Edward Island, and is also duly licensed to become sole surety on bonds, undertakings, etc., permitted or required by law.

The undersigned Assistant Secretary of FEDERAL INSURANCE COMPANY, do hereby certify that the foregoing Power of Attorney is in full force and effect.

Witnessing and the seal of said Company at Warren, N.J., this 25th day of March 19 85

Corporate Seal:



George L. Williams
George L. Williams
Assistant Secretary

1987

WATER MONITORING DATA

Property: #4 Mine
 Location: Little Bear
 Type: Spring
 Frequency: Monthly - Bi-annually

Field Measurements	Date Sampled										Mean
Flow	SEE ATTACHED SHEET										

Laboratory Measurements [mg/l]	Date Sampled		Mean
	6/30/87	8/24/87	
Total Suspended Solids	NA	2	2
Total Dissolved Solids		315	315
Total Hardness [as CaCO ₃]		319	319
Acidity [CaCO ₃]		281	281
Carbonate [CO ₃ ⁻²]		0	0
Bicarbonate [HC ₃ ⁻¹]			
Calcium [Ca]		52	52
Chloride [Cl ⁻]		5	5
Iron [Fe]		.18	.18
Magnesium [Mg]		46	46
Total Manganese [Mn]		<.02	<.02
Potassium [K]		2	2
Sodium [Na]		7	7
Sulfate [SO ₄ ⁻²]		36	36
Cation - Anion Balance		.21%	.21%

MONTH

LITTLE BEAR SPRING

	Total Flow	Average GPM Flow
January	14,547,000	326
February	12,993,000	322
March	14,338,000	321
April	13,628,000	315
May	14,303,000	320
June	16,426,000	380
July	17,332,000	388
August	16,232,000	364
September	14,900,000	345
October	14,893,000	345
November	14,165,000	328
December	14,331,000	321
Total	178,088,000	4,075 340

Beaver Creek Coal Company
Water Monitoring Report

4-3-W
Station #

Property: Mill Fork #4 Mine
 Location: Upper Mill Fork
 Type: Int. Stream
 Frequency: Quarterly

Measurements	Date Sampled				Mean
	2/6/87	5/1/87	8/10/87	10/5/87	
Flow	FROZEN	✓ 42	DRY	DRY	42
PH		✓ 8.1			8.1
Sp. Cond.		✓ 713			713
Temp.		✓ 6			6
DO		✓ 12			12

Measurements	Date Sampled				Mean
	2/6/87	5/1/87	8/10/87	10/5/87	
- TSS		1			1
- TDS		405			405
- CaCO ₃		376			376
- A CaCO ₃		316			316
- CO ₃ ⁻²		0			0
- Ca		50			50
- Cl ⁻		14			14
- Fe		.07			.07
- Mg		61			61
- Mn		<.02			<.02
- K		2			2
- Na		13			13
- SO ₄ ⁻²		77			77
- Cat-Anion		1.00%			1.00%

05-01-87 : NO LAB FORM ∴ NO LAB # ∴ SYNLAB# 0501870t

Beaver Creek Coal Company
Water Monitoring Report

4-8-W
Station #

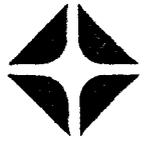
Property: Mill Fork #4 Mine
Location: Lower Mill Fork
Type: Int. Stream
Frequency: Quarterly

Date Sampled 10/05/87

Measurements	Date Sampled				Mean
	2/6/87	5/17/87	7/9/87	10/16/87	
Flow	72	✓ 51	129	27	69.75
PH	8.1	✓ 8	8	8	8.02
Sp. Cond.	660	✓ 790	530	260	629.75
Temp.	1°	✓ 6°	13°	10°	7.50°
Diss. O	?	✓ 12	?	9	10.50

Date Sampled 10/05/87

Measurements	Date Sampled				Mean
	2/6/87	5/17/87	7/9/87	10/16/87	
TSS	26	✓ 171	56	57	77.50
TDS	409	480	362	416	491.75
CaCO ₃	328	414	313	416	367.75
A CaCO ₃	382	269	246	< 1	224.5
CO ₃ ⁻²	0	0	0	0	0
Ca	59	56	50	37	50.5
Cl ⁻	12	24	17	14	15.75
Fe	.92	1.03	< .05	12	53
Mg	57	67	46	79	62.25
Mn	.06	.02	< .02	< .02	.03
K	2	3	3	2	2.5
Na	14	18	14	13	14.75
SO ₄ ⁻²	69	152	86	69	94.0
Cat-Anion	.24%	.60%	1.84%	1.94%	1.15%



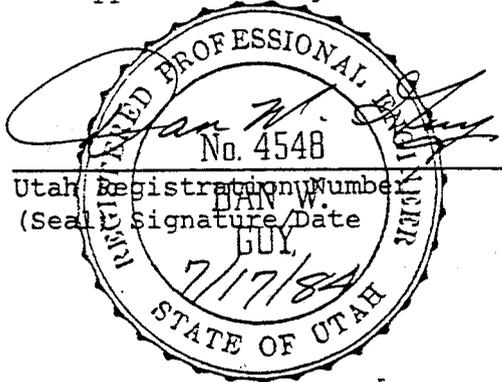
Date: July 17, 1984

Subject: Certification of Sediment Ponds

From/Location: D.W. Guy

To/Location: File

I, Dan W. Guy, a registered professional engineer State of Utah No. 4548, do hereby certify that the sediment control pond at the Huntington Canyon No. 4 has been constructed in accordance with the plan and design criteria set forth in the approved Mining and Reclamation Plan.



1987

SUBSIDENCE MONITORING REPORT

1987 Subsidence Monitoring
For
Huntington Canyon #4 Mine

An on-ground survey was made of the property in August 1987.
No visible subsidence effects were noted during that survey.

Note: Subsidence data for 1987 no available from U.S. Forest
Service.
(See following sheets for explanation.)



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

55 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

December 8, 1987

Mr. Dan W. Guy, Manager
Permitting & Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

Dear Mr. Guy:

Re: Conditional Approval of PAP Amendment, Request to Amend Subsidence Control Plan, Beaver Creek Coal Company, Huntington #4 Mine, INA/015/004-87A, Folder No. 3, Carbon County, Utah

The Division has completed its review of the above-referenced PAP amendment received September 16, 1987. These changes have been reviewed by Division Geologist, Richard Smith. The plans are adequate for conditional approval. Please refer to the attached Technical Memorandum for an explanation of the technical review and approval conditions. Also enclosed is a copy the U.S. Forest Service review comments and concurrence with our conditional approval. The informational requirements as outlined in their letter must also be addressed prior to final approval of this amendment request.

Please provide a response to these conditions by January 11, 1988. Thank you for your cooperation in completing this permitting action. Please contact Richard Smith, or John Whitehead should you have questions regarding specifics of this technical review.

Sincerely,

D. Wayne Hedberg
Data Management Coordinator

cjh

Attachments

cc: J. Dryden R. Smith
 R. Hagen J. Whitehead
 G. Morris P.F.O.
 P. Rutledge

8992R/10



October 16, 1987

TO: John Whitehead, Permit Supervisor
FROM: Richard V. Smith, Geologist *RVS*
RE: Request to Amend Subsidence Control Plan, Beaver Creek Coal Company, Huntington #4 Mine, INA/015/004, Folder #2, Emery County, Utah

Synopsis of Proposal

The operator requests that all subsidence monitoring be suspended at the Huntington #4 Mine. The operator states that they have been informed by the USFS that vertical movement data cannot be, at this time, derived from aerial photography collected since 1979. Moreover, the USFS has cancelled the 1987 aerial photography program.

Analysis

The operator is committed, in the approved PAP, to providing an annual subsidence monitoring report by January 31 of each year (Section 3.4.8.4, page 3-55). The subsidence report will include vertical movement information derived from the annual aerial photography and results of the bi-annual surface inspection.

Aerial photography collected since 1979 may be utilized to derive vertical movement when problems related to locating subsidence monuments have been resolved.

Recommendations

1. Approve discontinuance of the aerial photography aspects, including submittal of annual data, of the subsidence monitoring plan until the USFS resolves problems with locating monuments. Upon correction of the monument location problem, require the operator to commit to derive and submit vertical movement data from preceding (1980-1986) aerial photography surveys.

Page 2

Memo to J. Whitehead

INA/015/004

October 16, 1987

2. Approve discontinuance of the bi-annual surface inspections.
3. Require the operator to commit to:
 - (a) Acquiring additional aerial photography, in cooperation with the USFS, if vertical movement data from preceeding (1980-1986) aerial surveys indicate substantial subsidence. Moreover, commit to providing attendant vertical movement data.
 - (b) Acquiring, in cooperation with the USFS, one suite of aerial photography and providing attendant vertical movement data prior to bond release.
 - (c) Conducting an annual surface inspection to identify material damage to the surface (i.e., slope failure, subsidence cracks). Commit to annually providing the results of the surface inspection.

djh
9206R/26

United States
Department of
Agriculture

Forest
Service

Manti-LaSal
National Forest

599 West Price River Drive
Price, Utah 84501

Reply to: 2820/7140

Date: November 30, 1987

RECEIVED
DEC 7 1987

DIVISION OF
OIL, GAS & MINING

Mr. Lowell Braxton
State of Utah Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Lowell:

We have reviewed Request to Amend Subsidence Control Plan, Beaver Creek Coal Company, Huntington Canyon #4 Mine, INA/015/004, Folder #2, Emery County, Utah.

Beaver Creek Coal Company requests that all subsidence monitoring be suspended at the Huntington Canyon #4 Mine. The request is based on the facts the Forest Service has not provided any subsidence data to the Company under the aerial photogrammetric subsidence monitoring program, and that the program was suspended in 1987 due to problems with the photogrammetry.

In consultation with the Forest Service, the Division prepared the attached technical memorandum and recommendations dated October 16, 1987. We agree with the recommendations outlined in the memorandum as conditions for approval of the request.

The Geometronics Section of Engineering at our Regional Office is trying to isolate the cause of residual values in aerotriangulation which exceed theoretical and acceptable standards. Hopefully, the problem can be isolated and corrected so that accurate data regarding subsidence can be obtained and the program can be resumed.

In our letter to Beaver Creek Coal Company, we requested two copies of an accurate map of the final underground mine workings registered to the surface and underground coordinate system. We are presently working with a scale of 1 inch = 100 feet. The maps should be at this scale but, if they are not available, a scale of 1 inch = 200 feet would be adequate. This information is needed to register the underground workings with the surface data generated from the control monuments and photogrammetry. The maps must be submitted as soon as possible.

Sincerely,



for
GEORGE A. MORRIS
Forest Supervisor

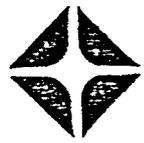
Enclosures

BEAVER CREEK Coal Company

Post Office Box 1377

Price, Utah 84601

Telephone 801 637-4450



September 11, 1987

Mr. Lowell P. Braxton
Administrator
Utah Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Re: Subsidence Control Plan Amendment
Huntington Canyon No. 4 Mine
INA/015/004
Emery County, Utah

Dear Mr. Braxton:

The Huntington Canyon No. 4 Mine started production in early 1977, was temporarily inactive from October, 1978 to March, 1980, resumed full operation in March 1980, and ceased operations in October, 1984. The minesite underwent final reclamation in the fall of 1985. Phase I Bond release was issued for the reclamation on November 10, 1986.

The surface above and adjacent to the mine is owned by Beaver Creek Coal Company and the U.S. Forest Service.

As a condition of our original permit approval in 1979, the U.S. Forest Service insisted that we perform subsidence monitoring at this site under a cooperative agreement with U.S.F.S., using aerial photography. Beaver Creek (formerly Swisher Coal Company) did enter into that agreement on August 27, 1979, and has since that time performed all its obligations under the agreement, including yearly payments for the aerial monitoring.

Since the start of the program, Beaver Creek Coal Company has received virtually no actual subsidence data. We have received only copies of the aerial photos and a map showing flight paths and station locations.

On August 20, 1987 we were notified by U.S.F.S. that a problem exists with the aerotriangulation results and point comparisons to detect subsidence are therefore suspect. As a result we will not be receiving any subsidence data for the past years. In addition the letter states that no flights are planned in 1987, and the program is essentially cancelled until the problem is corrected. A copy of the U.S.F.S. letter is attached.

Beaver Creek Coal Co. is therefore requesting that subsidence monitoring be suspended at the Huntington Canyon No. 4 Mine. This request is based on the following facts:

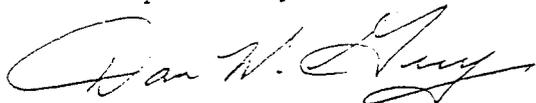
- (1) We have no past data with which to compare future measurements; with therefore we would, in effect, be starting from scratch;
- (2) Annual field surveys have indicated no visible subsidence effects above the mine;
- (3) Mining stopped three years ago, and no affects have been noted to date; subsidence effects will generally manifest themselves within this time frame;
- (4) There are no renewable resources above the mine except for vegetation, which is generally not adversely affected by subsidence; such affects are not evident, and since mining stopped three years ago, they are not likely to occur in the future;
- (5) Beaver Creek Coal Company has met all of its obligations in connection with the subsidence monitoring program, and has acted in good faith with the managing agencies; we should not be held responsible for the failure of the program, since we did not have a choice as to whether or not to participate;
- (6) Given the late notice of the decision not to fly in 1987, it will not be possible to obtain required base data for another program this year; we would therefore not have even initial data until late 1988, with a first round comparison in 1989 - a full five years after completion of mining!

I have enclosed three copies of our proposed changed to the M.R.P. The pages are numbered and dated, and if approved, should replace corresponding sheets in the plan. Additional copies will be sent at your request.

It is our hope you will appreciate our position on this matter and approve our request for suspension of subsidence monitoring at this site.

If you have any questions, or need any further information, please let me know.

Respectfully,



Dan W Guy
Manager Permitting/Compliance

DWG/rs

cc: J.L. Coffey
R.J. Marshall
File

United States
Department of
Agriculture

Forest
Service

Manti-LaSal
National Forest

599 West Price River Drive
Price, Utah 84501

Reply to: 2820
7140

Date: August 20, 1987

Bert Jeanselme
Beaver Creek Coal Co.
P.O. Box 1378
Price, Utah 84501

Dear Bert:

Enclosed is your set of the 1986 color aerial photography for subsidence monitoring with an accompanying photo index map. Please note that the scale is 1:6000 as compared to 1:4800 for prior years.

Due to the unavailability of Forest Service aircraft and photo crews, the 1986 photography was contracted out to Intermountain Aerial Surveys (IAS). IAS uses a 6" focal length camera as opposed to the 8 1/4" focal length camera used by the Forest Service. Using the 6" camera at 1:6000 scale, the desired accuracy should be obtained.

A Bill for Collection for \$668.33 (No. 1251) was sent to Beaver Creek Coal Co. on September 25, 1986, to cover the estimated cost of the 1986 photography as follows:

\$1,715.04 estimated 1986 cost - \$1,046.71 balance in account = \$668.33

The actual cost of the 1986 photography was as follows:

\$ 453.27	Flight Cost
\$ 279.00	Color Prints (3 sets)
\$ 465.00	Film Positives (1 set)
<u>\$1,197.27</u>	
\$ 228.68	Administration (19.1%)
<u>\$1,425.95</u>	Total

The actual amount owed for the 1986 photography is as follows:

\$1,425.95 actual cost - \$1,046.71 in account = \$379.24 owed.

A Bill for Collection for this amount is enclosed. The unpaid Bill for Collection (No. 1251) for \$668.33 has been canceled. Please submit a check payable to the USDA Forest Service

We do not plan to conduct the annual photography for this year (1987), therefore, no Bill for Collection for the estimated cost of the 1987 photography is enclosed.

Bridging and point readings for the base year and 1985 photography have been completed by our geometronics group for most of the participating companies. Aerotriangulation results show overall residuals that exceed theoretical and acceptable standards. As a result, point comparisons for the subsequent years which are made to detect subsidence are suspect. At the present time we are unable to isolate the problem. We do not feel that it would be prudent to continue the annual aerial photography until the problem can be isolated and corrected.

The Forest Service will recontrol, retarget and photograph a test area on the Forest to check the results of photogrammetric subsidence monitoring. The results will be applied photogrammetrically to the base year and past annual photography for this area in an attempt to isolate any problem in the original control or photogrammetric process. Hopefully, the problem can be isolated and corrected so that accurate data regarding subsidence on the test area and other mine areas can be obtained and photography can be resumed next year.

Geometronics will continue to process this existing data for you mine area to obtain the most accurate results on subsidence as possible. In order to complete the baseline data and register the surface control with the underground mine workings, we will need an accurate map of the underground mine workings and coordinates. We are presently working with a scale of 1 inch = 100 ft. for the surface maps. Please submit two copies of an accurate, up-to-date map of the mine workings registered to the surface and underground coordinate system at this scale.

We will need to work together to evaluate the results of the program and prepare base maps and subsidence maps which will meet the needs of the company and the Forest Service and help us better understand the mechanisms of mining induced subsidence and associated effects to resources.

If you have any questions, contact the Forest Supervisor's Office in Price, Utah.

Sincerely,



for
GEORGE A. MORRIS
Forest Supervisor

Enclosures

3.4.8.3 Subsidence Impacts (continued)

Local surface fracturing, should it occur, would increase groundwater recharge. Some springs, therefore, may actually increase in flow during the period that a fracture remains open. Subsidence may also cause some springs to reissue elsewhere, possibly causing some inconvenience without any material damage.

Mitigation measures, should a substantial water inflow occur, may include; attempts to seal off the inflow, increased monitoring efforts, pumping and cleaning of inflow water, replacement of lost water if indicated by monitoring. The first step will be to try and seal off the inflow by grouting, first from the underground and then from the surface. If this is unsuccessful, the other measures mentioned above will be employed.

Mitigation measures, should surface damage occur due to subsidence, may include; filling of fractures, regrading of broken areas, replanting degraded areas, intensified monitoring.

3.4.8.4 Subsidence Monitoring Plan

Beaver Creek Coal Company has followed a monitoring plan established under an August 27, 1979 Cooperative Agreement with the Manti-LaSal National Forest Service, U.S. Department of Agriculture (see Figure 3-5). The current U.S.F.S. Environmental Assessment on this area has been attached as Appendix 6.

A photogrammetric monitoring program, as opposed to a subsidence monitoring survey net, was initiated at the insistence of the Forest Service to minimize the surface disturbance associated with subsidence monitoring.

Mining and Reclamation Plan

Huntington Canyon No. 4 Mine Permit Application

3.4.8.4 Subsidence Monitoring Plan (continued)

The subsidence monitoring program was suspended in 1987 after eight years of monitoring showed no effects from subsidence, and the U.S. Forest Service suspended the program.

(Note: Delete pages 49 through 54 and Plate 3-7).

Mining and Reclamation Plan
Huntington Canyon No. 4 Mine Permit Application

3.5 Reclamation Plan

3.5.1 Contemporaneous Reclamation

The completion of mining operations at No. 4 was 1984. As soon as areas become available, they will be backfilled, graded, retopsoiled and revegetated to acceptable reclamation standards established by environmental baseline studies. Seeding, fertilizing, and mulching will be performed in conjunction with backfilling and grading as access for reclamation equipment will be limited due to the steepness of the recontoured surface. It is anticipated that reclamation will be completed in 100 foot intervals.

1987
VEGETATION DATA

VEGETATIVE MONITORING REPORT

BEAVER CREEK COAL COMPANY

ALL PROPERTIES

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SCOPE:

Beaver Creek Coal Company maintains 6 properties located over 4 locations in Carbon and Emery Counties in Southeastern Utah [see Figure 1 - Location Map]. Three properties have been totally reclaimed and three properties have had either interim or permanent reclamation over small isolated areas. This report deals with the success of the vegetation establishment on each site. An attempt was made to establish parameters of evaluation and identify potential problems so that corrective measures can be implemented where necessary.

METHODOLOGIES:

Two types of surveys were conducted depending on the year that reclamation was implemented and the monitoring schedule committed to in the respective MRP's. The two methods are: [1] Reconnaissance, and [2] Quantitative Sampling. A description of each is as follows:

- [1] Reconnaissance: Each reclamation site was surveyed and a complete ground survey was conducted. Qualitative observations were recorded. A species list was generated for the entire area. If the site encompassed more than one biom or major vegetative category, separate species lists were assembled by area. All species were noted, desirable as well as undesirable, which may

have been introduced either from adjacent areas or imported on to the site through the use of hay, straw or contaminated seed. A site specific map scaled at no greater than [1" = 50'] was utilized and all evidence of potential problems such as erosion, bare areas etc. were noted and located on the map. The use by domestic stock or wildlife was noted and categorized as to impacts and specific species which were utilized. A count of woody species [seedlings and saplings] was made and estimates of survival were recorded. A few random transects utilizing a 10 point frame were run to give tentative quantitative estimates of % cover as well as ocular estimates of species diversification.

The goal or objective of the reconnaissance survey is to identify potential problems early so that corrective actions can be expeditiously implemented.

[2] Quantitative Sampling: Quantitative sampling of vegetation involved point samples along 50 M transects. A random numbers table was used to determine the number of paces between transect lines. The direction of each transect was randomly selected by a hand-held compass. Compass headings that fell within the plot boundary and did not bisect other transects were used. Ten point samples were taken every 5 meters along each transect using a modified point frame. Recordings included plant species and vigor, litter, rock and bare ground. A species list and cover by species was thus generated.

A single tail t-test was used to determine the number of samples needed to satisfy a 90% confidence limit.

In addition, each area was inventoried for woody plant density; this was accomplished by : 1. a total count of all woody plants observed on the site. This method was employed only on small areas [less than 2 acres] on the larger units, and 2. actual counts of seedling and sapling planting were conducted and % survival was determined by dividing surviving plants by the original number planted. In the majority of cases the woody plant species were less than three years old, so that no minimum height requirement was implemented.

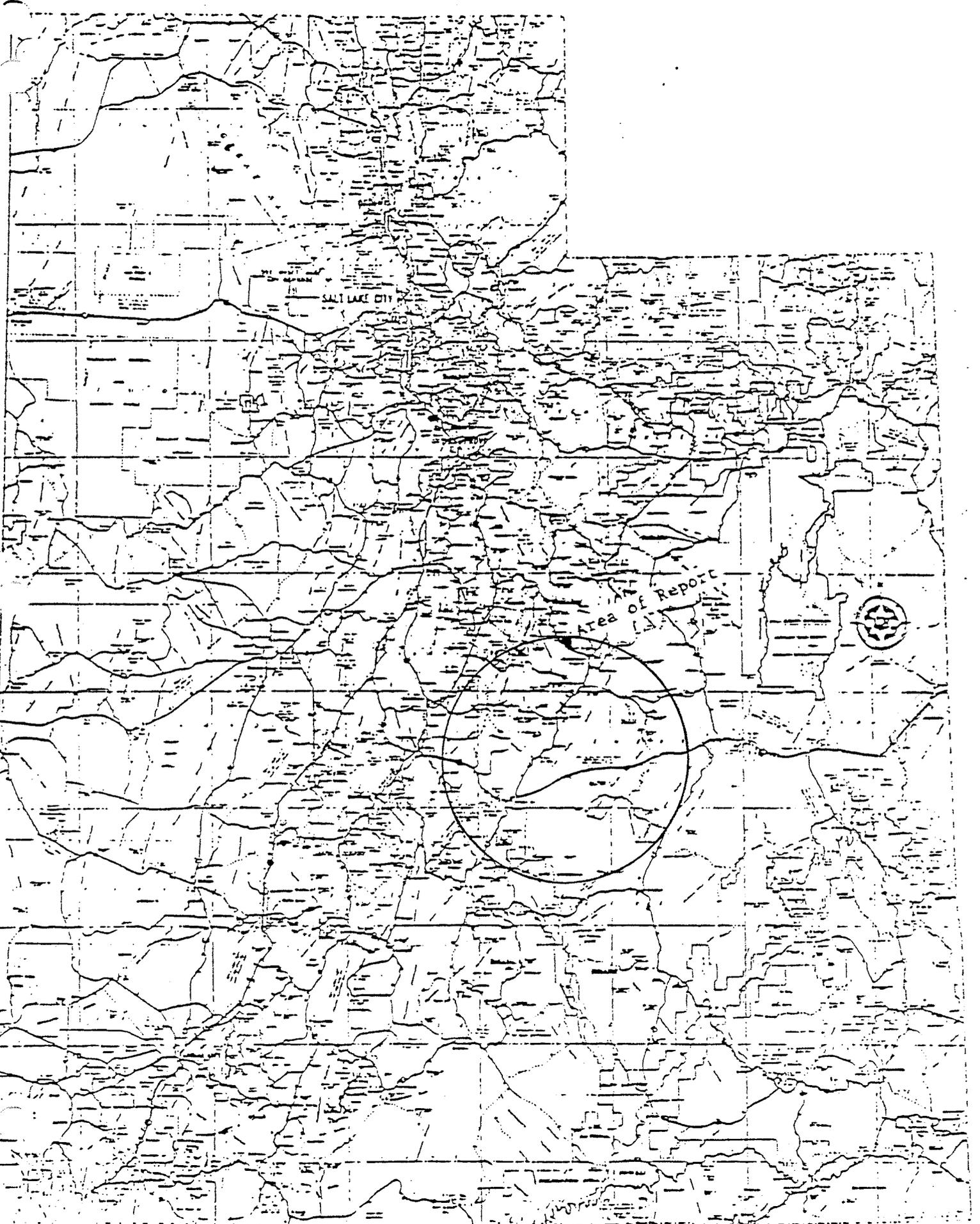
Stems per acre were determined by counting all stems in randomly placed 1 square meter plots located along each transect line. Use by domestic stock and or wildlife was noted as well as any problems observed such as erosion, high mortality, or areas which appear to be unsuccessful.

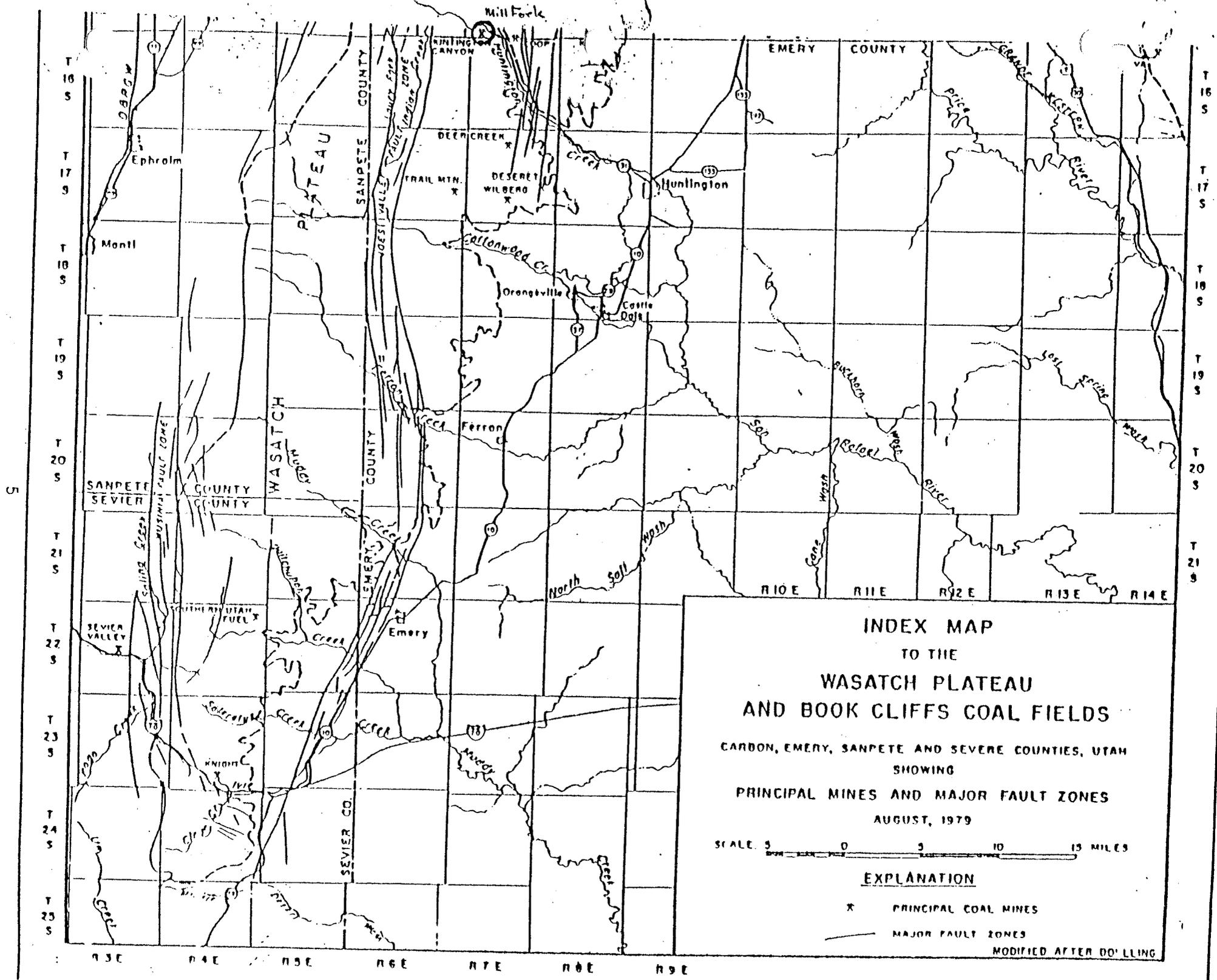
Quantitative sampling of the various reference areas was not implemented due to the relatively short time frame since reclamation was implemented.

Each site is discussed in brief. The following information will preview the survey data:

1. Year reclamation was implemented
2. Methodologies utilized
3. Seed mix used
4. Conclusions and recommendations

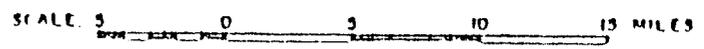
Figure 1





INDEX MAP
TO THE
WASATCH PLATEAU
AND BOOK CLIFFS COAL FIELDS

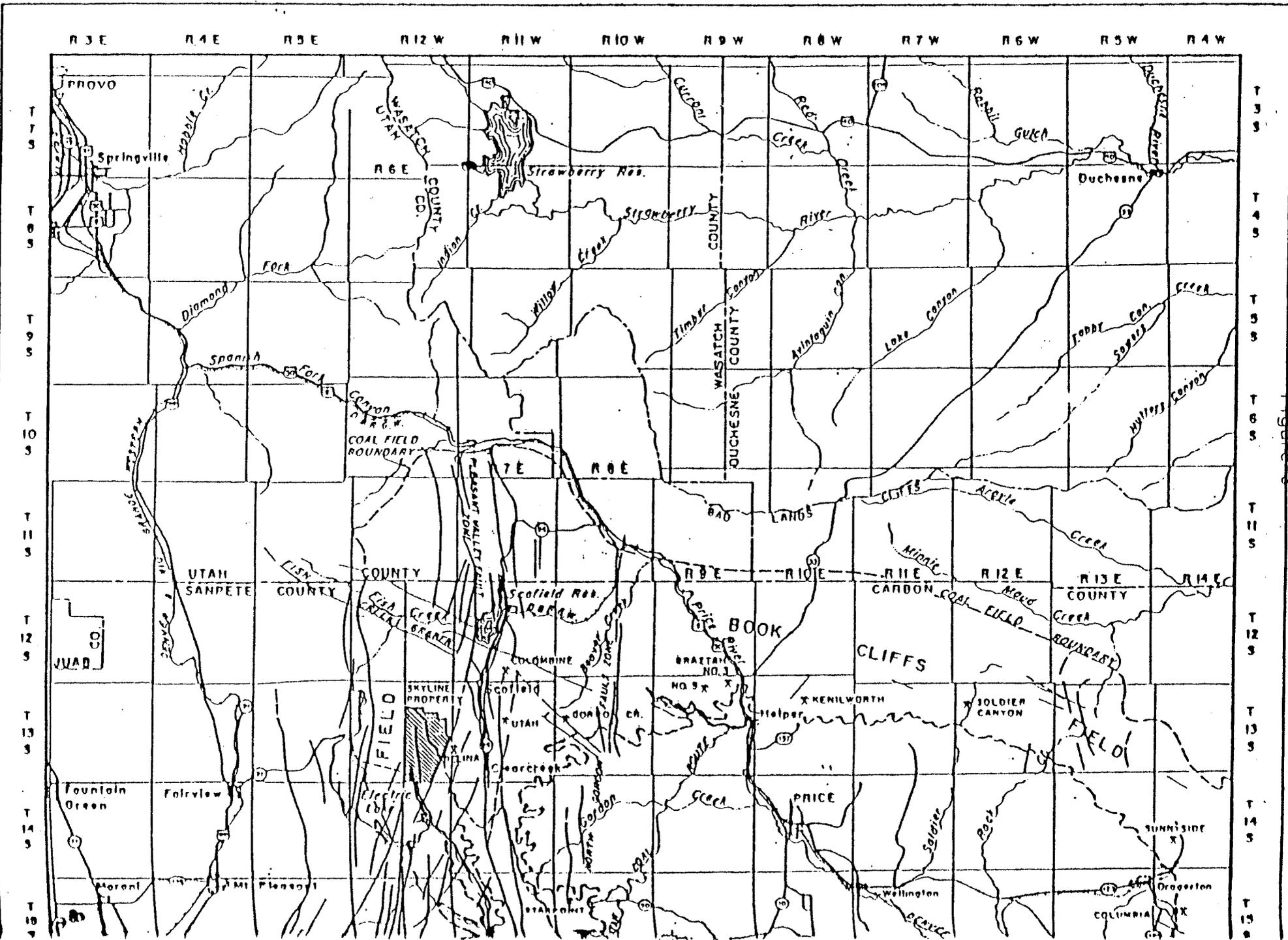
CARBON, EMERY, SANPETE AND SEVIER COUNTIES, UTAH
SHOWING
PRINCIPAL MINES AND MAJOR FAULT ZONES
AUGUST, 1979



EXPLANATION

- X PRINCIPAL COAL MINES
- MAJOR FAULT ZONES

MODIFIED AFTER DOELLING



1987 VEGETATION SURVEY

#4 MINE

BEAVER CREEK COAL COMPANY

MILLFORK CANYON

AREA 1
#4 Mine - Mill Fork Canyon
QUANTITATIVE SURVEY

General Background:

#4 Mine is located on Mill Fork Creek approximately 12 miles above Huntington Utah [see Location Maps - Fig. 1 and Fig. 2]. The area encompasses approximately 28 acres of disturbance. The site reclaimed was the 1. lower pad area, 2. the loadout area, 3. the haul road, 4. the portal pad area, and 5. a small area referred to as the pump house location. The majority of the property is in private ownership with the exception of the pump house area which lies on the Manti LaSal National Forest. The area lies along Mill Fork Creek from an elevation of 7350' proceeding up the north side of the canyon to an elevation of 7871' [see Plate 3-8A].

Planting Methodology:

The area was reclaimed in the fall of 1985. The following methodologies were implemented:

As the recontouring was completed, the area was seeded utilizing a Bowie 3,000 gallon hydroseeder applying the approved seed mixes [Attachment 4-1] in conjunction with 500 lbs. of wood fiber mulch per acre and 40 lbs. per acre of Terra Tac AR. The seed was then covered with 2,000 lbs. per acre of wood fiber mulch in conjunction with 50 lbs. per acre of Tac and 100 lbs. per acre of 16-16-8 fertilizer

utilizing the same hydroseeder. Seedlings were hand planted throughout the reclaimed area at a rate of 300 per acre [see Attachment 4-1] utilizing standard planting procedures with each seedling being watered at the time of planting. The area was partially fenced to detour grazing by domestic stock.

Conclusions & Recommendations:

The survey was completed August 24 1987 . The overall appearance of the entire site is excellent. Plant vigor is good to excellent. The majority of the species have produced abundant seed and has not been adversely impacted by grazing, insects or rodents. Small areas of potential problems were noted and their locations plotted on Plate 3-8A. Vegetation is uniformly distributed over the entire site with the exception of the few remaining highwalls. It is important to note that the residual highwalls blend into the surrounding topography and are aesthetically pleasing and not a deterrent to the overall success of the reclamation.

It appears at this time that the only recommendation which the survey data indicated was to continue to monitor the site, primarily for evidence of erosion and implement corrective measures if problem areas appear.

Survey results, species list, examples of field notes are included as Attachment 4-2.

ATTACHMENT 4-1

RECOMMENDED SEED MIX

SEED MIXES

	<u>Pounds of Pure Live Seed per Acre</u> <u>[Broadcast or Hydroseed]</u>	
	<u>Temporary</u>	<u>Permanent</u>
<u>GRASS AND FORB SPECIES</u>		
Fairway crested wheatgrass <u>Arrpyron cristatum</u>	1	1
Bluebunch wheatgrass <u>A. spicatum</u>	3	5
Streambank wheatgrass <u>A. riparium</u>	3	4
Slender wheatgrass <u>A. traphycaulum</u>	3	4
Indian ricegrass <u>Oryzopsis hymenoides</u>	2	2
Mountain brome <u>Bromus marginatus</u>	1	3
Cicer Milkvetch <u>Astragalus cicer</u>	2	4
Palmer penstemon <u>Penstemon palmeri</u>	2	3
Silky lupine <u>Lupinus sericeus</u>	<u>2</u>	<u>2</u>
TOTAL	19	28

SEED MIXES [continued]

	Pounds of Pure Live Seed per Acre [Broadcast or Hydroseed]	
	<u>Temporary</u>	<u>Permanent</u>
<u>STRATIFIED SHRUBS</u>		
Curl-leaf mountain mahogany <u>Cercocarpus ledifolius</u>		.5
Utah serviceberry <u>Amerlanchier utahensis</u>		.5
* Rubber rabbitbrush <u>Chrysothamnus nauseosus</u> var. <u>albicaulis</u>		.5
x Oregon grape <u>Mahonia repens</u>		<u>.5</u>
TOTAL		2.0
<u>RELATIVELY LOW-GROWING SHRUBS</u>		
* Rubber rabbitbrush <u>Chrysothamnus nauseosis</u> var. <u>albicaulis</u>		.5
Snowberry <u>Symphoricarpos oreophilus</u>		.5
Antelope Bitterbrush <u>Purshia tridentata</u>		.5
x Oregon grape <u>Mahonia repens</u>		<u>.5</u>
TOTAL		2.0

SEED MIXES [continued]

RIPARIAN AREA

Pounds of Pure Live Seed per Acre
[Broadcast or Hydroseed]

	<u>Permanent</u>
<u>GRASSES</u>	
Western wheatgrass <u>Agropyron smithii</u>	3
Slender wheatgrass <u>Agropyron trachycaulum</u>	2
Mountain brome <u>Bromus carinatur</u>	2
Sedge <u>Carex Spp.</u>	2
Kentucky blugrass <u>Poa pratensis</u>	<u>2</u>
TOTAL	11
<u>FORBS</u>	
Yellow Sweet Clover <u>Melilotus officinalis</u>	3
Palmer Penstemon <u>Penstemon palmeri</u>	<u>.5</u>
TOTAL	3.5
<u>SHRUBS</u>	
Creeping Oregon Grape <u>Mohonia repens</u>	.25
Woods Rose <u>Rosa woodii</u>	.5
American Red Raspberry <u>Rubus idaeus sachalinensis</u>	.25
Yellow [Watson] willow <u>Salix rigida</u> [cuttings on 3' centers along channel and pond]	<u>.25</u>
TOTAL	1.25
TOTAL SEED	15.75

✓ AG-CR
 AG-SR
 15 R.
 1500
 15 SE

SHRUB SEEDLING STOCKING RATES

	<u>Stocking Rate</u> <u>[Plants/Acre]</u>
Mountain Mahogany <u>Cercocarpus ledifolius</u>	250
Bitterbrush <u>Purshia tridentata</u>	50
	<hr/>
TOTAL	300

ATTACHMENT 4-2

SUMMARY OF FIELD DATA

1987 #4 MINE

% COVER #4 MINE

	Riparian		Pad #1 lower		Pad #2 middle		Pad #3 high		Lower Pad		Upper Road		Totals	
	pts	%	pts	%	pts	%	pts	%	pts	%	pts	%	pts	%
Total Points	100		200		200		300		600		1900		3300	
Vegetative Cover	33	33.0%	90	45.0%	48	24.0	60	20.0	169	28.2	386	20.3	786	23.8%
Bare Ground	63	63.0	90	45.0	138	69.0	219	73.0	389	64.8	1318	69.4	2217	67.2%
Litter	2	2.0	3	1.5	0	0	0		13	2.2	33	1.7	51	1.5%
Rock	2	2.0	17	8.5	14	7.0	21	7.0	29	4.8	163	8.6	246	7.5%

% SURVIVAL - WOODY PLANTS [SEEDLINGS]

Riparian	82%
Pad #1 [Lower]	78%
Pad #2 [Middle]	60%
Pad #3 [Upper]	68%
Lower Road	94%
Upper Road	72%

Average Woody Plant Density Per Acre

75.66% Survival @ 300 plants per acre

Woody Plant Density of 227 per acre

A large number of Ponderosa pine were observed - no evidence of mortality was observed with the Ponderosa pine.

t-Test at 90% Confidence Level

n = 320 plots

$$n = \frac{[t]^2 [s]^2}{[10\% \text{ mean}]^2} \quad t = 1 \text{ tail at } 90\% \text{ confidence} \\ \text{is } 1.282 \text{ with } df = \alpha$$

variance = standard deviation squared $s^2 = 3.23$

sample mean = $\bar{x} = 2.5$
sample size = n = 320 plots

sample size needed
for a 90% conf:

$$n = \frac{[1.282]^2 [3.23]}{.06} = 88.5 \text{ should be at or below } 320$$

General Overview

Abundant scat from deer and elk, particularly along the upper road.

Tracks include deer, elk, coyote, badger, ground squirrel and various birds.

Agropyron spicatum [Bluebunch wheatgrass] appears to be a favourite graze species for wildlife.

FIELD NOTES

#4 MINE

#4 MINE SPECIES LIST

<u>SYMBOL</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
X AGSMS	Agropyron smithii	Western wheatgrass
AGSP ³	Agropyron spicatum	Bluebunch wheatgrass
AGCR	Agropyron cristatum	Crested wheatgrass
ORHYH	Oryzopsis hymenoides	Indian ricegrass
BRCA ⁵	Bromus carinatus	Mountain brome
X POPR	Poa pratensis	Kentucky bluegrass
H SIHY	Alopecurus pratensis	Meadow foxtail
		Houndstongue
ASTRA	Astragalus sp.	Milkvetch
MEAR ⁴	Mentha arvensis	Field mint
SAKA	Salsola Kali	Russian thistle
HEBO	Hedysarum boreale.	Northern sweetvetch
ASCH ²	Aster chilensis	Pacific aster
PEPA	Penstemon palmeri	Palmer penstemon
WYAM	Wyethia amplexicaulis	Mulesear dock
MEOF	Melilotus officinalis	Yellow sweet clover
MAAF	Malcomia africana	African mustard
CIAR	Cirsium arvense	Canada thistle
HEOCC	Hedysarum occidentale	Cannon western sweetvetch
CHNA ²	Chrysothamnus nauseosus	Rubber rabbitbrush
ROWO	Rosa woodsii	Wood rose
CELEL	Cercocarpus ledifolius	Curl-leaf Mt. Mahogany
PUTR ²	Purshia tridentata	Antelope bitterbrush
ERIOG	Eriogonum sp.	Eriogonum

Company Name Brauer Corp Date 8/1/87

Location # 4. meadow Site RIPARIAN Time _____

Magnetic Heading 80° NE Transect # 12

Species vigor and/or % cover.

✓	HEBO	B	B	B		B	B	B		B	B
✓	HEBO	R	B	B	B	B	B	B		R	B
	B	B	B	B	B	B	B	B		AGSMS	B
	B	B	MEOF	B	B	B	B	B		B	B
✓	HEBO	B	B	B	AGSMS	L	AGCK	L		B	SIHY
✓	HEBO	AGSP ³	HEBO	HEBO	B	B	B	B		B	B
	B	B	B	B	AGSP ³	AGSP ³	HEBO	PEPA ⁸		AGSP ³	B
✓	HEBO	AGSP ³	B	AGSP ³	PEPA ⁸	B	HEOC	HEBO		HEBO	AGSP ³
✓	B	BRCA ⁵	B	B	HEBO	B	B	B		AGSP ³	HEBO
✓	HEBO	B	B	B	HEBO	HEBO	B	B		B	B

Comments & Observations _____

Company Name Beaver Ck Date 8/1/87

Location 4. mine Site 1st Pad Time _____

Magnetic Heading 110° SE Transect # 3

Species vigor and/or % cover.

B	SAKA	SAKA	SAKA	SAKA	SAKA	SAKA	SAKA	B	SAKA	B
B	B	SAKA	SAKA	SAKA	SAKA	AGSMIS	B	B	B	B
ORHU ^H	CHNA ²	CHNA ²	B	B	ORHU	B	ORHU	B	B	B
B	PEPA ⁸	B	L	B	B	B	B	PEPA ⁸	B	B
R	R	WVAM	B	AGSP ³	R	B	B	R	AGCR	AGCR
AGSP ³	AGSP ³	R	B	B	SAKA	B	SAKA	HERBO	B	B
AGSP ³	B	B	BRCA ⁵	AGCR	R	B	BRCA ⁵	AGSP ³	AGSP ³	AGSP ³
ROWO	L	B	WVAM	BRCA ⁵	AGCR	AGSP ³	AGSP ³	B	AGSP ³	AGSP ³
B	SAKA	B	B	B	B	B	SAKA	B	SAKA	SAKA
PEPA ⁸	R	B	R	CHNA ²	B	AGCR	SAKA	SAKA	AGSP ³	AGSP ³

Comments & Observations _____

Company Name Beaver Crk Date 8/2/87

Location 4 Site Lower Road Time _____

Magnetic Heading 80° NE Transect # 37

Species vigor and/or % cover.

B	B	B	B	AGSMS	B	B	B	AGSMS	AGSMS
AGSP ³	B	B	AGSMS	AGSMS	AGSM	AGSMS	AGSP ³	B	B
AGSMS	AGSM	B	B	AGSP ³	B	R	AGSMS	AGSMS	B
AGSP ³	B	HEBD	B	B	AGSMS	B	B	B	B
R	AGSM	AGSM	B	B	AGSP ³	B	B	R	B
AGSMS	L	B	AGSMS	B	R	R	B	AGSP ³	B
B	R	R	AGSMS	AGSM	L	L	B	B	B
L	B	B	B	B	AGSP ³	B	AGSP ³	B	R
AGSMS	AGSP ³	AGSP ³	B	L	L	AGSMS	AGSM	AGSP ³	AGSP ³
AGSP ³	AGSP ³	B	B	B	AGSP ³	AGSP ³	AGSMS	B	AGSP ³

Comments & Observations _____

VI = Vicia

V = 40
O = SAKA

LL

Company Name Beaver Crk. Date 8/1/87

Location 4 miles Site Upper Pad #3 Time _____

Magnetic Heading 220°SW Transect # 9

Species vigor and/or % cover.

B	B	B	B	B	B	B	B	B	B	B	B
AGSP ³	B	B	B	B	B	B	B	B	B	B	B
AGSP ³	B	B	B	AGSP ³	AGSP ³	AGSP ³	AGSP ³	B	B	B	B
B	B	B	B	B	B	HEBO	B	HEBO	B	B	B
B	B	B	B	B	B	B	B	B	B	B	B
B	AGSP ³	B	B	B	AGSP ³	AGSP ³	B	AGCE	AGCE	B	B
AGSP ³	AGSP ³	B	ORH4H	B	AGSP ³	R	B	B	B	B	B
R	B	B	B	B	B	B	AGSP ³	B	B	B	B
B	B	R	B	R	R	B	R	B	B	B	B
B	B	B	B	B	B	B	B	B	B	B	B

Comments & Observations _____

Company Name Beaver Creek Date 8/2/87

Location A mine Site Upper Road Time _____

Magnetic Heading 30 NE Transect # 22

Species vigor and/or % cover.

BECH ⁵	B	B	B	B	B	CHNA ²	B	B	SAKA	B
B	B	AGCR	B	B	B	B	B	B	B	B
B	B	B	B	B	B	PEPA ⁸	B	PEPA ⁸	AGCR	B
B	B	B	R	R	B	B	B	B	B	B
B	B	B	R	B	B	B	B	B	B	B
B	B	AGCR	B	B	B	B	B	B	R	B
B	B	B	B	B	B	B	B	B	B	B
AGSP ³	B	AGSP ³	B	B	B	B	B	BECA ⁵	B	AGSP ³
B	B	B	B	B	B	B	B	B	B	B
AGSP ³	CIAR	B	AGSP ³	B	AGCR	AGCR	B	MEAR ⁴	AGCR	
MEAR ⁴	AGCR	B	B	B	AGSP ³	B	B	SAKA	B	

Comments & Observations _____

J = 23
Sa = 2

Company Name Beaver Creek

Date 8/2/87

Location 4 mine

Site Upper Road

Time _____

Magnetic Heading 60° NE

Transect # 25

Species vigor and/or % cover.

B	HYBO	B	B	B	B	AGCR	AGCR	PEP ⁸	B
B	B	B	B	B	B	B	B	B	R
R	R	R	R	R	R	R	R	R	R
B	ORHYH	B	B	B	B	B	B	B	SAKA
R	AGSMS	B	AGSMS	B	B	B	B	SAKA	B
R	B	B	R	B	B	R	B	B	B
B	B	SAKA	AGSP ³	B	B	B	SAKA	B	SAKA
B	SAKA	SAKA	SAKA	AGSP ³	SAKA	B	B	B	0
B	SAKA	B	B	SAKA	B	SAKA	B	B	B
B	B	B	B	AGCR	R	B	B	B	B

Comments & Observations _____

v=22
c=12

Company Name Beaver Crk

Date 8/2/87

Location 4 min

Site Upper Road

Time _____

Magnetic Heading 120°SE

Transect # 26

Species vigor and/or % cover.

AGSM ³	B	B	B	B	B	B	B	B	B	B
B	B	SAKA	B	B	B	B	B	B	B	B
B	B	B	B	B	B	B	B	B	B	B
B	B	B	B	B	AGCP	B	R	B	AGSM ³	
B	B	B	B	AGSP ³	B	R	B	B	B	B
B	AGSP ³	B	B	B	B	B	SAKA	B	SAKA	
AGSP ³	B	B	B	B	SAKA	R	R	R	R	
R	B	HEBO	B	R	B	B	B	R	R	
B	B	B	B	B	B	B	B	B	B	
B	B	B	B	B	SAKA	SAKA	B	R	B	

Comments & Observations _____

Company Name Beaver Creek

Date 8/2/87

Location 4 mi

Site Upper Road

Time _____

Magnetic Heading 100SE

Transect # 29

Species vigor and/or % cover.

B	B	PEPA ³	SAKA	SAKA	B	B	B	B	B
B	B	B	B	B	B	B	B	B	B
SAKA	SAKA	B	SAKA	SAKA	SAKA	SAKA	SAKA	B	B
B	B	B	B	B	B	B	B	SAKA	SAKA
B	B	B	B	B	B	B	B	B	B
B	B	B	B	B	B	B	B	B	B
B	B	B	SAKA	SAKA	B	B	B	SAKA	B
R	R	R	R	R	R	WYAM	SAKA	R	R
B	B	B	B	B	B	B	B	B	B
SAKA ³	B	AGSP ³	B	B	B	B	B	B	B

Comments & Observations _____

V=19
Sa=15

1987

PERMIT/ STIPULATION STATUS

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
(801) 538-5340

This permit, ACT/015/004 , which incorporates the Office of Surface Mining (OSM) Permit UT-0004 , is issued for the state of Utah by the Utah Division of Oil, Gas and Mining (DOGM) to:

Beaver Creek Coal Company

P. O. Box 1378

Price, Utah 84501

for the Huntington #4 Mine. Beaver Creek Coal Company is the lessee of federal coal leases U-33454 and SL-064903, the lessee of state coal leases NA , and/or the lessee/owner of certain fee-owned parcels 717.5 acres . The permit is not valid until a performance bond is filed with the DOGM in the amount of \$360,104.00 (1989 \$) , payable to the state of Utah, Division of Oil, Gas and Mining and OSM, and the DOGM has received a copy of this permit signed and dated by the permittee.

Sec. 1 STATUTES AND REGULATIONS - This permit is issued pursuant to the Utah Coal Mining and Reclamation Act of 1979, Utah Code Annotated (UCA) 40-10-1 et seq, hereafter referred to as UCMRA.

Sec. 2 The permittee is authorized to conduct surface coal mining and reclamation operations on the following described lands (as shown on ownership map) within the permit area at the Huntington #4 Mine situated in the state of Utah, Emery County, and located:

Township 16 South, Range 7 East, SLBM

Section 8: S1/4 SE1/4

Section 16: NW1/4 NE1/4, N1/2 NW1/4, SW1/4 NW1/4,
NW1/4 SW1/4

Section 17: NE1/4

Township 16 South, Range 7 East, SLBM

Section 16: NE1/4 SW1/4, NW1/4 SE1/4, SE1/4 NW1/4,
SW1/4 NE1/4

Township 16 South, Range 7 East, SLBM

Section 9: SW1/4 SE1/4, SE1/4 SW1/4, SW1/4 SW1/4

Township 16 South, Range 7 East, SLBM

Section 17: W1/2 SE1/4

This legal description is for the permit boundary (as shown on the permit area map) of the Huntington #4 Mine. The permittee is authorized to conduct surface and reclamation operations connected with mining on the foregoing described property subject to the conditions of the leases, the approved mining plan, and OSM permit UT-0004, to be issued April 10, 1985, including all conditions and all other applicable conditions, laws and regulations.

- Sec. 3 This permit is issued for a term of five (5) years commencing on the date the permit is signed by the permittee, except that this permit will terminate if the permittee has not begun the surface coal mining and reclamation operations covered herein within three (3) years of the date of issuance.
- Sec. 4 The permit rights may not be transferred, assigned or sold without the approval of the Director, DOGM. Request for transfer, assignment or sale of permit rights must be done in accordance with applicable regulations including but not limited to 30 CFR 740.13(e) and UMC 788.17-.19.
- Sec. 5 The permittee shall allow the authorized representative of the DOGM, including but not limited to inspectors, and representatives of the Office of Surface Mining, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay to:
- A. have the rights of entry provided for in 30 CFR 840.12, UMC 840.12, 30 CFR 842.13 and UMC 842.13; and,
 - B. be accompanied by private persons for the purpose of conducting an inspection in accordance with UMC 842.12 and 30 CFR 842, when the inspection is in response to an alleged violation reported by the private person.
- Sec. 6 The permittee shall conduct surface coal mining and reclamation operations only on those lands specifically designated as within the permit area on the maps submitted in the mining plan and permit application and approved for the term of the permit and which are subject to the performance bond.

- Sec. 7 The permittee shall minimize any adverse impact to the environment or public health and safety including but not limited to:
- A. accelerated monitoring to determine the nature and extent of noncompliance and the results of the noncompliance;
 - B. immediate implementation of measures necessary to comply; and
 - C. warning, as soon as possible after learning of such noncompliance, any person whose health and safety is in imminent danger due to the noncompliance.
- Sec. 8 The permittee shall dispose of solids, sludge, filter backwash or pollutants in the course of treatment or control of waters or emissions to the air in the manner required by the approved Utah State Program and the Federal Lands Program which prevents violation of any applicable state or federal law.
- Sec. 9 The lessee shall conduct its operations:
- A. in accordance with the terms of the permit to prevent significant, imminent environmental harm to the health and safety of the public; and
 - B. utilizing methods specified as conditions of the permit by DOGM and OSM in approving alternative methods of compliance with the performance standards of the Act, the approved Utah State Program and the Federal Lands Program.
- Sec. 10 The permittee shall provide the names, addresses and telephone numbers of persons responsible for operations under the permit to whom notices and orders are to be delivered.
- Sec. 11 The permittee shall comply with the provisions of the Water Pollution Control Act (33 USC 1151 et seq,) and the Clean Air Act (42 USC 7401 et seq), UCA 26-11-1 et seq, and UCA 26-13-1 et seq.
- Sec. 12 Upon expiration, this permit may be renewed for areas within the boundaries of the existing permit in accordance with the Act, the approved Utah State Program and the Federal Lands Program.

- Sec. 13 If during the course of mining operations, previously unidentified cultural resources are discovered, the applicant shall ensure that the site(s) is not disturbed and shall notify the state Regulatory Authority (RA). The state RA, after coordination with DSM, shall inform the operator of necessary actions required.
- Sec. 14 APPEALS - The lessee shall have the right to appeal: (a) under 30 CFR 775 from actions or decisions of any official of DSM; (b) under 43 CFR 3000.4 from an action or decision of any official of the Bureau of Land Management; (c) under 30-CFR 290 from an action, order or decision of any official of the Minerals Management Service; or (d) under applicable regulations from any action or decision of any other official of the Department of the Interior arising in connection with this permit. In addition, the lessee shall have the right to appeal as provided for under UMC 787.
- Sec. 15 SPECIAL CONDITIONS - In addition to the general obligations and of performance set out in the leases, OSM permit UT-0004 and this permit, the permittee shall comply with the special conditions of OSM permit UT-0004 and the conditions appended hereto as Attachment A.

The above conditions (Secs. 1-15) are also imposed upon the permittee's agents and employees. The failure or refusal of any of these persons to comply with these conditions shall be deemed a failure of the permittee to comply with the terms of this permit and the lease. The permittee shall require his agents, contractors and subcontractors involved in activities concerning this permit to include these conditions in the contracts between and among them. These conditions may be revised or amended, in writing, by the mutual consent of the grantor and the permittee at any time to adjust to changed conditions or to correct an oversight. The grantor may amend these conditions at any time without the consent of the permittee in order to make them consistent with any new federal or state statutes and any new regulations.

THE STATE OF UTAH

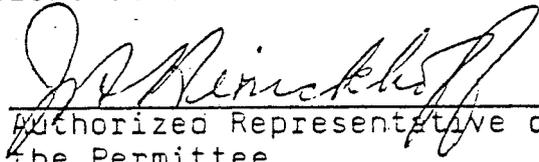
By: _____

Walter R. Nielson

Date: _____

April 10, 1985

I certify that I have read and understand the requirements of this permit and any special conditions attached.



Authorized Representative of
the Permittee

Date: April 29, 1985

APPROVED AS TO FORM:

By: 

Assistant Attorney General

Date: April 10, 1985

Attachment A

SPECIAL CONDITIONS

1. Results from soil analysis, identification of the best available topsoil substitute materials, estimates of material volumes for final reclamation, and a commitment to selectively place the best suitable topsoil substitute material during final reclamation of, the pumphouse must be submitted to the regulatory authority for approval no later than June 1, 1985. At a minimum, the analyses must include data on soil texture, pH, EC, SAR, N, P, and K. A sufficient number of samples must be taken to adequately characterize this material.

2. The regulatory authority is willing to grant a variance to the requirements of UMC 817.44(b)(2) if the permittee can adequately demonstrate to the regulatory authority that these cross-sections represent a conclusive demonstration of comparable, adjacent drainage. The following parameters will have to be demonstrated in order to assess the comparability of the two watershed systems.
 1. Similar drainage area and channel capacity.
 2. Similar slopes and aspects.
 3. Cross-sections must be located in an area which gives comparable channel configurations.
 4. Natural armoring or riprap size must be noted, as well as natural energy dissipators (i.e., large boulders, log jams, drops and eddies, etc.) so they can be engineered into the new designs.

These requirements must be met during the site visit in the spring of 1985 and the permittee must submit within 30 days of this site visit adequate plans for the proposed stream channel reclamation plans. These plans must include the following engineering designs at a minimum:

1. Energy dissipators within the channel at crucial points; namely where flows come onto the upper pad and drop off the cliff area below the upper pad onto the lower pad.
2. A design flow and channel configuration criteria compatible with this condition and 817.44(d)(1) (2)(3).

3. The permittee shall sample on a quarterly basis until bond release any discharges from the underground workings which occur after mining. Sampling will assess if discharges are in compliance with the effluent standards of UMC 817.42 and all other applicable State and Federal regulations. The permittee will provide treatment, if necessary, of any discharges to achieve compliance with applicable standards during the period of discharge.
4. The permittee shall provide, within 60 days of the effective date of this permit, documentation of assignment or transfer of 800 shares in the Huntington-Cleveland Irrigation Company from the Hardy Coal Company to Beaver Creek Coal Company.
5. Within 15 days of the effective date of this permit, the operator must revise the permanent seed mixture for the riparian area by including at least two forb species. The species must meet all the requirements of this section and UMC 817.97.
6. Within 15 days of the effective date of this permit, the operator must revise the tree seedling stocking rate for the pinyon-juniper-curl leaf-mountain mahogany vegetation type (Table 3-2) by replacing the pinyon and juniper seedlings with an equal number of seedlings of woody shrub species native to the area. The species must meet all the requirements of this section and UMC 817.97.
7. Before any site redisturbance occurs, the permittee must conduct a survey, under the supervision of the regulatory authority, of the areas to be redisturbed. The survey shall identify and record locations of individuals and populations of Hedysarum occidentale var. canone (canyon sweet-vetch). If canyon sweet-vetch is found in portions of the permit area to be redisturbed, the permittee must develop and submit a mitigation plan for regulatory authority approval and after approval implement this plan before redisturbance occurs.
8. The entrance gate to the mine facilities must not be dismantled until after reclamation operations are completed and permanent self regenerating vegetation is established on the reclaimed mine site. The gate should remain locked to prevent public vehicle access to the reclaimed area. Written permission must be obtained from the Forest Supervisor of the Manti-LaSal National Forest prior to removal of the gate.

9. If existing raptor nests are affected by mine related subsidence, the permittee shall replace or otherwise mitigate the nest loss in consultation with the U.S. Fish and Wildlife Service and the Utah Division of Wildlife Resources according to the requirements of UMC 784.21 and UMC 817.97. Notification of the loss to the above agencies and the regulatory authority must take place within two working days of the permittee's discovery of the loss.



STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Norman H. Bongertel, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

February 20, 1985

Mr. Dan W. Guy, Manager
Permitting and Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

Dear Mr. *Dan* Guy:

RE: Change in Status from ACT to INA, Beaver Creek Coal Company, Gordon Creek #3 and #5 Mine, INA/007/017, #2 and #7, Carbon County, Utah; Huntington #4 Mine, INA/015/004, #2 and #7, Emery County, Utah

This letter will serve to inform you of the change in activity status regarding the above referenced mines. These mines, which are no longer operating and face final reclamation upon approval of the mining and reclamation plans under review, are now regarded by the Division as Inactive and will henceforth be identified in future correspondence as INA/007/017 (Gordon Creek #3 and #5) and INA/015/004 (Huntington #4).

As you are aware, Beaver Creek Coal Company will continue to be held accountable for compliance with all applicable performance standards until reclamation is completed and bond release has been obtained.

Should you have any questions, please contact the Division at your convenience.

Sincerely,

Mary M. Boucek

Mary M. Boucek
Permit Supervisor/
Reclamation Biologist

DDD

cc: Robert Hagen
Allen Klein
Mary Boucek
Joe Helfrich
Tom Munson
Rick Smith
Tom Wright



55 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-536-5340

August 9, 1985

Mr. Dan W. Guy, Manager
Permitting and Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

Dear Mr. Guy:

RE: Special Condition #1, Huntington #4 Mine, INA/015/004, #2,
Emery County, Utah

Thank you for your response to Special Condition #1 of the Huntington #4 permit. The soil analyses provided in the August 5, 1985 submittal has satisfied the requirements of Special Condition #1.

Sincerely,

John J. Whitehead
Permit Supervisor/
Reclamation Hydrologist

EH/btb

cc: Allen Klein
Robert Hagen
Tom Munson
Tom Wright

9946R-9



55 W. North Temple - 3 Triad Center - Suite 350 - Salt Lake City, UT 84180-1203 - 801-536-5340

August 14, 1985

TO: John Whitehead, Permit Supervisor
FROM: Tom Munson, Hydrologist *TM*
RE: Huntington #4 Stipulations updated

The following stipulations have been formally signed off on: stipulations #1, #5, and #6. Stipulation #7 was brought in August 12, 1985 to the Division but has not as yet been looked at. Stipulation #2 was submitted to the Division July 25, 1985 and Tom Munson met with Dan Guy on August 12, 1985 to discuss inadequacies regarding his submittal. It was agreed upon in that meeting that before any construction took place that the necessary information would be submitted to the Division, as discussed in that meeting (August 12, 1985) (See memo regarding stipulation #2). Stipulations #3 and #8 do not need any response from the operator, as they agreed to commit to these stipulations when they signed the permit.

jvb

cc: Dan Guy
Tom Wright

0141R-18



August 14, 1985

TO: John Whitehead, Permit Supervisor
FROM: Tom Munson, Hydrologist *TM*
RE: Huntington #4 (Stipulation #2) August 12, 1985 Meeting with Dan Guy

The information originally submitted in the mine plan used hydrologic calculations for the 10 yr-24 hour storm event. (MRP, Vol 1, Pg 58, 58a-c) These calculations were incorporated into the stipulation response (i.e. channel size and rip-rap size shown on the two additional figures submitted July 25, 1985). Dan was informed that he also needed to incorporate and update the verbage in his plan to include the reason why these plans were considered adequate and reference the new figures submitted and tie this information to the calculations in the text. He was told to reference the on-site meeting and discuss the use of the comparative drainage study to justify the adequacy of the reclaimed channel according to regulatory requirements. Dan was also told to submit this information, as soon as possible, prior to the actual construction of the channel.

jvb
cc: Dan Guy
T. Wright
0141R-17



5 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-536-5340

September 26, 1985

Mr. Dan W. Guy, Manager
Permitting and Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

Dear Mr. Guy:

RE: Approval for Special Condition #2, Final Permit Approval,
UT-0004, Huntington Canyon #4 Mine, INA/015/004, #2 and
#4, Emery County, Utah

The information provided on Plate 3-10 and Plate 3-11 and pages 3-58, 3-58a and 3-58aa, address the concerns spelled out in Tom Munson's memo dated August 14, 1985. Beaver Creek Coal has incorporated and updated the verbage in the plan to include the reasons the comparative drainage study was undertaken, referencing Plates 3-10 and 3-11, and have tied this information to the calculations in the text.

The Division approves this stipulation response and recommends the following measures be taken onsite: (1) a pilot channel be used where possible on all sections of the reclaimed drainage; (2) the placement of riprap be done with care to ensure that an adequate armor of small rocks (three to nine inch range) be placed in the pilot channel prior to the placement of large rocks (greater than 18 inches). This procedure will provide better protection during runoff and prevent riprap failure.

Page 2

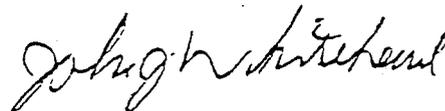
Mr. Dan W. Guy, Manager

INA/015/004

September 26, 1985

Thank you for your time and effort and cooperation during this study.

Sincerely,



John J. Whitehead
Permit Supervisor/
Reclamation Hydrologist

TM/btb

cc: Allen Klein

Jim Fricke

886DR-15 & 16



March 3, 1986

Mr. Lowell Braxton
Administrator
Division of Oil, Gas, & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RE: Special Condition No. 4
Final Permit Approval
Huntington Canyon No. 4 Mine
ACT/015/004; UT-0004
Emery County, Utah

Dear Mr. Braxton:

Enclosed are 15 copies of a new Water Rights Certificate for 800 shares issued in the name of Beaver Creek Coal Company. This certificate should replace the old Hardy Coal Company certificate in Appendix 4 of the approved M.R.P.

I apologize for the delay in providing this documentation to you. The original certificate was apparently lost during the numerous personnel changes and departmental moves in our Denver offices. We finally had to obtain a new certificate by posting a "Lost Instrument Bond" with the irrigation company.

I appreciate your patience on this matter. If you have any questions, or need any further information, please let me know.

Respectfully,

Dan W. Guy
Manager of Permitting and Compliance

DWG/sb

Enclosures

cc: J. Marshall (BCCC)
File 4-P-6-1
~~FILE 4-P-6-1-6-1~~
IBM DS

UTAH



HUNTINGTON-CLEVELAND IRRIGATION COMPANY

HUNTINGTON, UTAH
THIS CERTIFICATE IS ISSUED
ON THE DATE HEREON TO RE-
PLACE A LOST ORIGINAL CER-
TIFICATE NO. 8730 FOR
100.00 SHARES ISSUED ON
July 22, 1878

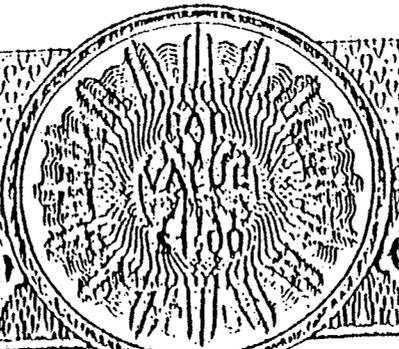
Wm. M. Mason Deaver Creek Coal Company

is the owner of Eighty hundred and no. 100 Class A Shares of the Capital Stock of
Huntington - Cleveland Irrigation Company.

transferable on the books of the Corporation by the holder hereof in
person or by Attorney in person or by Attorney in person or by
Attorney in person or by Attorney in person or by Attorney in person or by

In Witness Whereof, the said Corporation has caused this Certificate to be signed
by its, duly authorized, officers and its Corporate Seal to be hereunto affixed.
this 19th day of February A. D. 1886

Wm. M. Mason



Wm. M. Mason



August 8, 1985

Mr. Dan W. Guy, Manager
Permitting and Compliance
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah 84501

Dear Mr. Guy:

RE: Special Conditions #5 and #6, Final Permit Approval,
Huntington #4 Mine, INA/015/004, #2 and #4, Emery County,
Utah

The Division has reviewed the revised seed list for the riparian area and revised tree seedling stocking rate required by Special Conditions #5 and #6 for the Huntington #4 permit. The material you have submitted is adequate to respond to these stipulations.

Thank you for your cooperation in this matter.

Sincerely,

John J. Whitehead
Permit Supervisor/
Reclamation Hydrologist

btb

cc: Allen Klein
Robert Hagen
Tom Munson
Tom Wright

9294R-41

Beaver Creek Coal Company

P.O. Box 1378

Price, Utah 84501

Telephone 801 637-5050



August 9, 1985

Mr. Lowell Braxton
Administrator
Division of Oil, Gas, and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

RE: Special Condition No. 7
Huntington Canyon No. 4 Mine
ACT/015/004;UT-0004
Emery County, Utah

Dear Mr. Braxton:

Enclosed are 14 copies of the T & E information required by Special Condition No. 7 of the Huntington Canyon No. 4 Mine Approval.

The sheets are numbered and should be added to Chapter 9 of the M.R.P.

If you need any further information, please let me know.

Respectfully,

Dan W. Guy
Manager of Permitting and Compliance

DWG/sb

Enclosures

cc: M.P. Watson
K.S. Fleck
File
IBM D1

ENVIRONMENTAL INDUSTRIAL SUPPLY

P.O. Box 358 - Elmo, Utah 84521 - Telephone (801) 653-2606

Mel Coonrod - Reclamation Specialist
Hydro Seeding & Planting - Field Consultants
Complete Reclamation Supplies

August 9, 1985

Beaver Creek Coal Co.
P.O. Box 1378
Price, Utah 84501

RE: T & E Species Survey #4 Mine
Area of Potential Disturbance

Dear Mr. Guy:

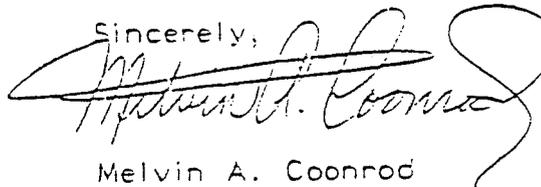
On August 8, 1985, Mr. Robert Thompson of the USFS Manti LaSal National Forest, and I conducted a survey for threatened and endangered species on all areas of potential redisturbance in association with the reclamation of #4 Mine reclamation.

The survey consisted of a visual inventory on an area approximately 50' above and 100' below the pad and road areas. While disturbance will most likely be limited to a 20' to 25' area above and below, we felt that the additional area was warranted to compensate for down-cast material.

The result of the survey was that no T & E species are present. There are three areas where seeps associated primarily with historic abandoned mines create habitat which may be conducive to the establishment of Hedysarum occidentale var. canone.

It would be desirous if this species were to become established in this area. The USFS would appreciate notification if it appears during post mining reclamation monitoring.

Sincerely,



Melvin A. Coonrod

Attachment

1987

MODIFICATIONS / AMENDMENTS



STATE OF UTAH
 NATURAL RESOURCES
 Oil, Gas & Mining

Norman H. Bangertter, Governor
 Dee C. Hansen, Executive Director
 Dianne R. Nielson, Ph.D., Division Director

5 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

November 16, 1987

Mr. Dan W. Guy, Manager
 Permitting & Compliance
 Beaver Creek Coal Company
 P. O. Box 1378
 Price, Utah 84501

Dear Mr. Guy:

Re: Final Approval of PAP Amendment, Request to Amend Water
 Monitoring Plan, Beaver Creek Coal Company, Huntington #4 Mine,
 INA/015/004-87B, Folder No. 3, Carbon County, Utah

The Division has completed its review of the above referenced PAP amendment received October 22, 1987. These changes have been reviewed by Division Hydrologist, James Fricke. The plans have been determined adequate for Division approval. Please refer to the attached technical memorandum for an explanation of the technical review.

This letter will serve as the Division's final approval for this PAP amendment. Beaver Creek Coal Company has adequately addressed all of the Division's requirements for approval of this amendment request. The amended plans will be incorporated into the existing approved permit application. Thank you for your cooperation in completing this permitting action. Please contact James Fricke, or John Whitehead should you have questions regarding this approval.

Sincerely,

D. Wayne Hedberg
 Data Management Coordinator

djh
 Attachment
 cc: J. Dryden
 R. Hagen
 G. Morris
 P. Rutledge
 8992R/30

R. Smith
 J. Whitehead
 P.F.O.



35 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

November 10, 1987

TO: John Whitehead, Permit Supervisor
FROM: James R. Fricke, Reclamation Hydrologist *JRF*
RE: Water Monitoring Amendment, Beaver Creek Coal Company,
Huntington #4 Mine, ACT/015/004-87B, Folder #2, Emery
County, Utah

Synopsis

The operator has requested to delete Total Settleable Solids and Oil and Grease from the non-NPDES monitoring stations. The operator will sample the parameters on all NPDES stations.

Analysis

Reclamation of the mine site occurred in October 1985. Mining related activities are not present on the site; therefore, sample of Oil and Grease (at non-NPDES stations) would not detect measurable limits. Sampling of Total Settleable Solids, at non-NPDES stations, may not be useful; however, the operator must adhere to UMC 817.46(u) for sediment pond removal.

Recommendation

The Division should approve the amendment.

jr
0798R/23

BEAVER CREEK Coal Company

Post Office Box 1378

Price, Utah 84501

Telephone 801 637-5050

10/15/87-015
Work
Copy



October 5, 1987

Mr. Lowell P. Braxton
Administrator
Utah Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Re: Amended Water Monitoring Report
Huntington Canyon No. 4 Mine
INA/015/004
Carbon County, Utah

Dear Mr. Braxton:

Enclosed are fourteen (14) copies of an amended water monitoring report form for the above referenced permit. This amendment is to clarify the parameters to be analyzed on the water samples from this property. The two parameters in question are: Total Setteable Solids and Oil and Grease; these are NPDES requirements for sediment pond discharges, and were never intended for runoff or other water samples. The new form clarifies this point.

The form page is numbered and should simply replace the old form in the plan.

Thank you for your consideration. If you have any questions, or need any further information, please let me know.

Respectfully,

Dan W. Guy
Manager Permitting/Compliance

DWG/rs

cc: J.L. Coffey
R.J. Marshall
File

RECEIVED
OCT 22 1987

DIVISION OF
OIL, GAS & MINING

Beaver Creek Coal Company Water Monitoring Report

Property: _____

Date Sampled: _____ Date Analyzed: _____

Station: _____

Location: _____

Type: _____

Frequency: _____

Field Measurements:

Water Level or Flow : _____

PH : _____

Specific Conductivity : _____ (ohms/cm)

Temperature : _____ (°c)

Dissolved Oxygen : _____ (ppm)
(Perennial streams only)

Laboratory Measurements (mg/l):

* * Total Settleable Solids: _____

Total Suspended Solids : _____

Total Dissolved Solids : _____

Total Hardness (as CaCO₃): _____

Acidity (CaCO₃) : _____

*Carbonate (CO₃⁻²) : _____

*Bicarbonate (HC₃⁻¹) : _____

*Calcium (Ca) : _____

Chloride (Cl⁻) : _____

Iron (Fe) : _____

*Magnesium (Mg) : _____

*Total Manganese (Mn) : _____

*Potassium (K) : _____

*Sodium (Na) : _____

*Sulfate (SO₄⁻²) : _____

* * Oil & Grease : _____

Cation - Anion Balance : _____

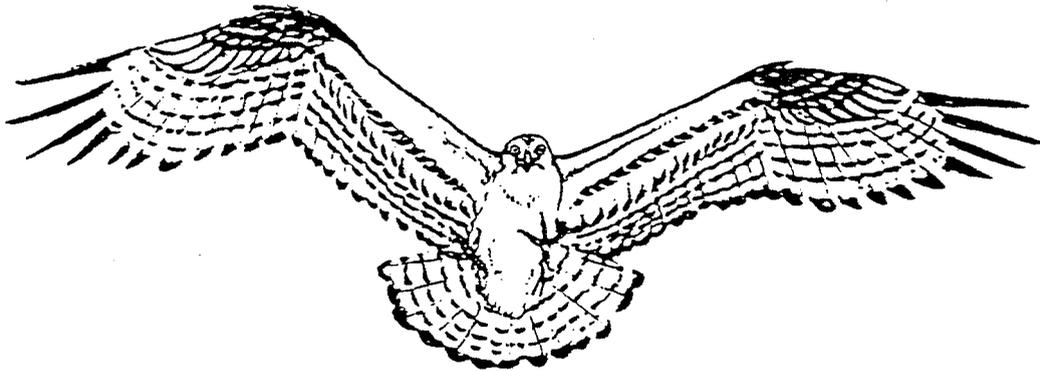
* Dissolved Form

7-91a

* * NPDES Samples only

1987
RAPTOR SURVEY
AND
MONITORING REPORT

RAPTOR SURVEY
AND
MONITORING REPORT FOR 1987
Beaver Creek Coal Company



Prepared by

E. I. S.

Raptor Survey and Monitoring Report for 1987

Scope:

The following report is based on a helicopter survey conducted in April-May of 1987 by various coal companies in cooperation with the Utah Division of Wildlife Resources.

Methodology:

The information is referenced by nest location numbers which correspond to official nest designations as listed by both the federal and state Wildlife agencies. In addition to the official inventory, E.I.S. personnel monitored raptor sightings at all properties during the nesting period. As a result of this monitoring activity, three significant sightings were made and reported to either Miles Moretti or Larry Dalton of the Utah Division of Wildlife Resources. These observations were: [1] possible Peregrine Falcon sighting #2 Mine Area ridge separating Beaver Creek and Gordon Creek drainages, [2] paired Bald Eagles below #3 & 6 Mine adjacent to Gordon Creek Haul Road [feeding on road kill deer].

In addition to the reported sighting of T & E species, there were 12 sightings of Redtail hawks, 3 sightings of a Sharpshin hawks, 3 sightings of a Goshawk and 5 unidentified raptors in the mine area. The relocated nests in the upper end of Gordon Creek Canyon appeared to be abandoned and not being utilized during the 1987 nesting season.

Results:

A map of each property is attached with the nest locations indicated and the corresponding number identity. Tables R-1, R-2, R-3 and R-4 list each property and a summation of nest sights and/or monitoring sightings.

Recommendations:

Based on a meeting with Larry Dalton of the Utah Division of Wildlife Resources and the attached correspondance, Appendix R-1, the practice of an annual raptor survey should be discontinued. The survey utilizing a helicopter is a cooperative function of the wildlife agencies and the company, and as such should only be conducted under conditions which warrant this type of activity. The Utah Division of Oil, Gas and Mining have set standards and procedures for this type of inventory [see Appendix R-2]. Unless Beaver Creek Coal anticipates the type of activities outlined in Appendix R-2, an annual survey appears to be be redundant at best, and could be considered harrassment of raptors at worst.

TABLE R-1

Huntington Canyon #4 Mine

<u>Species</u>	<u>Year</u>	<u>Map I.D. Number</u>
Unknown Buteo	1981	168
Unknown Buteo	1981	169
Unknown Buteo	1981	170
Unknown Buteo	1981	171
Unknown Buteo	1987	271
Unknown Buteo	1987	272

TABLE R-2

Gordon Creek 3 & 6 Mine Permit Area

No known nest sites within 1 mile of existing permit area.

TABLE R-3

CV Spur Permit Area

No known nest sites within 1 mile of existing permit area.

TABLE R-4

Gordon Creek #2 & #7 Mine

No nest sites within $\frac{1}{2}$ mile, however, there is one raptor site near the southern boundary of the Location Map Plate 1-1.

<u>Species</u>	<u>Year</u>	<u>Map I.D. Number</u>
Unknown Buteo	1987	327

APPENDIX R-1



Southeastern Region • 455 West Railroad Avenue • Price, UT 84501-2829 • 801-637-3310

March 23, 1988

Mr. Melvin A. Coonrod
Environmental Industrial Supply
P.O. Box 258
Elmo, UT 84521

Dear Mel:

In regards to Beaver Creek Coal Company's request for you to assist them at conducting an annual raptor survey, the following is offered for your consideration.

Annual surveys for permitted facilities are not normally required. Where raptor nests are known to exist within one-half mile of surface disturbed areas/facilities, annual monitoring to determine the status of just those nests was recommended during the first 5-year permit period. Once the impacts, if any, from a coal facility on a raptor nest are established, monitoring could be discontinued.

From a planning perspective, there is value for a coal company to conduct at least one permit-wide survey every five years on their actively mined property. This would facilitate future and appropriately timed surface disturbing developments. When adequate historical data is not available and a new surface disturbing development is planned at a coal mining complex, a raptor survey within one-half mile radius of such may be recommended.

Personnel conducting a survey during the raptor breeding season, which lies between early February and mid August, and who approach within one-half mile of a nest are required to secure a "Certificate of Registration" from the Division. Survey work that is accurate and comprehensive always results in disturbance (harassment) to the birds. Such is not allowed without appropriate authorization. A certificate of registration will only be issued to a qualified raptor ecologist and for a specific survey area. Additionally, the survey technique will require Division approval before the certificate is issued. Generally speaking, precipitous terrain will require use of a helicopter during mid May and a biologically trained backup observer must accompany the raptor ecologist. Survey of arboreal areas can be conducted on-the-ground by a raptor ecologist. On-the-ground survey must occur prior to leaf-out.

Mel, adequate baseline raptor data exists for Beaver Creek's Trail Mountain and Huntington Canyon (Mill Fork) properties due to an intense helicopter survey in May of 1987. Also, the Mill Fork properties have undergone final

Mel Coonrod
Page 2
March 23, 1988

reclamation. No raptor survey work is needed in association with the Castle Valley loadout project due to a lack of raptor nesting habitat and the already existing facility. The 3/6 mines in the Gordon Creek area (Coal Canyon) have also undergone final reclamation, thus no raptor survey is needed. The 2/7 mines in the Gordon Creek area remain in an actively developing mining project. The small amount of precipitous terrain associated with the permit area has potential for raptor nests. Also, the arboreal areas on that permit tract have a potential for raptor nests. Neither setting has been adequately surveyed in recent years. If the company has plans to expand into undisturbed areas, a comprehensive survey during this spring (1988) would behoove their interests. If no such plans exist or have potential to arise, there is no justification for a survey.

I hope this assessment will provide the needed guidance for Beaver Creek Coal Company's decision. If a decision to conduct inventory is made, a helicopter doing such work will be in the area in May. Coordination with DOGM (AMR Program) and possibly Castle Gate Coal Company could reduce cost for such an inventory. Please advise if I can be of further assistance.

Thank you for an opportunity to provide comment.

Sincerely,



Larry B. Dalton, Resource Analyst
Southeastern Region

LBD/dd

cc: Darrell Nish, DWR
Randy Radant, DWR
Lowell Braxton, DOGM
Clark Johnson, USFWS

APPENDIX R-2

Utah Division of Oil, Gas and Mining
Standards and Procedures for Raptor Surveys

The following should be considered a supplement to the Division's Fish and Wildlife Information Guidelines and will be incorporated into those guidelines when they are revised.

Before the Survey:

1. Consult with the Division to determine if a survey is necessary. This contact may be part of the normal wildlife consultation process for permit submission. If a survey is required, the following are general guidelines for surveys:
 - a. New mine permit or activity involving long term disturbance: The minimum requirement for baseline information is a survey of suitable habitat within a .5 mile radius of surface disturbing construction or operations activities. Surface disturbance includes potential areas of subsidence on cliffs.

A baseline survey of the entire permit area is recommended to prevent delays for clearances on amendments and permit renewals and may be required by the Division. Follow-ups on baseline surveys may be required for five year permit renewals.
 - b. Short term disturbances, e.g. small construction projects or exploration: If disturbance is to occur in the breeding season of February 15 to July 15, survey suitable habitat within .5 mile radius of the disturbance. If there will be no disturbance during the breeding season, surveys can usually be limited to the actual disturbance site.
 - c. Monitoring: Monitoring studies (i.e., methods, locations, scheduling) should be developed on a site by site basis. Except for special situations, survey flights are not required of the entire permit area or of all known nests. Monitoring will usually include reporting on known and new nests in the .5 mile buffer area around disturbances.
2. Contact (a) the Resource Analyst at the appropriate regional office of the Utah Division of Wildlife Resources; (b) the Field Supervisor, U.S. Fish and Wildlife Service, RM 2060, 1745 W. 1700 So., Salt Lake City, Utah 84104; and (c) the office of the appropriate federal land management agency, if applicable, for their most recent data on area raptors.

These state and federal agencies share information on raptors but one or more may have different data if recent work has been done by an agency.

Baseline Survey:

1. In most cases a helicopter is necessary for a baseline survey of cliff raptor habitat or any large scale survey of tree nesting species. Fixed wing aircraft cannot, generally, fly slow and close enough for an adequate survey. Ground monitoring may be useful after nest areas are identified but should not be considered a substitute for baseline data collection from a helicopter.

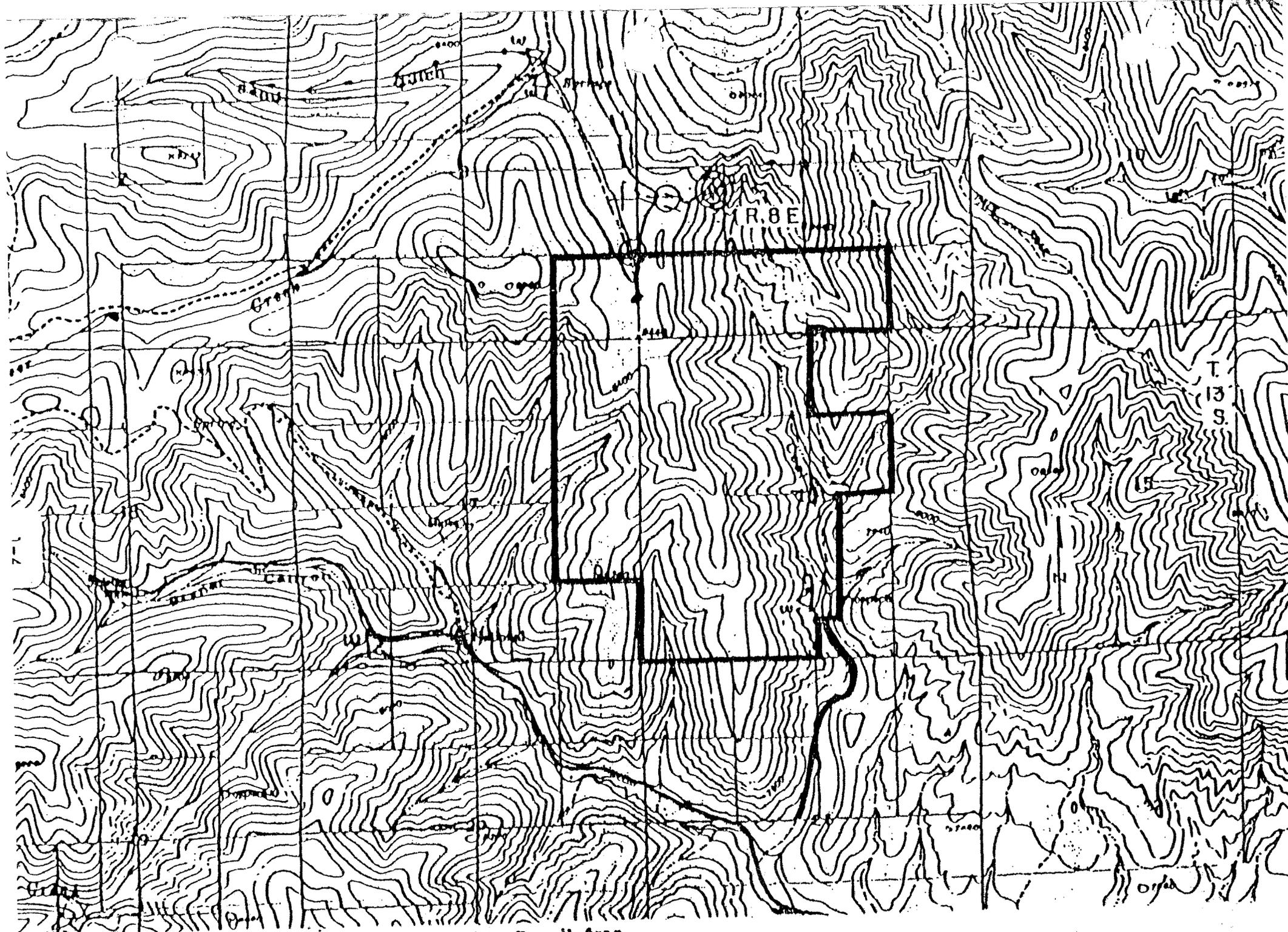


FIGURE I-2 Gordon Creek No 3 & 6 Mines Permit Area.

No nests on this map