

MOUNTAIN COAL COMPANY
1993 ANNUAL REPORT
GORDON CREEK 2/7/8 MINES

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015



March 31, 1994

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

Re: Mountain Coal Company
1993 Annual Report
Gordon Creek No. 2/7/8 Mines
ACT/007/016
Carbon County, Utah

Dear Mr. Braxton:

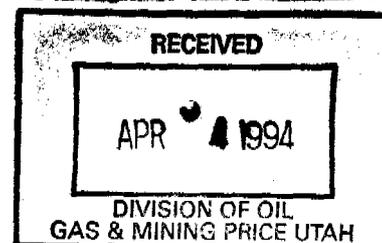
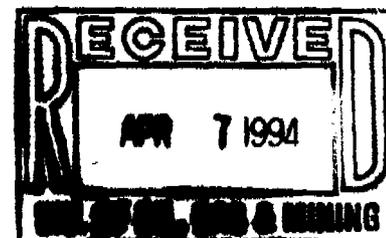
Enclosed is the Annual Report for Coal Mining and Reclamation Operations for 1993 for the Gordon Creek No. 2/7/8 Mines.

If you have any questions, or need any further information, please contact me or Kathleen Welt at Mountain Coal Company.

Respectfully,

Dan W. Guy P.E.
for
Kathleen G. Welt

cc: Kathleen Welt - Mountain Coal Company
File



COAL MINING AND RECLAMATION OPERATIONS FOR 1993

(Must be submitted to the Division by April 15, 1994)

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, Utah 84180-1203
(801) 538-5340

Permittee: MOUNTAIN COAL COMPANY
Mine Name: GORDON CREEK NO. 2/7/8 MINES
Mailing Address: P.O. BOX 591, SOMERSET, COLO. 81434
Company Representative: KATHLEEN G. WELT
Resident Agent: THE CORP. TRUST CO. 1209 ORANGE ST. WILMINGTON, DELAWARE
Permit Number: ACT/007/016 (INACTIVE) 19801
MSHA ID Number: N/A
Date of Initial Permanent Program Permit: 05/11/78
Date of Permit Renewal: 09/12/91 (EXPIRES 08/28/94)
Quantity of Coal Mined (tonnage) 1993: N/A (MINE CLOSED 11/90)

Attach Updated Mine Sequence Map(s) showing mine development through December 31, 1993.
(Same as Lease Royalty Payment Map and/or MSHA Progress Map)

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

A. General

1. Discuss anomalies, missing data and monitoring changes made throughout the year.
2. Summarize any corrective actions and the results that may have occurred during the year.

B. Water Monitoring Data:
Groundwater Summary

1. Mine Discharge
 - a. Summarize the total annual discharge from mine water discharge points and breakdown on a monthly basis for each site.
 - b. Discuss the past five years of data comparing changes in discharge. Elements such as mining rate, location of faults or large in-mine flows during the year should be discussed.
 - c. Discuss trends and exceedence in water quality parameters. A correlation with flow could provide additional information.

2. **Springs**
 - a. Are there seasonal trends/or changes in water quality for each quarter. Stiff diagrams provide a good aid in this determination.
 - b. Provide an analysis of changes in quantity of flow. Discuss any significant changes or trends. An accumulation of long-term data is necessary for this discussion.
 3. **Surface Water**
 - a. Include (discuss or tabulate) comparisons of upstream and downstream water quality and quantity for monitoring sites for each quarter. Include tributary quantity and quality information. Compare with mine water discharge where applicable.
 - b. Discuss any subsidence occurring over tributaries and streams, and results from monitoring of subsided areas.
- C. **Summarized Water Monitoring Data**
1. List of monitoring points and their locations, based on UTM coordinates, and respective frequencies of monitoring (monthly, quarterly, etc.) as approved in the PAP;
 2. UPDES permit number, UPDES discharge points, and their locations based on UTM coordinates.
 3. Summary of findings based on water monitoring during 1993; and
 4. Submit water monitoring as DOS based files. Be specific about the format, submit data in one of the following formats only, i.e: Quattro Pro, Lotus, or ASCII.
- D. **Precipitation or Other Climatological Data (please submit as DOS based files: ASCII, Lotus, Quattro Pro, FoxPro, etc. -- Contact Ken Wyatt, if you have any questions).**
- E. **Subsidence Monitoring Report:**
1. Brief description of monitoring system (monuments or aerial surveys, how monitoring is done, how frequently monitoring is done);
 2. List of all monitoring points (if any) and their locations and amount of displacement of each;
 3. Map showing either monitoring points (if any) or a representation of subsidence which has occurred; and
 4. Any owners and/or occupants of surface property and structures above the underground workings who were or will be mailed notification six months prior to mining (R645-301-525.300).
 5. Discussion of any proposed mining sequence changes and how that may affect the area of monitoring for the following year.
- F. **Vegetation Data (test plots) or Revegetation Success Monitoring (includes interim and final):**
1. Test plot monitoring data or implementation;
 2. Quantitative results from interim or final seeding efforts;
 3. If quantitative monitoring was not required, then at minimum, a qualitative description of the interim or final vegetation; and
 4. Describe any seeding done on site during the current year.
- G. **Annual Impoundment Certification, (R645-301-514.312) which includes the following information:**
1. Any appearances of instability;
 2. Structural weakness or other hazardous conditions;
 3. Depth and elevation of any impounded waters;

4. Existing storage capacity;
5. Any existing or required monitoring procedures and instrumentation; and
6. Any other aspects of the structure affecting stability.

Suggested form enclosed

- H. Annual Overburden, Spoil, Refuse, Roof, Floor, and Mid-Seam Data. For Consistency and completeness, please submit data for this reporting requirement in the following manner:
 1. Location of sample site, sample interval, and sample matrix (if roof or floor, then include lithologic unit and if coal, then thickness of seam at sample site);
 2. Sampling technique employed in the field (i.e., grab sample, composite, depth segregated or specific procedure outlined in the permit by chapter and page) and preparation prior to analysis (i.e., sieved sample, ground sample, air dried, oven dried, etc.);
 3. Laboratory analysis report sheet which includes:
 - i. Sample time and date;
 - ii. Date and time of lab analysis; and
 - iii. Analytical method(s) employed and references. Include the soil/spoil: water ratio.
 4. Summary of findings based on monitoring.
- I. A current copy of the annual report of officers submitted to the Department of Commerce and any changes in the ownership and control information required under R645-301-110.
- J. Any Other Information Required to be Submitted as Specified in your Permit Application Package and Permit.

ANNUAL MAINTENANCE INSPECTION CERTIFICATION

This certification shall be submitted to the Division as part of the "Annual Report".

1. I hereby certify, in accordance with R645-301-514.310 through R645-301-514.313 and others as applicable, that with respect to the following facility.

Name of Permittee _____ Permit No. _____

Mine Name _____

which is a: (check one)

- temporary water impoundment
- permanent water impoundment
- processing waste impoundment

2. I, or persons under my supervision, have conducted adequate inspections of the maintenance of the structure; and
3. The maintenance has been performed in accordance with the Utah State Coal Program; and
4. The attached report is certified in accordance with the rules of professional conduct promulgated by the Utah Board of Examiners for Engineers; and
5. The attached report addresses the following points:
 - a. any appearances of instability, structural weaknesses or other hazardous conditions;
 - b. depth and elevation of impoundment water;
 - c. existing storage capacity;
 - d. existing or required monitoring procedures and instrumentation; and
 - e. any other aspects of the structure affecting stability.
6. COMMENTS

CERTIFICATION REPORT

On _____, 1993, an inspection of _____
_____, Area No. _____'s sedimentation pond _____

revealed the following:

- A. The pond has been constructed and maintained in accordance with the approved plan.
- B. The pond's dam appeared sound with no signs of instability or hazardous conditions.
- C. The water elevation was _____ feet. The water depth was _____ feet.
- D. The existing storage capacity is _____ acre-feet which is greater than the _____ acre-feet required by the approved plan.
- E. Ponds are inspected weekly for structural problems and pH levels. Bi-monthly sampling of discharge is performed with analysis results submitted monthly. U.P.D.E.S. and DOGM requirements are followed during sampling, analysis, and reporting.

Based on this field inspection, pond ____ has been certified as required by R645-301-514.310 through R645-301-514.313. A "Certification of Maintenance of Dams and Embankments" is attached.

Affix seal of engineer
making this certification.
All data in the seal
must be legible.

Seal

12/31/93

PERMIT

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



August 6, 1993



Pamela Grubaugh-Littig
Permit Supervisor
Utah Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Re: Resubmittal of Plan
Mountain Coal Company
Gordon Creek No. 2/7/8 Mines
ACT/007/016; Folder #2
Carbon County, Utah

Dear Ms. Littig:

Pursuant to your letter of 6/9/93, to Kathleen Welt, Mountain Coal Company is herein resubmitting 6 complete copies of the Gordon Creek No. 2/7/8 Mine Reclamation Plans.

The plans have been edited, and the latest review issues have been addressed. A cross-reference is included to show location of review issue items. Chapters 3,7,8 and 9 have also been totally rewritten.

It is our hope this plan will meet with your approval. If you have any questions, or need further information, please contact me or Kathleen Welt.

Respectfully,

Dan W. Guy for
Kathleen G. Welt, MCC

cc: Kathy Welt - MCC
Scot Anderson
File

FEDERAL

PERMIT
ACT/007/016

September 12, 1991

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/007/016, is issued for the State of Utah by the Utah Division of Oil, Gas and Mining (Division) to:

Mountain Coal Company
P.O. Box 1378
Price, Utah 84501
(801) 637-5050

for the Gordon Creek #2, #7, & #8 Mines. Mountain Coal Company is the lessee of federal coal (U-8319 and U-53159) and private fee coal within the permit area. A Surety Bond is filed with the Division in the amount of \$641,443, payable to the State of Utah, Division of Oil, Gas and Mining, and the Office of Surface Mining, Reclamation and Enforcement (OSM). The Division must receive 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 the Act.

Sec. 2 PERMIT AREA - The permittee is authorized to conduct underground coal mining activities on the following described lands within the permit area at the Gordon Creek #2, #7, & #8 Mines, situated in the State of Utah, Carbon County, and located:

Township 13 South, Range 7 East, SLBM

Section 12: E1/2, E1/2 W1/2

Section 13: NE1/4 NE1/4, N1/2 NW1/4 NE1/4, N1/2 S1/2 NW1/4
NE1/4, S1/2 S1/2 NW1/4 NE1/4, S1/2 NE1/4, E1/2 W1/2,
SE1/4

Section 24: N1/2 NE1/4, NE1/4 NW1/4

Township 13 South, Range 8 East, SLBM

Section 7: W1/2 SW1/4, SE1/4 SW1/4

Section 17: SW1/4 SW1/4

- Section 18: Lots 1-4, NW1/4 NE1/4, S1/2 NE1/4, E1/2 NW1/4 NE1/4
SW1/4, SE1/4, SE1/4 SW1/4, S1/2 NW1/4, S1/2 NE1/4,
NW1/4 NE1/4
- Section 19: NE1/4, NE1/4 NW1/4, N1/2 SW1/4, NW1/4 SE1/4; Lots 1
and 2, SE1/4 NW1/4

This legal description is for the permit area of the Gordon Creek #2, #7, & #8 Mines. The permittee is authorized to conduct underground coal mining activities and related surface activities on the foregoing described property subject to the conditions of all applicable conditions, laws and regulations.

- Sec. 3 COMPLIANCE** - The permittee will comply with the terms and conditions of the permit, all applicable performance standards and requirements of the State Program.
- Sec. 4 PERMIT TERM** - This permit becomes effective on September 12, 1991, and expires on August 28, 1994.
- Sec. 5 ASSIGNMENT OF PERMIT RIGHTS** - The permit rights may not be transferred, assigned or sold without the prior written approval of the Division Director. 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 R614-303-300.
- Sec. 6 RIGHT OF ENTRY** - The permittee shall allow the authorized representative of the Division, including but not limited to inspectors, and representatives of the Office of Surface Mining Reclamation and Enforcement (OSM), 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, R614-400-220, 30 CFR 842.13 and R614-400-110;
 - (b) be accompanied by private persons for the purpose of conducting an inspection in accordance with R614-400-100 and R614-400-200 when the inspection is in response to an alleged violation reported to the Division by the private person.
- Sec. 7 SCOPE OF OPERATIONS** - The permittee shall conduct underground coal mining activities only on those lands specifically designated as within the permit area on the maps submitted in the approved plan and approved for the term of the permit and which are subject to the performance bond.

Sec. 8 ENVIRONMENTAL IMPACTS - The permittee shall take all possible steps to minimize any adverse impact to the environment or public health and safety resulting from noncompliance with any term or condition of the permit, including, but not limited to:

- (a) Any accelerated or additional monitoring necessary 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. 9 CONDUCT OF OPERATIONS - The permittee 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 the Division 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 EXISTING STRUCTURES - As applicable, the permittee will comply with R614-301 and R614-302 for compliance, modification, or abandonment of existing structures.

Sec. 11 RECLAMATION FEE PAYMENTS - The operator shall pay all reclamation fees required by 30 CFR Part 870 for coal produced under the permit, for sale, transfer or use.

Sec. 12 AUTHORIZED AGENT - 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. 13 COMPLIANCE WITH OTHER LAWS - 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. 14 PERMIT RENEWAL - 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. 15 CULTURAL RESOURCES - If during the course of mining operations, previously unidentified cultural resources are discovered, the permittee shall ensure that the site(s) is not disturbed and shall notify the Division. The Division, after coordination with OSM, shall inform the permittee of necessary actions required. The permittee shall implement the mitigation measures required by Division within the time frame specified by Division.

Sec. 16 APPEALS - The permittee shall have the right to appeal as provided for under R614-300-200.

The above conditions (Secs. 1-16) 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 Division and the permittee at any time to adjust to changed conditions or to correct an oversight. The Division may amend these conditions at any time without the consent of the permittee in order to make them consistent with any federal or state statutes and any regulations.

THE STATE OF UTAH

By: 

Date: 9-12-91

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


Authorized Representative of
the Permittee

Date: 10/15/91



Norman H. Hangerer
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Deputy Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

366 West North Temple
3 Third Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

August 28, 1989

Mr. Richard D. Pick, President
Mountain Coal Operations
Beaver Creek Coal Company
P. O. Box 1378
Price, Utah, 84501


Dear Mr. Pick:

Re: State Permit and Decision Package, Five-Year Permit
Renewal, Beaver Creek Coal Company, Gordon Creek #2, #7,
and #8 Mines, ACT/007/022, Folder #3, Carbon County, Utah

Enclosed are two State Permits and a Decision Package for the Gordon Creek #2, #7 and #8 Mines Five-Year Permit Renewal. Please read the Stipulations in Attachment A of the State Permit, then sign both State Permits and return one to the Division.

Your staff's cooperation during the permitting process has been appreciated.

Best regards,


Dianne R. Nielson
Director

RVS/djh
Enclosure
cc: P. Rutledge, OSM-Denver
R. Hagen, OSMRE-Albq.
AT8/90

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/007/016, 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
 (801) 637-5050

for the Gordon Creek #2, #7 and #8 Mines. Beaver Creek Coal Company is the lessee of federal coal and private fee coal within the permit area. A performance bond is filed with the DOGM in the amount of \$641,443.00, payable to the state of Utah, Division of Oil, Gas and Mining and the Office of Surface Mining, Reclamation and Enforcement (OSMRE). DOGM must receive 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 the Act.

Sec. 2 PERMIT AREA - The permittee is authorized to conduct underground coal mining activities on the following described lands (as shown on the map appended as Attachment B) within the permit area at the Gordon Creek #2, #7 and #8 Mines, situated in the state of Utah, Carbon County, and located:

Township 13 South, Range 7 East, SLBM, Utah

Section 12: E1/2, E1/2 W1/2
 Section 13: NE1/4 NE1/4, N1/2 NW1/4 NE1/4, N1/2 S1/2 NW1/4
 NE1/4, S1/2 S1/2 NW1/4 NE1/4, S1/2 NE1/4, E1/2
 W1/2, SE1/4
 Section 24: N1/2 NE1/4, NE1/4 NW1/4

Sec. 2 PERMIT AREA (Cont'd.)

Township 13 South, Range 8 East, SLBM, Utah

Section 7: W1/2 SW1/4, SE1/4 SW1/4
Section 17: SW1/4 SW1/4
Section 18: Lots 1-4, NW1/4 NE1/4, S1/2 NE1/4, E1/2 NW1/4
NE1/4 SW1/4, SE1/4, SE1/4 SW1/4, S1/2 NW1/4, S1/2
NE1/4, NW1/4 NE1/4
Section 19: NE1/4, NE1/4 NW1/4, N1/2 SW1/4, NW1/4 SE1/4; Lots
1 and 2, SE1/4 NW1/4.

This legal description is for the permit area (as shown on Attachment B) of the Gordon Creek #2, #7 and #8 Mines. The permittee is authorized to conduct underground coal mining activities and related surface activities on the foregoing described property subject to the conditions of all applicable conditions, laws and regulations.

- Sec. 3 PERMIT TERM** - This permit becomes effective on August 28, 1989 and expires on August 28, 1994.
- Sec. 4 ASSIGNMENT OF PERMIT RIGHTS** - The permit rights may not be transferred, assigned or sold without the approval of the Director, DOGM. 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 RIGHT OF ENTRY** - The permittee shall allow the authorized representative of the DOGM, including but not limited to inspectors, and representatives of OSMRE, 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 SCOPE OF OPERATIONS** - The permittee shall conduct underground coal mining activities only on those lands specifically designated as within the permit area on the maps submitted in the mining and reclamation plan and permit application and approved for the term of the permit and which are subject to the performance bond.

- Sec. 7 ENVIRONMENTAL IMPACTS** - The permittee shall minimize any adverse impact to the environment or public health and safety through 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 DISPOSAL OF POLLUTANTS** - 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 CONDUCT OF OPERATIONS** - The permittee 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 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 AUTHORIZED AGENT** - 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 COMPLIANCE WITH OTHER LAWS** - 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 PERMIT RENEWAL - 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 CULTURAL RESOURCES - If, during the course of mining operations, previously unidentified cultural resources are discovered, the permittee shall ensure that the site(s) is not disturbed and shall notify DOGM. DOGM, after coordination with OSMRE, shall inform the permittee of necessary actions required. The permittee shall implement the mitigation measures required by DOGM within the time frame specified by DOGM.
- Sec. 14 APPEALS - The permittee shall have the right to appeal as provided for under UMC 787.
- Sec. 15 SPECIAL CONDITIONS - In addition to the general obligations, the permittee shall comply with the special 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 DOGM and the permittee at any time to adjust to changed conditions or to correct an oversight. DOGM 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:

Deanne R. Nelson

Date:

August 28, 1989

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

Richard J. P. L.

Authorized Representative of
the Permittee

Date:

8/31/89

APPROVED AS TO FORM:

By:

Barbara W. Robert
Assistant Attorney General

Date:

August 28, 1989

ATTACHMENT A

STIPULATIONS
FIVE-YEAR PERMIT RENEWAL
GORDON CREEK #2, #7 AND #8 MINES
ACT/007/016

Beaver Creek Coal Company
Carbon County, Utah
August 28, 1989

Stipulation UMC 817.23-(1, 2)-(HS)

Within 30 days of permit approval the applicant must submit the following for inclusion in the PAP:

1. As-built surveys of the soil stockpiles to include: volume of material stockpiled, maximum and minimum height, slopes and all pertinent dimensions.
2. A topsoil mass balance table which includes the following: volumes of suitable topsoil to be redistributed; volumes of stockpiled material; disturbed acreage to be reclaimed; topsoil redistribution depths; and identification and volumes of material required to redistribute over each disturbed area.

Stipulation UMC 817.43-(1)-(DW)

1. Within 60 days of permit approval, the applicant must submit for inclusion in the PAP, adequate riprap sizing and channel designs for reclamation of Bryner Canyon, including gradation and filter blanket requirements.

Stipulation UMC 817.44-(1)-(DW)

1. Within 60 days of permit approval, the applicant must submit for inclusion in the PAP, proper riprap sizing, gradation, and filter blanket requirements for the permanent diversion of North Fork Gordon Creek at the Sweet's Canyon water truck fill-up pond. Installation of the riprap will take place during reclamation channel construction at the Gordon Creek #2, #7 and #8 Mines.

Stipulation UMC 817.97-(1)-(WJM/BAS)

1. Within 30 days of permit approval, the applicant must safeguard all powerpoles at the #2 Mine from raptor electrocution. Poles must be gapped (4 inch gap) at least 12 inches below the lowest crossarm and below transformer tanks. Perchguards must be installed on crossarms which provide less than 60 inches separation of conductors. Multiple perchguards or other forms of perch deterrents must be mounted on transformer tanks. Elevated perches, having at least a two-foot vertical rise above conductors, must be erected on all powerpoles.



United States Department of the Interior

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202



In Reply Refer To:

2155M

November 17, 1988

4441
UT-0010

Mr. Richard Pick
Beaver Creek Coal Company
P.O. Box 1378
Price, Utah 84501

Dear Mr. Pick:

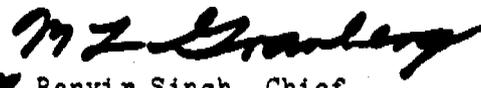
The Office of Surface Mining Reclamation and Enforcement (OSMRE) has terminated, effective immediately, Federal permit UT-0010, issued on August 27, 1984, for Beaver Creek Coal Company's Gordon Creek No. 2 mine. The Federal permit was terminated in accordance with OSMRE's Directive on the Termination of Federal Permits because the State has a cooperative agreement that delegates the permitting responsibilities on Federal lands to the State, and Utah Division of Oil, Gas and Mining (DOGGM) has issued State permit ACT/007/016 for the Gordon Creek No. 2 mine in accordance with the Utah State program and cooperative agreement.

I have enclosed the memorandum terminating the Federal permit. Attached to the memorandum are the applicable standard conditions of approval of the Gordon Creek No. 2 mine mining plan approved by the Assistant Secretary on August 24, 1984, for Federal leases U-8319 and U-47975. These conditions were previously incorporated in the Federal permit. Notwithstanding the termination of the Federal permit, these conditions remain in full force and effect.

Utah DOGGM is now the regulatory authority for surface coal mining and reclamation operations on Federal lands at the Gordon Creek No. 2 mine under the Utah State permit ACT/007/016, the Utah State program, and the cooperative agreement. Mining operations on Federal leases U-8319 and U-47975 must be conducted in accordance with the approved mining plan including the standard conditions, the leases, the Mineral Leasing Act of 1920, as amended, and its implementing regulations, as well as the State permit.

If you have any questions, please contact Richard Holbrook at (303) 844-5658.

Sincerely,

acting 
Ranvir Singh, Chief
Federal Lands Branch

Enclosures

cc: BLM, Utah State Office
BLM, Price Resource Area
BLM, Moab District Office
Director, DOGM
Robert Hagen, Albuquerque Field Office Field Office
B. McCue, U.S. Fish and Wildlife Service



United States Department of the Interior

OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
BROOKS TOWERS
1020 15TH STREET
DENVER, COLORADO 80202



In Reply Refer To:
441
UT-0010

2155M

MEMORANDUM

TO: Chief, Federal Programs Division

THROUGH *acting* Chief, Federal Lands Branch *ms*

FROM: Richard Holbrook, Project Leader *Richard Holbrook*

SUBJECT: Recommendation to Terminate Federal Permit UT-0010 for the Beaver Creek Coal Company Gordon Creek No. 2 Mine, Carbon County, Utah

I. Recommendation

I recommend termination of Federal permit UT-0010, issued on August 27, 1984, for the Beaver Creek Coal Company Gordon Creek No. 2 mine. My recommendation is based on the existence of the Utah cooperative agreement which provides for the delegation to the Utah Division of Oil, Gas and Mining (DOG M) of the permitting responsibilities for operations on Federal lands pursuant to Section 523 of the Surface Mining Control and Reclamation Act (SMCRA); the issuance of the Utah State permit ACT/007/016 in accordance with the Utah State program and cooperative agreement; incorporation of all necessary Federal permit conditions in the State permit; and the approved mining plan for Federal leases U-8319 and U-47975. Attached to this memorandum are the applicable standard conditions of approval of the Gordon Creek No. 2 mine mining plan approved by the Assistant Secretary on August 24, 1984, for Federal leases U-8319 and U-47975. These conditions were previously incorporated in the Federal permit. Notwithstanding the termination of the Federal permit, these conditions will remain in full force and effect.

Utah DOGM has reviewed the permit application package (PAP) for the Gordon Creek No. 2 mine under the Utah State program and cooperative agreement (30 CFR 944.30) and has issued Utah permit ACT/007/016 authorizing surface coal mining and reclamation operations on Federal and non-Federal lands in the permit area pursuant to the State program and cooperative agreement. A copy of the bond in the amount of \$641,443, payable to the United States and the State of Utah, is on file with OSMRE.

This permit termination is categorically excluded from the National Environmental Policy Act (NEPA) process because the Federal permit and mining plan approval were previously covered by the NEPA process (i.e., OSMRE's Environmental Assessment and Finding of No Significant Impact dated August 3 1984)

II. Background

The Gordon Creek No. 2 underground coal mine is located in Carbon County, Utah, 20 miles northwest of Price, Utah. The Utah State permit area contains approximately 2300 acres, approximately 1726 acres of which are leased Federal coal in the mining plan area for Federal leases U-3319 and U-47975.

The Gordon Creek No. 2 mine mining plan was originally approved under the Federal lands program on August 24, 1984, and the mine was permitted by OSMRE under the Federal lands program and Utah State program on August 27, 1984. Since the original approval of the mining plan, there have been no mining plan modifications.

OSMRE's Albuquerque Field Office Field Office was consulted on November 10, 1988 and has indicated that no pending enforcement actions are associated with the Federal permit for the Gordon Creek No. 2 mine.

The Federal permit contained 12 special conditions of approval.

Special Conditions 1 and 2 required erosion protection measures for certain ditches and were satisfied on March 11, 1985.

Special Condition 3 required monitoring of mine inflows and was satisfied on August 5, 1988.

Special Condition 4 required monitoring of surface water at two locations and was satisfied on October 6, 1988.

Special Condition 5 required the permittee to establish riparian habitat at the Gordon Creek #3 minesite and was satisfied on August 5, 1988.

Special Condition 6 required submittal of a USFWS permit for removal of a raptor nest and was satisfied on February 13, 1985.

Special Condition 7 required the permittee to notify Utah DOGM if mass movement occurs in the permit area and is carried forward in the State permit as Condition No. 1.

Special Condition 8 requires submittal of subsidence information and was satisfied on October 6, 1988.

Special Condition 9 required the permittee to contribute to the endangered fishes conservation fund and was satisfied on June 13, 1985.

Special Condition 10 requires modification of power poles for raptor protection and was carried forward in the State permit as Condition 2.

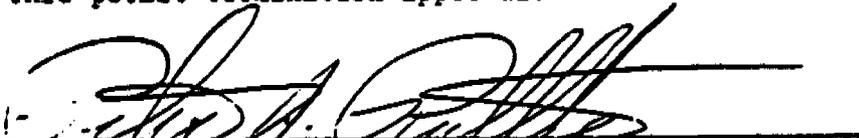
Special Condition 11 requires a survey for endangered plant species prior to any redisturbance and was carried forward in the State permit as Condition No. 3.

Special Condition 12 requires use of all spoil material in reclamation of the highwall and was carried forward in the State permit as Condition No. 4.

The standard conditions of the existing mining plan approval are appended to this memorandum as Attachment A. There are no remaining special conditions of approval of the mining plan.

III. Approval:

I approve the termination of Federal permit UT-0010, issued on August 27, 1984, for the Gordon Creek No. 2 mine. The applicable standard conditions of the mining plan approved by the Assistant Secretary on August 24, 1984, are appended as Attachment A and remain in full force and effect notwithstanding this permit termination approval.



Chief, Federal Programs Division
Western Field Operations
Office of Surface Mining Reclamation and Enforcement

11/17/88
Date

CONDITIONS
OF
MINING PLAN APPROVAL

This document contains the applicable conditions of approval of the Gordon Creek No. 2 mine mining plan approved on August 24, 1984, for Federal coal leases U-8319 and U-47975. Beaver Creek Coal Company is hereinafter referred to as the lessee/operator.

Condition 1. Statutes and Regulations.—The mining plan approval was made pursuant to Federal coal leases U-8319 and U-47975; the Mineral Leasing Act of 1920, as amended (30 U.S.C. 181 et seq.); and in the case of acquired lands, the Mineral Leasing Act for Acquired Lands of 1947, as amended (30 U.S.C. 351 et seq.). The mining plan approval is subject to all applicable regulations of the Secretary of the Interior including, but not limited to, 30 CFR Chapter VII and 43 CFR Group 3400, and to all regulations of the Secretary of Energy, which are now or hereafter in force; and all such regulations are made a part hereof. The lessee/operator shall comply with the provisions of the Water Pollution Control Act (33 U.S.C. 1151 et seq.), the Clean Air Act (42 U.S.C. 7401 et seq.) and other applicable Federal laws.

Condition 2. The current mining plan approved on August 24, 1984, covers all or portions of Federal coal leases U-8319 and U-47975 as described below:

T. 13 S., R. 7 E., S.L.M

Sec. 12: E1/2, E1/2 W1/2

Sec. 13: NE1/4 NE1/4, N1/2 NW1/4 NE1/4,
N1/2 S1/2 NW1/4 NE1/4, S1/2 S1/2, NW1/4 NE1/4
S1/2 NE1/4, E1/2 W1/2, SE1/4

Sec. 24: N1/2 NE1/4, NE1/4 NW1/4

T. 13 S., R. 8 E., S.L.M.

Sec. 18: Lots 1-4, NW1/4 NE1/4, S1/2 NE1/4, E1/2 NW1/4,
NE1/4 SW1/4

Sec. 19: Lots 1 and 2, SE1/4 NW1/4

as shown on the map appended hereto as Exhibit A.

- Condition 3. The lessee/operator shall conduct coal development and mining operations only as described in the complete permit application package approved by the Utah Division of Oil, Gas and Mining, except as otherwise directed in the conditions of the mining plan approval as contained herein.
- Condition 4. The lessee/operator shall comply with the terms and conditions of the leases and the approved mining plan, and the requirements of the Utah Permit number ACT/007/016 issued under the Utah State program, approved pursuant to the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. 1201 et seq.).
- Condition 5. The mining plan approval shall be binding on any person conducting coal development or mining operations under the approved mining plan and shall remain in effect until superseded, cancelled, or withdrawn.
- Condition 6. The lessee/operator shall allow the authorized representatives of the Secretary, and the Utah Division of Oil, Gas and 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 842.13, 43 CFR Group 3400, and UMC/SMC 840.12 and 842.13; and
 - b. Be accompanied by private persons for the purpose of conducting an inspection in accordance with 30 CFR 842.12 and UMC/SMC 842.12, when the inspection is in response to an alleged violation reported by the private person.
- Condition 7. If during the course of mining operations previously unidentified prehistoric or historic resources are discovered, the lessee/operator shall ensure that the resources are not disturbed and shall notify Utah Division of Oil, Gas and Mining and OSMRE. The lessee/operator shall take such necessary actions as are required by Utah Division of Oil, Gas and Mining in coordination with OSMRE.

R. 7 E.

R. 8 E.

Exhibit A
MINING PLAN APPROVAL AREA MAP
Gordon Creek No. 2 Mine

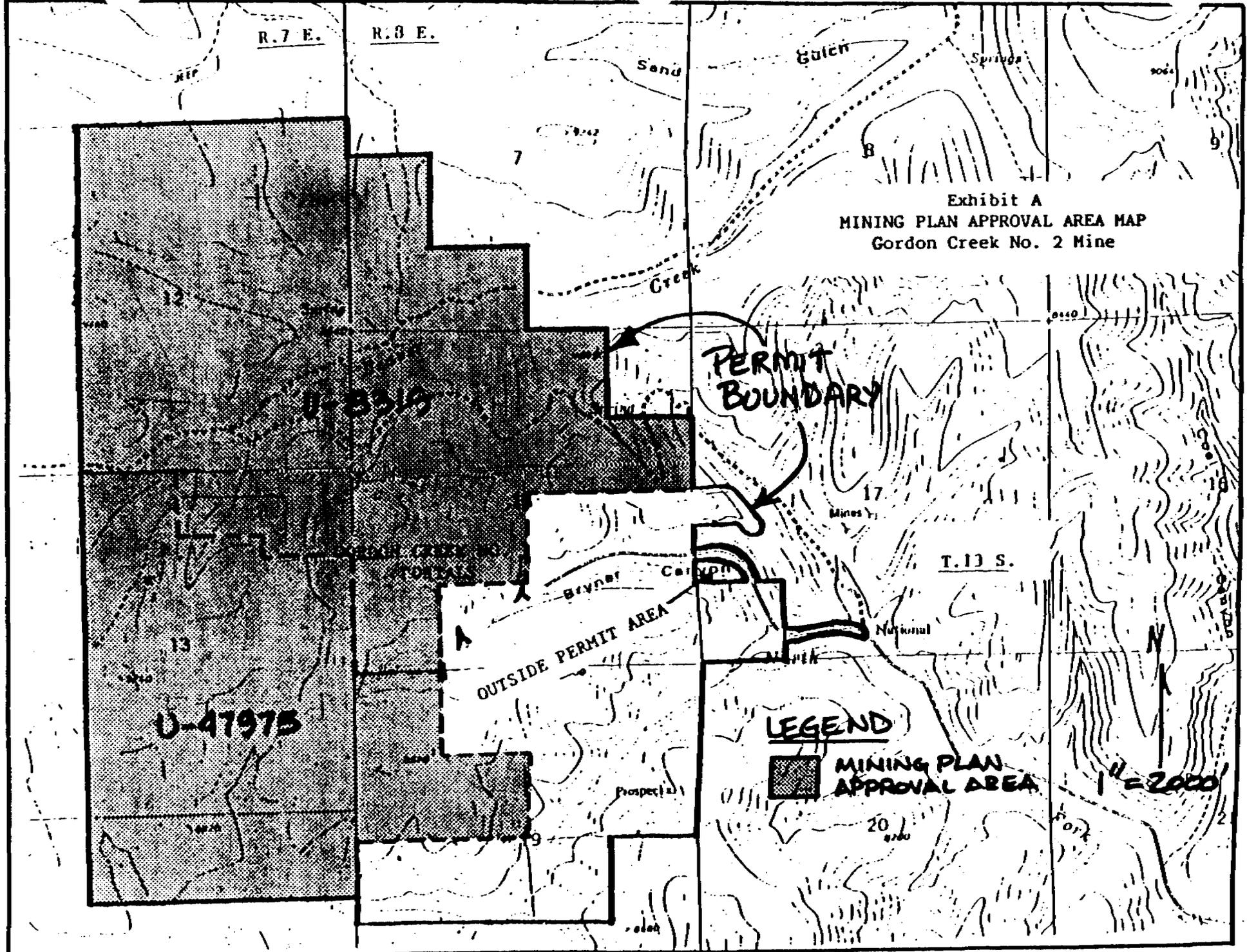
PERMIT
BOUNDARY

OUTSIDE PERMIT AREA

LEGEND

 MINING PLAN APPROVAL AREA

1:2000



AMENDMENTS

OTHER PERMITS

Permit No. UTG040000
_ Industrial

STATE OF UTAH
DIVISION OF WATER QUALITY
DEPARTMENT OF ENVIRONMENTAL QUALITY
SALT LAKE CITY, UTAH

AUTHORIZATION TO DISCHARGE UNDER THE
UTAH POLLUTANT DISCHARGE ELIMINATION SYSTEM
(UPDES)

GENERAL PERMIT FOR COAL MINING

In compliance with provisions of the *Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated ("UCA") 1953, as amended* (the "Act"),

Mountain Coal Company Gordon Creek No. 2 Mine located approximately 20 miles northwest of Price, Utah as identified in the Notice of Intent, application UTG040004 is authorized to discharge at outfall located at latitude 39°41'33" and longitude 111°03'56",

to Bryner Canyon tributary to North Fork of Gordon Creek

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on August 1, 1993.

This general permit and the authorization to discharge shall expire at midnight, April 30, 1998.

Signed this 22th day of July, 1993.



Authorized Permitting Official
Executive Secretary
Utah Water Quality Board

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I. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

A. Definitions.

1. The "30-day (and monthly) average" is the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.
2. The "7-day (and weekly) average" is the arithmetic average of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. The 7-day and weekly averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks with Saturdays in the month. If a calendar week overlaps two months (i.e., the Sunday is in one month and the Saturday in the following month), the weekly average calculated for that calendar week shall be included in the data for the month that contains the Saturday.
3. "Daily Maximum" ("Daily Max.") is the maximum value allowable in any single sample or instantaneous measurement.
4. "Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the composite sample period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
 - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - c. Constant sample volume, time interval between samples proportional to flow (i.e., sample taken every "X" gallons of flow); and,
 - d. Continuous collection of sample, with sample collection rate proportional to flow rate.
5. A "grab" sample, for monitoring requirements, is defined as a single "dip and take" sample collected at a representative point in the discharge stream.
6. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
7. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

8. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
9. "Executive Secretary" means Executive Secretary of the Utah Water Quality Board.
10. "EPA" means the United States Environmental Protection Agency.
11. "Act" means the "*Utah Water Quality Act*".
12. "Best Management Practices" ("*BMPs*") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. *BMPs* also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.
13. "CWA" means *Federal Water Pollution Control Act*, as amended, by *The Clean Water Act of 1987*.
14. "Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharges.
15. "Significant spills" includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under *Section 311 of the Clean Water Act* (see *40 CFR 110.10* and *40 CFR 117.21*) or *Section 102 of CERCLA* (see *40 CFR 302.4*).
16. "Storm water" means storm water runoff, snow melt runoff, and surface runoff and drainage.
17. "Waste pile" means any noncontainerized accumulation of solid, nonflowing waste that is used for treatment or storage.
18. "10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable reoccurrence interval of once in 10 years. This information is available in *Weather Bureau Technical Paper No. 40*, May 1961 and *NOAA Atlas 2*, 1973 for the 11 Western States, and may be obtained from the National Climatic Center of the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.
19. The term "coal preparation plant" means a facility where coal is crushed, screened, sized, cleaned, dried, or otherwise prepared and loaded for transit to a consuming facility.
20. The term "coal preparation plant associated areas" means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities.
21. "Alkaline mine drainage" means mine drainage which before any treatment has a pH equal to or greater than 6.0 and total iron concentration less than 10 mg/l.

22. The term "settleable solids" is that matter measured by the volumetric method specified below:

- Fill an Imhoff cone to the one-liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled material in the cone as milliliters per liter. Where a separation of settleable and floating material occurs, do not include the floating material in the reading.

B. Criteria for Inclusion in the General Permit for Coal Mining

This General permit shall apply only to the discharge of treated wastewater from:

Coal mining operations either new or existing in Utah which include or will include in part or in a whole alkaline mine water drainage, storm water runoff from coal preparation plant associated areas, active mining areas, and post mining areas until the performance bond is released. The total amount of total dissolved solids discharged from all mine water and decant operations is limited to one ton per day.

C. Notice of Intent for a General Permit for Coal Mining

Any facility which desires a general permit for coal mining and meets the requirements of Part I.B. can be issued a general permit by submitting a notice of intent (NOI) to the Division of Water Quality and EPA at the addresses listed on page 10 of this permit.

The NOI shall include:

- a. A completed Environmental Protection Agency Application (EPA Form 3510-1) or equivalent information.
- b. Location and identification number (such as 001, 002, etc.) of each existing discharge and/or proposed discharge point(s). This includes the latitude and longitude to the nearest 15 seconds and the name of the receiving water(s).
- c. A description of the source of the wastewater for each discharge point.
- d. A description of the treatment given or proposed for the wastewater at each discharge point and if necessary a justification of why no treatment is required.
- e. Flow characteristics for each discharge point such as whether flow is or will be continuous or intermittent and indicate projected and/or actual average and maximum flows in gpd.
- f. Data for each discharge point for the following parameters:
 - 1) Biochemical oxygen demand (BOD₅)
 - 2) Chemical oxygen demand (COD)
 - 3) Total organic carbon (TOC)
 - 4) Total suspended solids (TSS)
 - 5) Flow
 - 6) Ammonia (as N)
 - 7) Oil and grease

- 8) Temperature
- 9) pH
- 10) Total dissolved solids (TDS)
- 11) Total iron and metals, cyanide, phenols located in Table III UAC R317-8-3.12
- 12) Date and time of sampling for each parameter
- 13) Date and time of analysis for each parameter
- 14) Utah certified laboratory which has completed the analysis for each parameter

If no data is available, indicate why the data is not available. The Executive Secretary may waive the reporting requirements for any of these pollutants and parameters if the applicant submits a request for such a waiver before or with the NOI which demonstrates that information adequate to support issuance of the permit can be obtained through less stringent reporting requirements.

- g. For each discharge point the presence or absence of any toxic and/or priority pollutants as listed by EPA in *40 CFR Part 403*.
- h. Best management practice plan or sediment runoff control plan approved by the Division of Oil, Gas and Mining.

D. Description of Discharge Point(s).

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a UPDES permit is a violation of the *Act* and may be subject to penalties under the *Act*. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge may be subject to criminal penalties as provided under the *Act*.

Outfall Number

Location of Discharge Points

001

Sediment pond outfall to Bryner Canyon

E. Narrative Standard.

It shall be unlawful, and a violation of this permit, for the permittee to discharge or place any waste or other substance in such a way as will be or may become offensive such as unnatural deposits, floating debris, oil, scum or other nuisances such as color, odor or taste, or conditions which produce undesirable aquatic life or which produces objectionable tastes in edible aquatic organisms; or concentrations or combinations of substances which produce undesirable physiological responses in desirable resident fish, or other desirable aquatic life, or undesirable human health effects, as determined by bioassay or other tests performed in accordance with standard procedures.

F. Specific Limitations and Self-monitoring Requirements.

1. Effective immediately and lasting the duration of this permit, the permittee is authorized to discharge from Outfalls 001 and 002. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	<u>Discharge Limitations a/</u>			<u>Monitoring Requirements</u>	
	<u>Average 30-Day</u>	<u>7-Day</u>	<u>Daily Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow, gpd	NA	NA	NA	Monthly	Measured <u>b/</u>
Oil & Grease, mg/L	NA	NA	10	Monthly	Grab
Total Suspended Solids, mg/L	25	35	70	Monthly	Grab <u>e/</u>
Total Iron, mg/l	NA	NA	1.0 <u>c/</u>	Monthly	Grab <u>e/</u>
Total Dissolved Solids lbs/day	NA	NA	<u>d/</u>	Monthly	Grab <u>e/</u>

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units in any sample and shall be monitored monthly by a grab sample.

There shall be no visible sheen or floating solids or visible foam in other than trace amounts.

There shall be no discharge of sanitary wastes or any process water from coal preparation plants.

N.A. - Not Applicable.

- a/ See Definitions, *Part IA* for definition of terms.
 - b/ For intermittent discharge, the duration of the discharge shall be reported along with the flow.
 - c/ Values up to 2 mg/l may be approved where the permittee provides sufficient information that water quality standards will not be violated.
 - d/ The total amount of total dissolved solids (TDS) discharged from all mine water and decant operations is limited to one ton (2000 pounds) per day.
 - e/ These samples may also be a composite sample.
2. Samples taken in compliance with the monitoring requirements specified above shall be taken from the effluent before mixing with any receiving water.

3. Any overflow, increase in volume of a discharge or discharge from a bypass system caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) at all surface runoff pond (outfalls) may comply with the following limitation instead of the total suspended solids limitations contained in Part I.F.1:

Effluent Characteristics

Daily Maximum

Settleable Solids

0.5 mL/L

In addition to the monitoring requirements specified under Part I.F.1, all effluent samples collected during storm water discharge events shall also be analyzed for settleable solids. Such analyses shall be conducted on either grab or composite samples.

4. Any overflow, increase in volume of a discharge or discharge from a bypass system caused by precipitation within any 24-hour period greater than the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) at all surface runoff pond outfalls may comply with the following limitations instead of the otherwise applicable limitations:

The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units. However, as stated under Part I.F.3, all effluent samples collected at all surface runoff pond outfalls during storm water discharge events shall be analyzed for settleable solids and the parameters identified under Part I.F.1.

5. The operator shall have the burden of proof that the discharge or increase in discharge was caused by the applicable precipitation event described in Parts I.F.3. and F.4. The alternate limitation in Parts I.F.4. and F.5. shall not apply to treatment systems that treat underground mine water only.

6. Best Management Practices.

- a. The company shall implement and maintain best management practices for the control of road salt storage for areas discharging to waters of the State. This shall include enclosure or coverage to prevent exposure to precipitation, except exposure resulting from adding or removing materials from the pile. Dischargers shall demonstrate compliance with the enclosure provision as expeditiously as practicable, but in no event later than October 1, 1995.
- b. The facility must minimize the discharge of salt by using the largest practicable amount of saline water for process and dust control. After April 30, 1994 there shall be no use of gypsum for rock dusting unless the permittee provides sufficient information to the Executive Secretary such that approval is granted based upon the Colorado River Basin Salinity Control Forum Policies and the fact that it will not significantly increase total dissolved solids concentrations.
- c. Sediment and Erosion Control. Within six months of permit issuance, the permittee shall develop a stormwater pollution prevention plan which identifies areas which, due to topography, road construction with waste materials, other activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to limit erosion. (The general permit for storm water discharges associated with industrial activity contains information for developing a satisfactory plan).

- d. **Management of Runoff.** The stormwater pollution prevention plan shall be implemented as soon as practical but no later than one year after permit issuance. Appropriate measures for small areas may include: silt fences, sediment traps, vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration deicers, and wet detention/retention devices.
- e. **Comprehensive Site Compliance Evaluation.** Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the stormwater pollution prevention plan, but in no case less than once a year. Such evaluations shall provide:
- (1) Areas contributing to a storm water discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed.
 - (2) Based on the results of the inspection, the description of potential pollutant sources identified in the plan and pollution prevention measures and controls identified in the plan shall be revised as appropriate within two weeks of such inspection and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than twelve weeks after the inspection.
 - (3) A report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken shall be made and retained as part of the storm water pollution prevention plan for at least one year after coverage under this permit terminates. The report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with *Part IV.G Signatory Requirements* of this permit.
 - (4) Where annual site inspections are shown in the plan to be impractical for inactive mining sites due to the remote location and inaccessibility of the site, site inspections required under this part shall be conducted at appropriate intervals specified in the plan, but, in no case less than once in three years.
- f. **Consistency with other plans.** Plans may reflect requirements for *Spill Prevention Control and Countermeasure ("SPCC")* plans developed for the facility under *Section 311* of the CWA or *Best Management Practices ("BMP")* otherwise required by this permit for the facility as long as such requirement is incorporated into the plan.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

- A. Representative Sampling. Samples taken in compliance with the monitoring requirements established under *Part I* shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to the use-disposal practice.
- B. Monitoring Procedures. Monitoring must be conducted according to test procedures approved under *Utah Administrative Code ("UAC") R317-2-10*, unless other test procedures have been specified in this permit.
- C. Penalties for Tampering. The *Act* provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
- D. Reporting of Monitoring Results. Monitoring results obtained during the previous month shall be summarized and reported monthly on a Discharge Monitoring Report Form (EPA No. 3320-1), post-marked no later than the 28th day of the month following the completed reporting period. The first report is due on August 28, 1993. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the requirements of *Signatory Requirements (see Part IV.G)*, and submitted to the Director, Division of Water Quality and to EPA at the following addresses:

original to: Department of Environmental Quality
Division of Water Quality
288 North 1460 West
PO Box 144870
Salt Lake City, Utah 84114-4870

copy to: United States Environmental Protection Agency Region VIII
Denver Place
999 18th Street, Suite 500
Denver, Colorado 80202-2466
Attention: Water Management Division
Compliance Branch (8WM-C)

- E. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.
- F. Additional Monitoring by the Permittee. If the permittee monitors any parameter more frequently than required by this permit, using test procedures approved under *UAC R317-2-10* or as otherwise specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. Such increased frequency shall also be indicated. Only those parameters required by the permit need to be reported.

G. Records Contents. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The individual(s) who performed the sampling or measurements;
3. The date(s) and time(s) analyses were performed;
4. The individual(s) who performed the analyses;
5. The analytical techniques or methods used; and,
6. The results of such analyses.

H. Retention of Records. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the Executive Secretary at any time. A copy of this UPDES permit must be maintained on site during the duration of activity at the permitted location.

I. Twenty-four Hour Notice of Noncompliance Reporting.

1. The permittee shall (orally) report any noncompliance which may seriously endanger health or environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of circumstances. The report shall be made to the Division of Water Quality, (801) 538-6146, or 24 hour answering service (801) 536-4123.
2. The following occurrences of noncompliance shall be reported by telephone (801) 536-4123 as soon as possible but no later than 24 hours from the time the permittee becomes aware of the circumstances:
 - a. Any noncompliance which may endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See *Part III.G, Bypass of Treatment Facilities.*);
 - c. Any upset which exceeds any effluent limitation in the permit (See *Part III.H, Upset Conditions.*); or,
 - d. Violation of a maximum daily discharge limitation for any of the pollutants listed in the permit.
3. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and,

- d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - e. Steps taken, if any, to mitigate the adverse impacts on the environment and human health during the noncompliance period.
4. The Executive Secretary may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Division of Water Quality, (801) 538-6146.
 5. Reports shall be submitted to the addresses in *Part II.D, Reporting of Monitoring Results*.
- J. Other Noncompliance Reporting. Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for *Part II.D* are submitted. The reports shall contain the information listed in *Part II.1.3*.
- K. Inspection and Entry. The permittee shall allow the Executive Secretary, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:
1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
 4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the *Act*, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Executive Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- B. Penalties for Violations of Permit Conditions. The Act provides that any person who violates a permit condition implementing provisions of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine not exceeding \$25,000 per day of violation; Any person convicted under UCA 19-5-115(2) a second time shall be punished by a fine not exceeding \$50,000 per day. Except as provided at Part III.G, Bypass of Treatment Facilities and Part III.H, Upset Conditions, nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.
- C. Need to Halt or Reduce Activity not a Defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. Proper Operation and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- F. Removed Substances. Collected screening, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not directly enter either the final effluent or waters of the state by any other direct route.
- G. Bypass of Treatment Facilities.
1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this section. Return of removed substances, as described in Part III.F, to the discharge stream shall not be considered a bypass under the provisions of this paragraph.
 2. Notice:
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under *Part II.I, Twenty-four Hour Reporting*.
3. Prohibition of bypass.
 - a. Bypass is prohibited and the Executive Secretary may take enforcement action against a permittee for a bypass, unless:
 - (1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage ;
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
 - (3) The permittee submitted notices as required under paragraph 2 of this section.
 - b. The Executive Secretary may approve an anticipated bypass, after considering its adverse effects, if the Executive Secretary determines that it will meet the three conditions listed above in paragraph 3.a of this section.

II. Upset Conditions.

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph 2. of this section are met. Executive Secretary's administrative determination regarding a claim of upset cannot be judiciously challenged by the permittee until such time as an action is initiated for noncompliance.
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under *Part II.I, Twenty-four Hour Notice of Noncompliance Reporting*; and,
 - d. The permittee complied with any remedial measures required under *Part III.D, Duty to Mitigate*.
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

- I. Toxic Pollutants. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of *The Water Quality Act of 1987* for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- J. Changes in Discharge of Toxic Substances. Notification shall be provided to the Executive Secretary as soon as the permittee knows of, or has reason to believe:
1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 ug/L);
 - b. Two hundred micrograms per liter (200 ug/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(7)* or (10); or,
 - d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.
 2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. Five hundred micrograms per liter (500 ug/L);
 - b. One milligram per liter (1 mg/L) for antimony;
 - c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with *UAC R317-8-3.4(9)*; or,
 - d. The level established by the Executive Secretary in accordance with *UAC R317-8-4.2(6)*.
- K. Industrial Pretreatment. Any wastewaters discharged to the sanitary sewer, either as a direct discharge or as a hauled waste, are subject to Federal, State and local pretreatment regulations. Pursuant to Section 307 of *The Water Quality Act of 1987*, the permittee shall comply with all applicable federal General Pretreatment Regulations promulgated at *40 CFR 403*, the State Pretreatment Requirements at *UAC R317-8-8*, and any specific local discharge limitations developed by the Publicly Owned Treatment Works (POTW) accepting the wastewaters.

In addition, in accordance with *40 CFR 403.12(p)(1)*, the permittee must notify the POTW, the EPA Regional Waste Management Director, and the State hazardous waste authorities, in writing, if they discharge any substance into a POTW which if otherwise disposed of would be considered a hazardous waste under *40 CFR 261*. This notification must include the name of the hazardous waste, the EPA hazardous waste number, and the type of discharge (continuous or batch).

IV. GENERAL REQUIREMENTS

- A. Planned Changes. The permittee shall give notice to the Executive Secretary as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit. In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Executive Secretary of any planned changes at least 30 days prior to their implementation.
- B. Anticipated Noncompliance. The permittee shall give advance notice to the Executive Secretary of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- C. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- D. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. The application shall be submitted at least 60 days before the expiration date of this permit. The application shall be submitted at least 180 days before the expiration date if an individual permit is necessary.
- E. Duty to Provide Information. The permittee shall furnish to the Executive Secretary, within a reasonable time, any information which the Executive Secretary may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Executive Secretary, upon request, copies of records required to be kept by this permit.
- F. Other Information. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Executive Secretary, it shall promptly submit such facts or information.
- G. Signatory Requirements. All applications, reports or information submitted to the Executive Secretary shall be signed and certified.
1. All permit applications shall be signed by either a principal executive officer or ranking elected official.
 2. All reports required by the permit and other information requested by the Executive Secretary shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Executive Secretary, and,
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager,

superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to authorization. If an authorization under paragraph IV.G.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph IV.G.2 must be submitted to the Executive Secretary prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. Penalties for Falsification of Reports. The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000.00 per violation, or by imprisonment for not more than six months per violation, or by both.
- I. Availability of Reports. Except for data determined to be confidential under UAC R317-8-3.2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the office of Executive Secretary. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.
- J. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the permittee of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under the Act.
- K. Property Rights. The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.
- L. Severability. The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

- M. Transfers. This permit may be automatically transferred to a new permittee if:
1. The current permittee notifies the Executive Secretary at least 20 days in advance of the proposed transfer date;
 2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,
 3. The Executive Secretary does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.
- N. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by *UCA 19-5-117*.
- O. Water Quality-Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. Water Quality Standards for the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
 2. A final wasteload allocation is developed and approved by the State and/or EPA for incorporation in this permit.
 3. A revision to the current Water Quality Management Plan is approved and adopted which calls for different effluent limitations than contained in this permit.
- P. Toxicity Limitation-Reopener Provision. This permit may be reopened and modified (following proper administrative procedures) to include whole effluent toxicity (WET) testing, a WET limitation, a compliance schedule, a compliance date, additional or modified numerical limitations, or any other conditions related to the control of toxicants if toxicity is detected during the life of this permit.
- Q. Storm Water-Reopener Provision. At any time during the duration (life) of this permit, this permit may be reopened and modified (following proper administrative procedures) as per *UAC R317.8*, to include, any applicable storm water provisions and requirements, a storm water pollution prevention plan, a compliance schedule, a compliance date, monitoring and/or reporting requirements, or any other conditions related to the control of storm water discharges to "waters-of-State".

F:Gen-Coal.per

BOND

ORIGINAL

R I D E R

RIDER to be attached to and form a part of Bond Number U-629965

on behalf of BEAVER CREEK COAL COMPANY
(Name)

555 SEVENTEENTH STREET, DENVER, COLORADO 80202
(Address)

as Principal, and in favor of STATE OF UTAH, DIVISION OF OIL, GAS AND MINING

as Oblige, executed by UNITED PACIFIC INSURANCE COMPANY as Surety .

in the amount of SIX HUNDRED FORTY-ONE THOUSAND FOUR HUNDRED FORTY-THREE AND NO/100

Dollars (\$ 641,443.00) effective SEPTEMBER 13, 19 90

It is hereby understood and agreed that effective as of SEPTEMBER 5, 1991, the said bond has been amended as follows:

- 1) The Principal's Name has been changed from: BEAVER CREEK COAL COMPANY
to: MOUNTAIN COAL COMPANY
- 2) Specific Language has been added:
"In the event the Cooperative Agreement between the DIVISION and OSM is terminated, then the portion of the bond covering the Federal Lands will be payable only to the United States, Department of Interior, Office of Surface Mining."

Nothing herein contained shall vary, alter or extend any provisions or conditions of the bond other than as above stated.

SIGNED, SEALED AND DATED this 5TH day of SEPTEMBER, 19 91

LEGAL
lll

MOUNTAIN COAL COMPANY
Principal

BY: Thomas H. Parker
Vice President

UNITED PACIFIC INSURANCE COMPANY
Surety

BY: Dorothy M. Swanoff
DOROTHY M. SWANOFF
ATTORNEY-IN-FACT



Date: September 25, 1990

Subject: Rider for State of Utah
Reclamation Bond #U-629965
Gordon Creek #2 and #7 Mine

From/Location: Kim Penoyer, DAT-2165

Kim Penoyer

To/Location: Dick Pick, Grand Jct.

Please sign the attached Rider for the State of Utah Reclamation Bond for Gordon Creek #2 and #7 Mines. We were notified that our bond had an incorrect acreage figure which needed to be updated.

If you will return the signed document to me, I will obtain the proper seal and return it to the State Office.

KP:mjb
attachment
cc: Dan Guy, w/a

R I D E R

RIDER to be attached to and form a part of Bond Number U-629965
on behalf of BEAVER CREEK COAL COMPANY
(Name)

555 SEVENTEENTH STREET, DENVER, COLORADO 80202

(Address)
STATE OF UTAH

as Principal, and in favor of DIVISION OF OIL, GAS AND MINING

as Obligee, executed by UNITED PACIFIC INSURANCE COMPANY as Surety,
in the amount of SIX HUNDRED FORTY-ONE THOUSAND FOUR HUNDRED FORTY-THREE AND NO/100**
Dollars (\$ 641,443.00***) effective JULY 30, 19 87.

It is hereby understood and agreed that effective as of SEPTEMBER 13, 1990,
the Acreage on said bond has been amended from: 2,286.05 acres of land
to: 17.2 acres of land

Nothing herein contained shall vary, alter or extend any provisions or conditions
of the bond other than as above stated.

**CALIFORNIA
ACKNOWLEDGEMENT BY SURETY**

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES } ss.

On this 13TH day of SEPTEMBER in the year 19 90, before me CORA V. RODRIGUEZ personally
appeared CASSIE J. BERRISFORD
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person who executed the within
instrument as attorney-in-fact of UNITED PACIFIC INSURANCE COMPANY
and acknowledged to me that the corporation executed it.



Cora V. Rodriguez
Notary Public

UNITED PACIFIC INSURANCE COMPANY

HEAD OFFICE, FEDERAL WAY, WASHINGTON-

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, That the UNITED PACIFIC INSURANCE COMPANY, a corporation duly organized under the laws of the State of Washington, does hereby make, constitute and appoint

CASSIE J. BERRISFORD of LOS ANGELES, CALIFORNIA

as true and lawful Attorney-in-Fact to make, execute, seal and deliver for and on its behalf, and as its act and deed

ANY AND ALL BONDS AND UNDERTAKINGS OF SURETYSHIP -----

and to bind the UNITED PACIFIC INSURANCE COMPANY thereby as fully and to the same extent as if such bonds and undertakings and other writings obligatory in the nature thereof were signed by an Executive Officer of the UNITED PACIFIC INSURANCE COMPANY and sealed and attested by one or more of such officers, and hereby ratifies and confirms all that its said Attorney-in-Fact may do in pursuance hereof.

This Power of Attorney is granted under and by authority of Article VII of the By-Laws of UNITED PACIFIC INSURANCE COMPANY which became effective September 7, 1978, which provisions are now in full force and effect, reading as follows:

ARTICLE VII - DISSOLUTION OF BONDS AND UNDERTAKINGS-

1. The Board of Directors, the President, the Chairman of the Board, any Senior Vice President, any Vice President or Assistant Vice President or other officer designated by the Board of Directors shall have power and authority to (a) appoint Attorneys-in-Fact and to authorize them to execute on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof, and (b) to remove any such Attorney-in-Fact at any time and revoke the power and authority given to him.

2. Attorneys-in-Fact shall have power and authority, subject to the terms and limitations of the power-of attorney issued to them, to execute and deliver on behalf of the Company, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof. The corporate seal is not necessary for the validity of any bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof.

3. Attorneys-in-Fact shall have power and authority to execute affidavits required to be attached to bonds, recognizances, contracts of indemnity or other conditions or obligatory undertakings and they shall also have power and authority to certify the financial statements of the Company and to copies of the By-Laws of the Company or any article or section thereof.

This power of attorney is signed and sealed by facsimile under and by authority of the following Resolution accepted by the Board of Directors of UNITED PACIFIC INSURANCE COMPANY at a meeting held on the 8th day of June, 1978, at which a quorum was present, and said Resolution has not been amended or repealed:

"Resolved, that the signatures of such directors and officers and the seal of the Company may be affixed to any such power-of attorney or any certificate relating thereto by facsimile, and any such power of attorney or certificate bearing such facsimile signatures or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached."

IN WITNESS WHEREOF, the UNITED PACIFIC INSURANCE COMPANY has caused these presents to be signed by its Vice President, and its corporate seal to be hereunto affixed, this 7th day of May 19 90

UNITED PACIFIC INSURANCE COMPANY



[Signature] Vice President

STATE OF Washington } COUNTY OF King } ss.

On this 7th day of May 19 90 personally appeared Lawrence W. Carlstrom

to me known to be the Vice-President of the UNITED PACIFIC INSURANCE COMPANY, and acknowledged that he executed and attested the foregoing instrument and affixed the seal of said corporation thereto, and that Article VII, Section 1, 2, and 3 of the By-Laws of said Company and the Resolution, set forth therein, are still in full force.

My Commission Expires May 15 19 90



[Signature] Notary Public in and for State of Washington Residing at TACOMA

I, Robert D. Ritzhaupt, Assistant Secretary of the UNITED PACIFIC INSURANCE COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by said UNITED PACIFIC INSURANCE COMPANY, which is still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Company this 13TH day of SEPTEMBER 19 90



Assistant Secretary [Signature] Robert D. Ritzhaupt

LIABILITY INSURANCE

CERTIFICATE OF INSURANCE

12/08/92 - DPC CIGNA Property and Casualty Companies

(This Certificate of Insurance neither affirmatively nor negatively amends, extends or alters the coverage, limits, terms or conditions of the policies it certifies.)



This is to Certify to

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

COMPANY CODES

- 2 CIGNA INSURANCE COMPANY
- 3 CIGNA INS. CO. OF TEXAS
- 5 PACIFIC EMPLOYERS INS. CO. INSURANCE COMPANY OF NORTH AMERICA
- A CIGNA INS. CO. OF ILLINOIS
- B CIGNA INS. CO. OF OHIO
- (OTHER - SPECIFY)

that the following described policy or policies, issued by The Company as coded below, providing insurance only for hazards checked by "X" below, have been issued to:

NAME AND ADDRESS OF INSURED
 Atlantic Richfield Company, its Subsidiaries and subsidiaries thereof as now or hereinafter constituted, Atlantic Richfield Plaza, 515 So. Flower Street, Los Angeles, CA 90071
 covering in accordance with the terms thereof, at the following location(s):

Including Mountain Coal Company and ARCO Coal Company

TYPE OF POLICY	HAZARDS	CO. CODE	POLICY NUMBER	POLICY PERIOD	LIMITS OF LIABILITY	
(a) Standard Workmen's Compensation & Employers' Liability	<input type="checkbox"/>	<input type="checkbox"/>			\$ Statutory W. C. One Accident and Aggregate Disease	
(b) General Liability Bodily Injury, Premises-Operations (including "Incidental Contracts" as defined below) Independent Contractors Completed Operations/Products Contractual, (Specific type as described in footnotes below)	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9	ISL G1 519134-A	01/01/93 to 01/01/96	\$*See Below \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9				Each Person Each } <input type="checkbox"/> Accident <input type="checkbox"/> Occurrence
	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9				Aggregate-Completed Operations/Products
	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9				Aggregate-Completed Operations/Products
Property Damage Premises-Operations (Including "Incidental Contracts" as defined below) Independent Contractors Completed Operations/Products Contractual, (Specific type as described in footnote below)	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9	ISL G1 519134-A	01/01/93 to 01/01/96	\$*See Below \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9				Each } <input type="checkbox"/> Accident <input type="checkbox"/> Occurrence
	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9				Aggregate-Prem./Oper.
	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9				Aggregate-Protective Operations/Products
(c) Automobile Liability Bodily Injury Owned Automobiles Hired Automobiles Non-owned Automobiles	<input type="checkbox"/>	<input type="checkbox"/>			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
	<input type="checkbox"/>	<input type="checkbox"/>	Each Person			
	<input type="checkbox"/>	<input type="checkbox"/>	Each } <input type="checkbox"/> Accident <input type="checkbox"/> Occurrence			
Property Damage Owned Automobiles Hired Automobiles Non-owned Automobiles	<input type="checkbox"/>	<input type="checkbox"/>			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
	<input type="checkbox"/>	<input type="checkbox"/>	Each } <input type="checkbox"/> Accident <input type="checkbox"/> Occurrence			
	<input type="checkbox"/>	<input type="checkbox"/>	Each } <input type="checkbox"/> Accident <input type="checkbox"/> Occurrence			
(d) ** INCLUDES "XCU" COVERAGE					* \$500,000 Combined Single Limit, per occurrence/aggregate where applicable.	

Contractual Footnote: Subject to all the policy terms applicable, specific contractual coverage is provided as respects

- (Check Applicable Block) a contract
 purchase order agreements
 all contracts } between the insured and:

In the event of cancellation of the policy or policies by the company, forty five (45) days' written notice of such cancellation will be given to you at the address stated above.

NAME OF OTHER PARTY

DATE (if applicable)

CONTRACT NO. (if any)

DESCRIPTION (OR JOB)

Gordon Creek #2, #7 & #8 ACT/007/016

Definitions: "Incidental contract" means any written (1) lease of premises (2) easement agreement, except in connection with construction or demolition operations on or adjacent to a railroad, (3) undertaking to indemnify a municipality required by municipal ordinance, except in connection with work the municipality, (4) sidetrack agreement, or (5) elevator maintenance agreement.

[Signature]
 Authorized Representative

DIVISION ORDERS

DIVISION ORDERS



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

cc D Cuy

Michael O. Leavitt
Governor
Ted Stewart
Executive Director
James W. Carter
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340
801-359-3940 (Fax)
801-538-5319 (TDD)

September 20, 1993

Ms. Kathleen G. Welt
Environmental Supervisor
Mountain Coal Company
P.O. Box 591
Somerset, Colorado 81434

Dear Ms. Welt:

Re: Division Order DO-93A - Updated Facilities Map, Mountain Coal Company, Gordon Creek #2, #7, and #8 Mines, ACT/007/016-93A, Folder #3, Carbon County, Utah

The above-noted Surface Facilities Map, Plate 3-1, updated August 1993 is approved.

Sincerely,

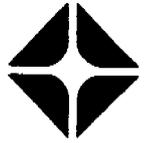


Pamela Grubaugh-Littig
Permit Supervisor

pgl

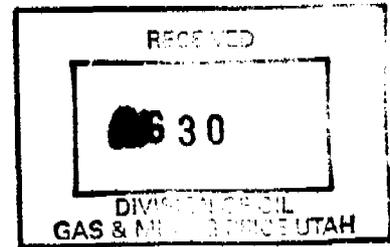
Mountain Coal Company

West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



August 28, 1993

Ms. Pamela Grubaugh-Littig
Permit Supervisor
Utah Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203



Re: Division Order 93-A
Mountain Coal Company
Gordon Creek 2/7/8 Mines
ACT/007/016-DO-93A; Folder #3
Carbon County, Utah

Dear Ms. Littig:

Enclosed are 3 copies of the revised Surface Facilities Map (Plate 3-1) for the Gordon Creek No. 2/7/8 Mines. The map has been updated to reflect the existing conditions at the site.

If you have any questions or need any additional information, please contact me.

Respectfully,

Dan W. Guy,
for Kathleen G. Welt

Enclosures

cc: Kathy Welt, MCC
Bill Malencik, DOGM
File

WATER MONITORING

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-8015
Fax 303 929-5595



January 25, 1994

Ms. Pamela Grubaugh-Littig
Permit Supervisor
Utah Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Ms. Littig:

Enclosed are the results of the Mountain Coal Company Water Monitoring for the Fourth Quarter of 1993.

If you have any questions or need any additional information, please contact me.

Respectfully,

Dan W. Guy for
Kathy Welt, MCC

DWG/db

Enclosures

cc: Kathy Welt, MCC
File
WTRMON

E.I.S. Hydrology
Field Measurements Form

Date 10/23/93

Station # 2-14

Company MH Coal

Time 11:55

Flow/Depth 0

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring ___ Stream ___ Well ___ Discharge ___ NPDES ___

Collection Point _____

Appearance of Water: Clear ___ Milky ___ Cloudy ___ Opaque ___

Quality Sample Taken: Yes ___ No

Pump Reading _____

Comments _____

Field Monitor J. P. Lawrence

When Sample or Measurements Not Taken:

Reason: _____

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

E.I.S. Hydrology
Field Measurements Form

Date 11/17/93

Station # 2-14

Company MW Real.

Time 14:50

Flow/Depth D

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring ___ Stream ___ Well ___ Discharge ___ NPDES 6

Collection Point _____

Appearance of Water: Clear ___ Milky ___ Cloudy ___ Opaque ___

Quality Sample Taken: Yes ___ No ___

Pump Reading _____

Comments _____

Field Monitor [Signature]

When Sample or Measurements Not Taken:

Reason: D

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

E.I.S. Hydrology
Field Measurements Form

Date 12/3/99

Station # 2-1W

Company Mt Paul

Time 9:00

Flow/Depth D

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring___ Stream___ Well___ Discharge___ NPDES___

Collection Point _____

Appearance of Water: Clear___ Milky___ Cloudy___ Opaque___

Quality Sample Taken: Yes___ No L

Pump Reading _____

Comments _____

Field Monitor M. P. Paul

When Sample or Measurements Not Taken:

Reason: _____

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

E.I.S. Hydrology
Field Measurements Form

Date 10/23/23 Station # 2-2W

Company W.N. Paul

Time 12:40

Flow/Depth 15.9

pH 8.1

Specific Conductivity 740

Water Temperature 6

Air Temperature 50

Dissolved Oxygen 7

Type: Spring Stream Well Discharge NPDES

Collection Point Creek below P House

Appearance of Water: Clear Milky Cloudy Opaque

Quality Sample Taken: Yes No

Pump Reading _____

Comments _____

Field Monitor [Signature]

When Sample or Measurements Not Taken:

Reason: N/R

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

E.I.S. Hydrology
Field Measurements Form

Date 4/17/93 Station # 2-2W

Company W. Paul

Time 1500

Flow/Depth 147 gpm

pH 8.1

Specific Conductivity 700

Water Temperature 6°

Air Temperature 47

Dissolved Oxygen 8

Type: Spring Stream Well Discharge NPDES

Collection Point Below Pump house

Appearance of Water: Clear Milky Cloudy Opaque

Quality Sample Taken: Yes No

Pump Reading _____

Comments _____

Field Monitor _____

When Sample or Measurements Not Taken:

Reason: _____

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

E.I.S. Hydrology
Field Measurements Form

Date 12/8/93

Station # 2-211

Company M. Peal

Time 9:30

Flow/Depth 118g

pH 8.1

Specific Conductivity 640

Water Temperature 20

Air Temperature 37

Dissolved Oxygen 7

Type: Spring Stream Well Discharge NPDES

Collection Point Pump House

Appearance of Water: Clear Milky Cloudy Opaque

Quality Sample Taken: Yes No

Pump Reading _____

Comments _____

Field Monitor [Signature]

When Sample or Measurements Not Taken:

Reason: N/A

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

Client: **MOUNTAIN COAL COMPANY**
 Project: Beaver Creek 2&7 Mine
 Sample ID: 2-2W
 Laboratory ID: 4216
 Sample Matrix: Water
 Condition: Cool / Intact

Date Reported: 12/07/93
 Date Sampled: 11/17/93
 Time Sampled: 1500
 Date Received: 11/22/93

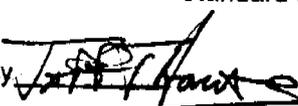
Parameter	Analytical		Units	
	Result	Units		

Lab pH.....	8.2	s.u.		
Lab Conductivity @ 25° C.....	685	umhos/cm		
Total Dissolved Solids @ 180°C.....	396	mg/L		
Total Dissolved Solids (Calc).....	379	mg/L		
Total Suspended Solids.....	12	mg/L		
Total Alkalinity as CaCO3.....	290	mg/L		
Total Hardness as CaCO3.....	364	mg/L		
Settleable Solids.....	<0.1	mL/L		
Total Oil and Grease.....	<0.26	mg/L		
Bicarbonate as HCO3.....	354	mg/L	5.80	meq/L
Carbonate as CO3.....	0	mg/L	0.00	meq/L
Hydroxide as OH.....	0	mg/L	0.00	meq/L
Chloride.....	9.3	mg/L	0.26	meq/L
Sulfate.....	84	mg/L	1.74	meq/L
Calcium.....	58	mg/L	3.61	meq/L
Magnesium.....	45	mg/L	3.67	meq/L
Potassium.....	2.7	mg/L	0.07	meq/L
Sodium.....	6.2	mg/L	0.27	meq/L
Cations.....			7.62	meq/L
Anions.....			7.80	meq/L
Cation/Anion Difference.....			1.17 %	

Trace Metals

Iron (total).....	0.16	mg/L
Manganese (total).....	< 0.02	mg/L

Reference: U.S.E.P.A. 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 "Standard Methods For The Examination Of Water And Waste Water", 17th ed., 1989.

Reviewed by: 

WATER MONITORING REPORT

Property: BCCC #2 Mine
 Station: 2-2-W
 Location: N. Fork Gordon
 Type: P. Stream
 Frequency: Monthly-Quarterly

Field Measurements	Date Sampled										
	01/07/93	02/08/93	03/10/93	04/28/93	05/14/93	06/10/93	07/24/93	08/02/93	09/20/93	10/23/93	11/17/93
Flow [gpm]	INACC	INACC	INACC	198.00	240.00	240.00	197.00	197.00	197.00	159.00	147.00
PH				8.20	7.50	8.10	7.90	8.10	8.10	8.10	8.10
Sp.Con. [ohms]				412.00	300.00	480.00	440.00	540.00	460.00	740.00	700.00
Temp [C]				3.00	5.00	6.00	8.00	9.00	8.00	6.00	6.00
Diss. O. [ppm]				8.00	7.20	8.20	7.00	9.00	7.24	7.00	8.00

Lab. Meas. [mg/l]	Date Sampled				
	03/10/93	05/14/93	08/02/93	11/17/93	Mean
TDS	N/A	243.00	289.00	379.00	303.67
TSS		286.00	7.00	12.00	101.67
O & G		ND	<0.29	<0.26	0.00
Al CaCO3		212.00	237.00	290.00	246.33
Hd CaCO3		225.00	262.00	364.00	283.67
HCO3		258.00	290.00	354.00	300.67
CO3		0.00	0.00	0.00	0.00
Cl		4.10	5.60	9.30	6.33
SO4		28.00	47.00	84.00	53.00
Ca		61.00	58.00	58.00	59.00
Mg		18.00	28.00	45.00	30.33
K		1.50	2.40	2.70	2.20
Na		3.50	4.80	6.20	4.83
Cat/An		2.65	3.28	1.17	2.37
Fe		4.36	0.24	0.16	1.59
Mn		0.15	0.04	<0.02	0.10

12/08/93 MEAN

118.00 188.11

8.10 8.02

640.00 412.00

2.00 5.89

7.00 7.63

E.I.S. Hydrology
Field Measurements Form

Date 9/28/93

Station All-Upper
Beaver Creek
Locations

Company M. Coal

Time 10:30

*Flow/Depth N/A

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring ___ Stream ___ Well ___ Discharge ___ NPDES ___

Collection Point _____

Appearance of Water: Clear ___ Milky ___ Cloudy ___ Opaque ___

Quality Sample Taken: Yes ___ No ___

Pump Reading _____

Comments rocks where chained - and access
denied by American Rockmen -

Field Monitor John P. Conroy

When Sample or Measurements Not Taken:

Reason: (N/A)

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

WATER MONITORING REPORT

Property: BCCC #2 Mine
 Station: 2-3W
 Location: Lower Beaver Cr.
 Type: P. Stream
 Frequency: Monthly-Flow; BiAnnual

Field Measurements	Date Sampled									
	01/07/93	02/08/93	03/10/93	04/28/93	05/14/93	06/10/93	07/24/93	08/02/93	09/20/93	10/23/93
Flow [gpm]	N/A	N/A	N/A	N/A	N/A	N/A	214.00	127.00	97.00	N/A
PH							7.90	8.10	8.10	
Sp.Con. [ohms]							411.00	310.00	640.00	
Temp [C]							8.00	9.00	9.00	
Diss. O. [ppm]							8.00	8.00	9.00	

Lab. Meas. [mg/l]	Date Sampled		Mean
	04/28/93	08/02/93	
TDS	N/A	277.00	277.00
TSS		4.00	4.00
O & G		N/R	N/R
Al CaCO3		259.00	259.00
Hd CaCO3		255.00	255.00
Ac CaCO3		N/R	N/R
HCO3		316.00	316.00
CO3		0.00	0.00
Cl		4.10	4.10
SO4		20.00	20.00
Ca		72.00	72.00
Mg		18.00	18.00
K		1.80	1.80
Na		5.50	5.50
Cat/An		2.84	2.84
Fe		0.06	0.06
Mn		0.03	0.03

11/17/93	12/08/93	MEAN
----------	----------	------

N/A	N/A	146.00
-----	-----	--------

8.03

453.67

8.67

8.33

WATER MONITORING REPORT

Property: BCCC #2 Mine
 Station: 2-4-W
 Location: Up. Beaver Cr.
 Type: P. Stream
 Frequency: Monthly-Flow; Biannual

Field Measurements	Date Sampled										
	01/07/93	02/08/93	03/10/93	04/28/93	05/14/93	06/10/93	07/24/93	08/02/93	09/20/93	10/23/93	11/17/93
Flow [gpm]	N/A	N/A	N/A	N/A	N/A	N/A	190.00	78.00	61.00	N/A	N/A
PH							7.90	7.90	8.10		
Sp.Con. [ohms]							400.00	240.00	640.00		
Temp [C]							7.00	9.00	8.00		
Diss. O. [ppm]							8.00	8.00	9.00		

Lab. Meas. [mg/l]	Date Sampled		Mean
	04/28/93	08/02/93	
TDS	N/A	280.00	280.00
TSS		3.00	3.00
O & G		N/R	N/R
Al CaCO3		263.00	263.00
Hd CaCO3		265.00	265.00
Ac CaCO3		N/R	N/R
HCO3		320.00	320.00
CO3		0.00	0.00
Cl		5.10	5.10
SO4		16.00	16.00
Ca		79.00	79.00
Mg		16.00	16.00
K		1.60	1.60
Na		3.90	3.90
Cat/An		1.98	1.98
Fe		0.24	0.24
Mn		0.05	0.05

12/08/93 MEAN

N/A 109.67

7.97

426.67

8.00

8.33

WATER MONITORING REPORT

Property:	BCCC
Station:	2-5W
Location:	Jewkes Spring
Type:	Spring
Frequency:	Bi-Annual

Field Measurements	Date Sampled		Mean
	05/14/93	08/02/93	
Flow [gpm]	N/A	27.00	27.00
PH		7.90	7.90
Sp.Con. [ohms]		310.00	310.00
Temp [C]		10.00	10.00
Diss. O. [ppm]		N/R	N/R

Lab. Meas. [mg/l]

TDS	267.00	2,677.00
TSS	5.00	5.00
O & G	N/R	N/R
Al CaCO3	233.00	233.00
Hd CaCO3	242.00	242.00
Ac CaCO3	N/R	N/R
HCO3	284.00	284.00
CO3	0.00	0.00
Cl	5.10	5.10
SO4	24.00	24.00
Ca	70.00	70.00
Mg	17.00	17.00
K	2.00	2.00
Na	10.00	10.00
Cat/An	0.03	0.03
Fe	<0.05	0.00
Mn	<0.02	0.00

WATER MONITORING REPORT

Property: BCCC
 Station: 2-6W
 Location: Gunnison Spring
 Type: Spring
 Frequency: Bi-Annual

Field Measurements	Date Sampled		Mean
	05/14/93	08/02/93	
Flow [gpm]	N/A	1.70	1.70
PH		8.10	8.10
Sp.Con. [ohms]		540.00	540.00
Temp [C]		11.00	11.00
Diss. O. [ppm]		N/R	N/R

Lab. Meas. [mg/l]			
TDS		246.00	246.00
TSS		3.00	3.00
O & G		N/R	N/R
Al CaCO3		212.00	212.00
Hd CaCO3		219.00	219.00
Ac CaCO3		N/R	N/R
HCO3		258.00	258.00
CO3		0.00	0.00
Cl		6.10	610.00
SO4		25.00	25.00
Ca		65.00	655.00
Mg		14.00	14.00
K		1.70	1.70
Na		7.00	7.00
Cat/An		2.13	2.13
Fe		<0.05	<0.05
Mn		0.04	0.04

E.I.S. Hydrology
Field Measurements Form

Date 11-17-93

Station # 2-76

Company MM Coal

Time 3:11

Flow/Depth /

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring _____ Stream _____ Well _____ Discharge _____ NPDES _____

Collection Point _____

Appearance of Water: Clear _____ Milky _____ Cloudy _____ Opaque _____

Quality Sample Taken: Yes _____ No

Pump Reading _____

Comments Dry

Field Monitor Good

When Sample or Measurements Not Taken:

Reason: Dry

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

WATER MONITORING REPORT

Property: BCCC #2 Mine
 Station: 2-7W
 Location: Left Fork Bryner
 Type: E. Stream
 Frequency: Quarterly

Field Measurements	Date Sampled				MEAN
	03/10/93	05/14/93	08/02/93	11/17/93	
Flow [gpm]	N/A	DRY	0.25	DRY	0.25
PH			7.90		7.90
Sp. Cond. [ohms]			440.00		440.00
Temp. [C]			9.00		9.00
Diss. O [ppm]			8.00		8.00

Lab. Meas. [mg/l]			
TDS		803.00	803.00
TSS		12.00	12.00
O & G		N/R	N/R
Al	CaCO3	404.00	404.00
Hd	CaCO3	686.00	686.00
Ac	CaCO3	N/R	N/R
HCO3		493.00	493.00
CO3		0.00	0.00
Cl		25.00	25.00
SO4		306.00	306.00
Ca		93.00	93.00
Mg		110.00	110.00
K		11.00	11.00
Na		15.00	15.00
Cat/An		1.58	1.58
Fe		1.46	1.46
Mn		0.20	0.20

E.I.S. Hydrology
Field Measurements Form

Date 11/17/93

Station # 2-800

Company MM Paul

Time Bt Fork

Flow/Depth: D

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring Stream Well Discharge NPDES

Collection Point _____

Appearance of Water: Clear Milky Cloudy Opaque

Quality Sample Taken: Yes No

Pump Reading _____

Comments _____

Field Monitor [Signature]

When Sample or Measurements Not Taken:

Reason: D

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

WATER MONITORING REPORT

Property: BCCC #2 Mine
 Station: 2-8W
 Location: Right Fork Bryner
 Type: E. Stream
 Frequency: Quarterly

Field Measurements	Date Sampled				Mean
	03/10/93	05/14/93	08/02/93	11/17/93	
Flow [gpm]	N/A	DRY	DRY	DRY	DRY
PH					
Sp. Cond. [ohms]					
Temp. [C]					
Diss. O [ppm]					

Lab. Meas. [mg/l]

TDS

TSS

O & G

Al CaCO3

Hd CaCO3

Ac CaCO3

HCO3

CO3

Cl

SO4

Ca

Mg

K

Na

Cat/An

Fe

Mn

E.I.S. Hydrology
Field Measurements Form

Date 11/17/93 Station # 2-9W

Company M. Coal

Time 15:25

Flow/Depth D

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring ___ Stream ___ Well ___ Discharge ___ NPDES ___

Collection Point _____

Appearance of Water: Clear ___ Milky ___ Cloudy ___ Opaque ___

Quality Sample Taken: Yes ___ No

Pump Reading _____

Comments _____

Field Monitor [Signature]

When Sample or Measurements Not Taken:

Reason: _____

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

WATER MONITORING REPORT

Property: BCCC #2 Mine
 Station: 2-9W
 Location: Bryner Canyon Below
 Type: E. Stream
 Frequency: Quarterly

Field Measurements	Date Sampled				Mean
	03/10/93	05/14/93	08/02/93	11/17/93	
Flow [gpm]	N/A	DRY	DRY	DRY	DRY
PH					
Sp. Cond. [ohms]					
Temp. [C]					
Diss. O [ppm]					

Lab. Meas. [mg/l]

TDS
TSS
O & G
Al CaCO3
Hd CaCO3
Ac CaCO3
HCO3
CO3
Cl
SO4
Ca
Mg
K
Na
Cat/An
Fe
Mn

E.I.S. Hydrology
Field Measurements Form

Date 11-17-93

Station # 2-104

Company W Pool

Time 3:15

Flow/Depth 0

pH _____

Specific Conductivity _____

Water Temperature _____

Air Temperature _____

Dissolved Oxygen _____

Type: Spring _____ Stream _____ Well _____ Discharge _____ NPDES _____

Collection Point _____

Appearance of Water: Clear _____ Milky _____ Cloudy _____ Opaque _____

Quality Sample Taken: Yes _____ No

Pump Reading _____

Comments _____

Field Monitor [Signature]

When Sample or Measurements Not Taken:

Reason: Ax

D = Dry F = Frozen N/A = Not Accessable N/R = Not Required

WATER MONITORING REPORT

Property: Mt. Coal #2 Mine
 Station: 2-10W
 Location: Inflow Sed. P. A.
 Type: E. Stream
 Frequency: Quarterly

Field Measurements	Date Sampled				Mean
	03/10/93	05/14/93	08/02/93	11/17/93	
Flow [gpm]	N/A	12.00	<.1	DRY	12.00
PH		7.70	7.80		7.75
Sp. Cond. [ohms]		600.00	300.00		450.00
Temp. [C]		4.00	10.00		7.00
Diss. O [ppm]		N/R	N/R		N/R

Lab. Meas. [mg/l]					
TDS		601.00	722.00		661.50
TSS		620.00	5.00		312.50
O & G		0.38	BROKEN		0.38
Al CaCO3		336.00	296.00		316.00
Hd CaCO3		501.00	582.00		541.50
HCO3		410.00	361.00		385.50
CO3		0.00	0.00		0.00
Cl		25.00	30.00		27.50
SO4		192.00	313.00		252.50
Ca		120.00	100.00		110.00
Mg		51.00	78.00		64.50
K		3.80	3.90		3.85
Na		10.00	15.00		12.50
Cat/An		4.01	3.50		3.76
Fe		13.00	<0.05		13.00
Mn		0.42	<0.02		0.42

U.P.D.E.S.
DISCHARGE DATA

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



January 25, 1994

Mr. Donald A Hilden, PH.D., Chief
Permits and Compliance Section
Department of Environmental Quality
Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Dear Mr. Hilden:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports cover the Fourth Quarter of 1993.

If you have any questions or need any additional information, please contact me.

Respectfully,

Dan W. Guy for
Kathy Welt, MCC

Enclosures

DWG/db

cc: Donna Franklin, E.P.A.
Lowell Braxton, UDOGM
Kathy Welt, Mountain Coal Co.
File

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



January 25, 1994

Ms. Donna Franklin
U.S.E.P.A., Region VIII
999 18th Street
Denver Place - Suite 500 WM-C
Denver, Colorado 80202-2405

Dear Ms. Franklin:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports cover the Fourth Quarter of 1993.

If you have any questions or need any additional information, please contact me.

Respectfully,

Dan W. Guy for
Kathy Welt, MCC

Enclosures

DWG/db

cc: Lowell Braxton, UDOGM
Donald Hilden, D.E.Q.
Kathy Welt, Mountain Coal Co.
File

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



January 25, 1994

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

Dear Mr. Braxton:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports cover the Fourth Quarter of 1993.

If you have any questions or need any additional information, please contact me.

Respectfully,

Dan W. Guy for
Kathy Welt, MCC

Enclosures

DWG/db

cc: Donna Franklin, E.P.A.
Donald Hilden, D.E.Q.
Kathy Welt, Mountain Coal Co.
File

PERMITTEE NAME ADDRESS (Include Facility Name/Location if different)
 NAME **MOUNTAIN COAL COMPANY**
 ADDRESS **C/O BLACKHAWK ENGINEERING**
RT 1 BOX 146-H5
HELPER UT 84526
 FACILITY _____
 LOCATION _____
 ATTN: **KATHLEEN WELT**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

UTG040004
 PERMIT NUMBER

001 A
 DISCHARGE NUMBER

MINOR

Form Approved.
 OMB No. 2040-0004

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	93	12	01		93	12	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

F - FINAL SED PMD OTFAL NO POKJSDM CRK

*** NO DISCHARGE ***
 NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (46-53)			QUALITY OR CONCENTRATION (38-45)			NO. EX (63-65)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE				(07)	*****	*****	*****			
00056 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT 30DA AVG	REPORT DAILY MX	GPD	*****	*****	*****	***		
PH	SAMPLE MEASUREMENT	*****	*****					(12)		
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	6.5 DAILY MN	*****	9.0 DAILY MX	SU		TWICE / MONTH
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	*****	*****		*****			(19)		
00530 P 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	25 30DA AVG	70 DAILY MX	MG/L		ONCE / 6 MONTH
SOLIDS, SETTLEABLE	SAMPLE MEASUREMENT	*****	*****		*****	*****		(25)		
00545 R 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	****	*****	*****	0.5 DAILY MX	ML/L		ONCE / 6 MONTH
OIL AND GREASE FROM EXTR-GRAV METH	SAMPLE MEASUREMENT	*****	*****		*****	*****		(19)		
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	10 DAILY MX	MG/L		ONCE / 6 MONTH
IRON, TOTAL (AS FE)	SAMPLE MEASUREMENT	*****	*****		*****	*****		(19)		
01045 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	1.0 DAILY MX	MG/L		ONCE / 6 MONTH
SOLIDS, TOTAL DISSOLVED	SAMPLE MEASUREMENT	*****		(26)	*****	*****		(19)		
70295 Q 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	2000 DAILY MX	LBS/DY	*****	*****	REPORT DAILY MX	MG/L		ONCE / 6 MONTH

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 Kathleen Welt
 Environmental Supervisor
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 31 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

Kathleen Welt
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 801 637-2422
 DATE 24 01 25
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

TDS IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS SHALL BE LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME AND ADDRESS (Include Facility Name/Location if different)
 NAME **MOUNTAIN COAL COMPANY**
 ADDRESS **C/O BLACKHAWK ENGINEERING**
RT 1 BOX 146-H5
HELPER UT 84526
 FACILITY _____
 LOCATION _____
 ATTN: **KATHLEEN WELT**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

UTG040004
 PERMIT NUMBER

001 A
 DISCHARGE NUMBER

MINOR Form Approved. OMB No. 2040-0004
 F - FINAL SED PND OTFEE NO FRKJGRDM CRK

MONITORING PERIOD
 FROM YEAR **93** MO **11** DAY **01** TO YEAR **93** MO **11** DAY **30**
 (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

*** NO DISCHARGE ***
 NOTE: Read instructions before completing this form.

PARAMETER (12-37)	SAMPLE MEASUREMENT PERMIT REQUIREMENT	(3 Card Only) QUANTITY OR LOADING (46-53) (54-61)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW RATE				(07)	*****	*****	*****			
00056 1 0 0 EFFLUENT GROSS VALUE		REPORT 30DA AVG	REPORT DAILY MX	GPD	*****	*****	*****			
PH		*****	*****			*****	(12)			
00400 1 0 0 EFFLUENT GROSS VALUE		*****	*****	****	6.5	*****	9.0			
SOLIDS, TOTAL SUSPENDED		*****	*****	****	DAILY MN		DAILY MX	SU		
00530 P 0 0 SEE COMMENTS BELOW		*****	*****	****	*****	25	70			
SOLIDS, SETTLEABLE		*****	*****		*****	*****		(25)		
00545 R 0 0 SEE COMMENTS BELOW		*****	*****	****	*****	*****	0.5			
OIL AND GREASE		*****	*****		*****	*****		(19)		
FREON EXTR-GRAY METH		*****	*****	****	*****	*****	10			
00556 1 0 0 EFFLUENT GROSS VALUE		*****	*****	****	*****	*****	DAILY MX	MG/L		
IRON, TOTAL (AS FE)		*****	*****		*****	*****		(19)		
01045 1 0 0 EFFLUENT GROSS VALUE		*****	*****	****	*****	*****	1.0			
SOLIDS, TOTAL DISSOLVED		*****		(26)	*****	*****		(19)		
70295 Q 0 0 SEE COMMENTS BELOW		*****	2000	DAILY MX	*****	*****	REPORT DAILY MX	MG/L		

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 Kathleen Welt
 Environmental Supervisor
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

Kathleen Welt
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: 801 637-2422
 DATE: 93 12 01
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

TDS IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS SHALL BE LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

PERMITTEE NAME AND ADDRESS (Include Facility Name/Location if different)
NAME

ADDRESS

FACILITY

LOCATION

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
(2-16) (17-19)

PERMIT NUMBER	DISCHARGE NUMBER
---------------	------------------

Form Approved.
OMB No. 2040-0004
Approval expires 10-31-94

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
	PERMIT REQUIREMENT	3000 AVG	REPORT DAILY MX		*****	*****	*****			ONCE / MONTH	MEASRD
	PERMIT REQUIREMENT	*****	*****		8.5 DAILY MX	*****	9.0 DAILY MX			TWICE / MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	25 3000 AVG	70 DAILY MX	/L		ONCE / MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	*****	2.5 DAILY MX	/L		ONCE / MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	*****	10 DAILY MX	/L		ONCE / MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	*****	1.0 DAILY MX	/L		ONCE / MONTH	GRAB
	PERMIT REQUIREMENT	*****	2000 DAILY MX		*****	*****	REPORT DAILY MX	/L		ONCE / MONTH	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER TYPED OR PRINTED	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)	TELEPHONE		DATE		
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME AND ADDRESS (Include Facility Name/Location if different) NAME _____
 ADDRESS _____
 FACILITY _____
 LOCATION _____

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)
 (2-16) (17-19)

PERMIT NUMBER _____ DISCHARGE NUMBER _____

Form Approved. OMB No. 2040-0004
 Approval expires 10-31-94

MONITORING PERIOD
 FROM YEAR MO DAY TO YEAR MO DAY
 (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING (46-53) (54-61)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
	PERMIT REQUIREMENT	REPORT 30DA AVG	REPORT DAILY MX		*****	*****	*****		ONCE/ MONTH	MEASRD
	PERMIT REQUIREMENT	*****	*****		0.5 DAILY MX	*****	0.5 DAILY MX		ONCE/ MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	30DA AVG	70 DAILY MX		ONCE/ MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	*****	0.5 DAILY MX		ONCE/ MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	*****	10 DAILY MX		ONCE/ MONTH	GRAB
	PERMIT REQUIREMENT	*****	*****		*****	*****	1.0 DAILY MX		ONCE/ MONTH	GRAB
	PERMIT REQUIREMENT	*****	2000 DAILY MX		*****	*****	REPORT DAILY MX		ONCE/ MONTH	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER TYPED OR PRINTED	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)	TELEPHONE		DATE		
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME AND ADDRESS (Include Facility Name/Location if different)
 NAME _____
 ADDRESS _____

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)
 (2-16) (17-19)

PERMIT NUMBER	DISCHARGE NUMBER
---------------	------------------

Form Approved.
 OMB No. 2040-0004
 Approval expires 10-31-94

FACILITY _____
 LOCATION _____

MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY

(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
	PERMIT REQUIREMENT	300A AVG	REPORT DAILY MX		*****	*****	*****			ONCE/ GRAB MONTH	
	PERMIT REQUIREMENT	*****	*****		0.5 DAILY MN	*****	9.0 DAILY MX			TWICE/ GRAB MONTH	
	PERMIT REQUIREMENT	*****	*****		*****	300A AVG	70 DAILY MX			ONCE/ GRAB MONTH	
	PERMIT REQUIREMENT	*****	*****		*****	*****	0.5 DAILY MX			ONCE/ GRAB MONTH	
	PERMIT REQUIREMENT	*****	*****		*****	*****	10 DAILY MX			ONCE/ GRAB MONTH	
	PERMIT REQUIREMENT	*****	*****		*****	*****	1.0 DAILY MX			ONCE/ GRAB MONTH	
	PERMIT REQUIREMENT	*****	300B DAILY MX		*****	*****	REPORT DAILY MX			ONCE/ GRAB MONTH	

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER TYPED OR PRINTED	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)	TELEPHONE AREA CODE NUMBER	DATE		
			SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	YEAR	MO

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Mountain Coal Company

West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



October 28, 1993

Mr. Donald A Hilden, PH.D., Chief
Permits and Compliance Section
Department of Environmental Quality
Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Dear Mr. Hilden:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports cover the Third Quarter of 1993.

If you have any questions or need any additional information, please contact me.

Respectfully,

A handwritten signature in cursive script, appearing to read "Dan W. Guy".

Dan W. Guy for
Kathy Welt, MCC

Enclosures

DWG/db

cc: Donna Franklin, E.P.A.
Lowell Braxton, UDOGM
Kathy Welt, Mountain Coal Co.
File

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



October 28, 1993

Ms. Donna Franklin
U.S.E.P.A., Region VIII
999 18th Street
Denver Place - Suite 500 WM-C
Denver, Colorado 80202-2405

Dear Ms. Franklin:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports cover the Third Quarter of 1993.

If you have any questions or need any additional information, please contact me.

Respectfully,

Dan W. Guy for
Kathy Welt, MCC

Enclosures

DWG/db

cc: Lowell Braxton, UDOGM
Donald Hilden, D.E.Q.
Kathy Welt, Mountain Coal Co.
File

Mountain Coal Company

West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



October 28, 1993

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

Dear Mr. Braxton:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports cover the Third Quarter of 1993.

If you have any questions or need any additional information, please contact me.

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A handwritten signature in cursive script that reads "Dan W. Guy".

Dan W. Guy for
Kathy Welt, MCC

Enclosures

DWG/db

cc: Donna Franklin, E.P.A.
Donald Hilden, D.E.Q.
Kathy Welt, Mountain Coal Co.
File

PERMITTEE NAME AND ADDRESS (Include Facility Name/Address if different)
 NAME **MOUNTAIN COAL COMPANY**
 ADDRESS **C/O BLACKHAWK ENGINEERING**
RT 1 BOX 146-H5
HELPER UT 84526
 FACILITY _____
 LOCATION _____

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)
 (2-16) (17-19)

UTG040004
 PERMIT NUMBER

001 A
 DISCHARGE NUMBER

MINOR

Form Approved. OMB No. 2040-0004

F - FINAL SED PND OTFEE NO PRK/GROW CRK

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	93	09	01		93	09	30

(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

*** NO DISCHARGE IX-1 ***
 NOTE: Read instructions before completing this form.

ATTN: KATHLEEN WELT

PARAMETER (32-37)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (46-53) (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW RATE				(07)	*****	*****	*****				
00056 1 0 0 EFFLUENT GROSS VALUE	PH	REPORT	REPORT	30DA AVG DAILY MX GPD	*****	*****	*****	***		ONCE / GRAB MONTH	
00400 1 0 0 EFFLUENT GROSS VALUE	PH	*****	*****	*****	6.5	*****	9.0	****	(12)	TWICE / GRAB MONTH	
00530 P 0 0 SEE COMMENTS BELOW	SOLIDS, TOTAL SUSPENDED	*****	*****	*****	*****	25	70	****	(19)	ONCE / GRAB MONTH	
00545 R 0 0 SEE COMMENTS BELOW	SOLIDS, SETTLEABLE	*****	*****	*****	*****	*****	*****	****	(25)	ONCE / GRAB MONTH	
00556 1 0 0 EFFLUENT GROSS VALUE	OIL AND GREASE	*****	*****	*****	*****	*****	0.5	****	(19)	ONCE / GRAB MONTH	
01045 1 0 0 EFFLUENT GROSS VALUE	FREON EXTR-GRAY METH	*****	*****	*****	*****	*****	10	****	(19)	ONCE / GRAB MONTH	
70295 0 0 0 SEE COMMENTS BELOW	IRON, TOTAL (AS FE)	*****	*****	*****	*****	*****	1.0	****	(19)	ONCE / GRAB MONTH	
	SOLIDS, TOTAL DISSOLVED	*****	*****	(26)	*****	*****	*****	****	(19)	ONCE / GRAB MONTH	
		*****	*****	2000	*****	*****	REPORT	****	(19)	ONCE / GRAB MONTH	
				DAILY MX LBS/DY			DAILY MX				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 Kathleen Welt
 Environmental Supervisor
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT. SEE 18 U.S.C. § 1001 AND 33 U.S.C. § 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
 TELEPHONE: 801 637-2422
 DATE: 93 10 28
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

TDS IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS SHALL BE LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.

Mountain Coal Company

West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



July 30, 1993

Mr. Donald A Hilden, PH.D., Chief
Permits and Compliance Section
Department of Environmental Quality
Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Dear Mr. Hilden:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTGO40004, UTGO40005, UTGO40014 and UTGO40015. These reports cover the Second Quarter of 1993.

If you have any questions or need any additional information, please contact me.

Respectfully,

A handwritten signature in cursive script that reads "Dan W. Guy".

Dan W. Guy for
Kathy Welt, MCC

Enclosures

cc: Donna Franklin, E.P.A.
Lowell Braxton, UDOGM
Kathy Welt, Mountain Coal Co.
File

DWG/cr

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



July 30, 1993

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U.S.E.P.A., Region VIII
999 18th Street
Denver, Place - Suite 500 WM-C
Denver, CO 80202-2405

Dear Ms. Franklin:

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If you have any questions or need any additional information, please contact me.

Respectfully,

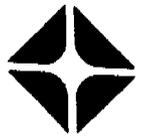
Dan W. Guy for
Kathy Welt, MCC

Enclosures

cc: Lowell Braxton, UDOGM
Donald Hilden, D.E.Q.
Kathy Welt, Mountain Coal Co.
File

DWG/er

Mountain Coal Company
West Elk Mine
Post Office Box 591
Somerset, Colorado 81434
Telephone 303 929-5015
Fax 303 929-5595



July 30, 1993

Mr. Lowell Braxton, Administrator
Utah Division of Oil, Gas & Mining
355 West North Temple
#3 Triad Center, Suite 350
Salt Lake City, Utah 84190-1203

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If you have any questions or need any additional information, please contact me.

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Dan W. Guy for
Kathy Walt, MCC

Enclosures

cc: Donna Franklin, E.P.A.
Donald Hilden, D.E.Q.
Kathy Walt, Mountain Coal Co.
File

lwb:cr

PERMITTEE NAME WELLS (Include Facility Name/Location)
WELLS COAL--GRDN #2
 ADDRESS P.O. BOX 1378
PRICH UT 84501

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)
 (2-16) (17-19)

UTG040004 001 A
 PERMIT NUMBER DISCHARGE NUMBER

P - FINAL
 SPD PND OPPL-NO PRE/GRDN CRK

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
93	04	01		93	06	30
(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

FACILITY _____
 LOCATION _____
 APPE: DAW H. GUY, MANAGER

MINOR
 NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW RATE		150 GPM	150 GPM	GPM	*****	*****	*****			1	PUMPED
00056 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT 30 DA AV	REPORT DAILY MX	GPD	*****	*****	*****	***		ONCE/ MONTH	MEASRD
PH		*****	*****		8.1	*****	8.2			1	GRAB
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	6.5	*****	9.0	***		TWICE/ MONTH	GRAB
SOLIDS, TOTAL SUSPENDED		*****	*****		*****	40	68			2	GRAB
00530 P 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	***	*****	25	70	***		ONCE/ MONTH	GRAB
SOLIDS, SETTLEABLE		*****	*****		*****	*****	<.05			1	GRAB
00545 P 0 0 SEE COMMENTS BELOW	PERMIT REQUIREMENT	*****	*****	***	*****	*****	0.5	***		ONCE/ MONTH	GRAB
OIL AND GREASE FROM EXTR-GRAV METH		*****	*****		*****	*****	<.5			1	GRAB
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	*****	10	***		ONCE/ MONTH	GRAB
IRON, TOTAL (AS FE)		*****	*****		*****	*****	.37			1	GRAB
01045 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	*****	2.0	***		ONCE/ MONTH	GRAB
FLOATING SOLIDS OR VISIBLE FOAM-VISUAL		*****	0		*****	*****	*****			1	GRAB
45613 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	0	RES=1 NO=0	*****	*****	*****	***		ONCE/ MONTH	VISUAL

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Kathleen Well
Environmental Supervisor
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN, AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.

Don W. Guy
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE 801 637-2422
 DATE 93 7 27
 AREA CODE NUMBER YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 TDS IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS, SETTLEABLE SOLIDS SHALL BE LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN THE APPROPRIATE ROW.



BLACKHAWK ENGINEERING, CO.

Rt. 1, Box 146-H5 - Helper, Utah 84526 - Telephone (801) 637-2422

April 29, 1993

Mr. Donald A Hilden, PH.D., Chief
Permits and Compliance Section
Department of Environmental Quality
Division of Water Quality
288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870

Dear Mr. Hilden:

Enclosed please find quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040013. These reports are on the preprinted DMR's provided by the State of Utah, and cover the first quarter of 1993.

If you have any questions or need any additional information, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Dan W. Guy".

Dan W. Guy,
President

Enclosures

cc: Donna Franklin, E.P.A.
Lowell Braxton, UDEGM
Kathy Welt, Mountain Coal Co.
File



BLACKHAWK ENGINEERING, CO.

Rt. 1, Box 146-H5 - Helper, Utah 84526 - Telephone (801) 637-2422

April 29, 1993

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

Dear Mr. Braxton:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports are on the preprinted DMR's provided by the State of Utah, and cover the first quarter of 1993.

If you have any questions or need any additional information, please contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Dan W. Guy'.

Dan W. Guy,
President

Enclosures

cc: Donna Franklin, E.P.A.
Donald Hilden, D.E.Q.
Kathy Welt, Mountain Coal Co.
File



BLACKHAWK ENGINEERING, CO.

Rt. 1, Box 146-H5 - Helper, Utah 84526 - Telephone (801) 637-2422

April 29, 1993

Ms. Donna Franklin
U.S.E.P.A., Region VIII
999 18th Street
Denver Place - Suite 500 WM-C
Denver, Colorado 80202-2405

Dear Ms. Franklin:

Enclosed please find Quarterly Discharge Monitoring Reports for Mountain Coal Company's UPDES Permit Numbers UTG040004, UTG040005, UTG040014 and UTG040015. These reports are on the preprinted DMR's provided by the State of Utah, and cover the first quarter of 1993.

If you have any questions or need any additional information, please contact me.

Sincerely,

Dan W. Guy,
President

Enclosures

cc: Lowell Braxton, UDOGM
Donald Hilden, D.E.Q.
Kathy Welt, Mountain Coal Co.
File

PERMITTEE NAME: WESS (Include Facility Name/Location if different)
 NAME: WESS
 ADDRESS: P.O. BOX 1373
DATE:

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)
 (2-16) (11719)
 PERMIT NUMBER: 9750404
 DISCHARGE NUMBER: 001 A

Form Approved.
 OMB No. 2040-0004.
 FINAL Approval expires 6-30-91.

FACILITY: Gordon Creek No. 2
 LOCATION:
 ATTN: DATE: 007

MONITORING PERIOD
 FROM: YEAR 93 MO 01 DAY 01 TO YEAR 93 MO 01 DAY 31
 (120-21) (122-23) (124-25) (126-27) (128-29) (130-31)

*** NO DISCHARGE ***
 NOTE: Read instructions before completing this form.

PARAMETER (32-37)	SAMPLE MEASUREMENT	(1 Card Only) QUANTITY OR LOADING (45-51)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
FLOW RATE		NO DISCHARGE			(07)	*****	*****	*****	()		
00356 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT	REPORT		*****	*****	*****	*****		ONCE/ MONTH	WASRD
PI		*****	*****	()		*****		(12)			
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	5.5	*****	9.0	DAILY MK SU		TWICE/ MONTH	GRAB
SOLIDS, TOTAL SUSPENDED		*****	*****	()	*****			(19)			
00530 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	25	70	30 DA AV DAILY MK MG/L		ONCE/ MONTH	GRAB
SOLIDS, SETTLEABLE		*****	*****	()	*****	*****		(25)			
00545 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	*****	0.5	DAILY MK ML/L		ONCE/ MONTH	GRAB
OIL AND GREASE FROM EXTR-GRAV METH		*****	*****	()	*****	*****		(19)			
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	*****	10	DAILY MK MG/L		ONCE/ MONTH	GRAB
IRON, TOTAL (AS FE)		*****	*****	()	*****	*****		(19)			
01045 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	***	*****	*****	2.0	DAILY MK MG/L		ONCE/ MONTH	GRAB
SOLIDS, TOTAL DISSOLVED		*****		(26)	*****	*****		(19)			
70295 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	2000		*****	*****	REPORT	DAILY MK MG/L		ONCE/ MONTH	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 Kathleen Welt
 Environmental Supervisor
 TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.

Kathleen Welt
 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE: 801 637-2422
 DATE: 93 04 27
 AREA CODE: 801 NUMBER: 637-2422 YEAR: 93 MO: 04 DAY: 27

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 THIS IS LIMITED TO ONE TON PER DAY FROM ALL OUTFALLS. DURING PRECIPITATION EVENTS SETTLEABLE SOLIDS SHALL BE LIMITED INSTEAD OF TSS. REPORT "DOES NOT APPLY" IN APPROPRIATE ROW.

POND INSPECTIONS

E.I.S Hydrology
Pond Inspection Report

POND: 2

LOCATION: Old Ponds
7 Mine

ITEM

REMARKS

(1) Potential Safety Hazards

None

(2) Slope Stability

Stable

(3) Erosion

None - other than
on S. Total below High
Water line

(4) Construction and Maintenance
Performance Standards

Good

(5) Recommendations/Comments

No Discharge -
5' 9" Below Oil
Skimmer.

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.

[Signature]
Inspector

2/8/93
Date

E.I.S Hydrology
Pond Inspection Report

POND: 7

LOCATION: #1 Mine Reservoir

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Stable</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Good</u>
(5) Recommendations/Comments	<u>4" Walk 3" Snow</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.

J. W. Plouffe
Inspector

Date 12/8/98

E.I.S Hydrology
Pond Inspection Report

POND: Parade

LOCATION: Lawrenceville

ITEM	REMARKS
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Stable</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Good</u>
(5) Recommendations/Comments	<u>Landowner - Staff of Pond</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.

John P. Cannon
Inspector
8/93
Date

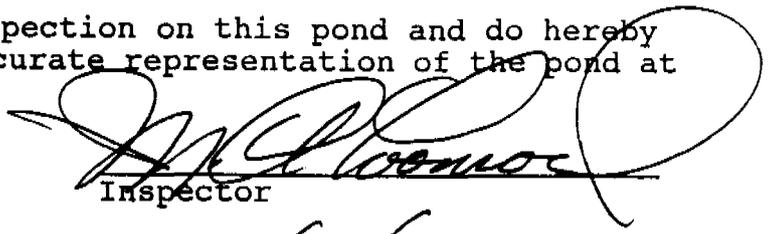
E.I.S Hydrology
Pond Inspection Report

POND: 7-(2)

LOCATION: 2:7 mine

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Stable</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Good - upper end 30% Sed.</u>
(5) Recommendations/Comments	<u>Less than 10% water - No Overflow</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.


Inspector

7/24/93
Date

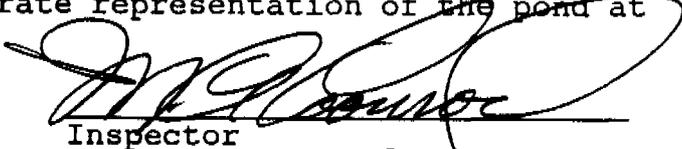
E.I.S Hydrology
Pond Inspection Report

POND: 07A

LOCATION: A-7mine

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Stable</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Good</u>
(5) Recommendations/Comments	<u>Water level @ 14"</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.


Inspector

Date 7/24/93

E.I.S Hydrology
Pond Inspection Report

POND: Lucks

LOCATION: Borden Creek

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Stable</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Good</u>
(5) Recommendations/Comments	<u>None (no work)</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.

[Signature]
Inspector

Date 7/24/93

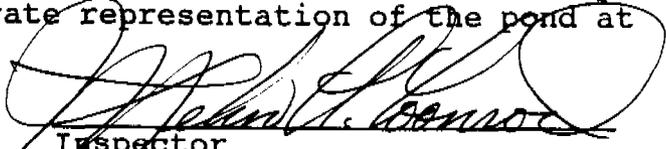
E.I.S Hydrology
Pond Inspection Report

POND: 02

LOCATION: 70' mine

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Good</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Good</u>
(5) Recommendations/Comments	<u>None -</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.


Inspector

5/13/95
Date

E.I.S Hydrology
Pond Inspection Report

POND: 07A

LOCATION: 7-8 Mine

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Stable</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Water level 18" deep of main Culvert</u>
(5) Recommendations/Comments	<u>Seal Pond</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.

[Signature]
Inspector

Date 5/13/93

E.I.S Hydrology
Pond Inspection Report

POND: Swack

LOCATION: Conamun

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<u>None</u>
(2) Slope Stability	<u>Stable</u>
(3) Erosion	<u>None</u>
(4) Construction and Maintenance Performance Standards	<u>Pond Per. Meeting</u>
(5) Recommendations/Comments	<u>Water Clean -</u> <u>No Problems</u>

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.

[Signature]
Inspector

Date 5/13/93

E.I.S Hydrology
Pond Inspection Report

POND: #2 0' 7" x 6' 5" Sport's Gym

LOCATION: Gordon Creek

<u>ITEM</u>	<u>REMARKS</u>
(1) Potential Safety Hazards	<i>Ponds inaccessible</i>
(2) Slope Stability	
(3) Erosion	
(4) Construction and Maintenance Performance Standards	
(5) Recommendations/Comments	

I have performed the above inspection on this pond and do hereby certify it to be a true and accurate representation of the pond at this time.

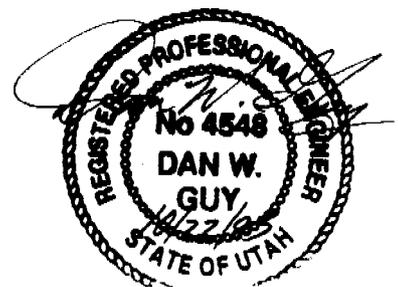
[Signature]
Inspector
Date *2/10/93*

**SUBSIDENCE
SURVEY**

MOUNTAIN COAL COMPANY
 SUBSIDENCE MONITORING
GORDON CREEK NO. 2 MINE

STATION	ORIGINAL ELEVATION		SURVEY ELEVATION		CHANGE	
	07/29/86	09/28/91	10/10/92	10/16/93	Last	Acc.
SWEETS	9174.513	9174.513	9174.513	9174.513	Control	
"H"	8849.120	8845.010	8845.010	8845.010	-	-
"A"	8653.167	8653.553	8653.501	8653.527	+0.026	+0.360
"B"	8241.927	8242.021	8241.995	8241.987	-0.008	+0.060
B-1	8542.205	8542.332	8542.523	8542.450	-0.074	+0.245
B-2	8557.768	8557.925	8558.082	8558.002	-0.080	+0.234
B-3	8571.868	8571.952	8572.096	8572.015	-0.081	+0.147
B-4	8594.970	-	-	-	-	-
B-5	8590.990	8591.002	8591.261	8591.167	-0.094	+0.177
B-6	8652.996	8653.031	8652.949	8652.842	-0.108	-0.155
B-7	8635.952	8635.988	8635.949	8635.835	-0.114	-0.117
B-8	8893.432	8893.496	8893.378	8893.267	-0.111	-0.165
B-9	8409.744	8409.760	8409.799	8409.763	-0.036	+0.019
B-10	8792.587	8792.624	8792.365	8792.369	-0.004	-0.198

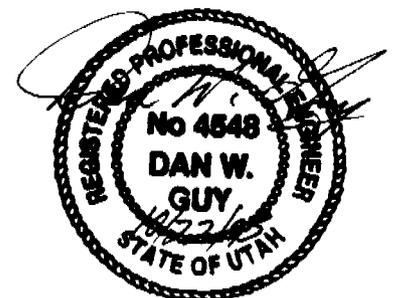
NOTE: (1) The area was walked between all stations. No visible movement, cracks or other recent subsidence effects were noted during the survey.



**MOUNTAIN COAL COMPANY
SUBSIDENCE MONITORING
GORDON CREEK NO. 7 MINE**

STATION	ORIGINAL ELEVATION		SURVEY ELEVATION		CHANGE	
	06/12/86	09/28/91	10/10/92	10/15/93	Last	Acc.
SWEETS	9174.513	9174.513	9174.513	9174.513	Control	
"H"	8849.120	8845.010	8845.010	8845.010	0.000	-4.110
"I"	9040.049	9038.081	9038.155	9038.175	+0.020	-1.874
Sub-1	8295.284	8295.430	8295.297	8295.273	-0.024	-0.011
Sub-2	8416.227	8413.659	8413.619	8413.610	-0.009	-2.617
Sub-4	9042.727	9040.057	9040.094	9040.072	-0.022	-2.655
Sub-5	9220.773	9220.756	9220.939	9220.934	-0.005	+0.161
Sub-6	8649.193	8646.335	8646.318	8646.266	-0.052	-2.927
Sub-7	8724.159	8723.205	8723.156	8723.118	-0.038	-1.041
Sub-8	8967.402	8966.269	8966.351	8966.368	+0.017	-1.034
Sub-9	8901.147	8899.687	8899.736	8899.752	+0.016	-1.395
Sub-10	8864.970	8863.427	8863.489	8863.506	+0.017	-1.464
Sub-11	9050.850	9049.482	9049.629	9049.635	+0.006	-1.215
Sub-12	8977.577	8975.308	8975.371	8975.332	-0.039	-2.245
Sub-13	8887.506	8884.992	8885.055	8885.030	-0.025	-2.476
Sub-14	9059.611	9059.673	9059.688	9059.675	-0.013	+0.064
Sub-15	9000.420	9000.473	9000.540	9000.522	-0.018	+0.102
Sub-17	8905.849	8905.639	8905.660	8905.711	+0.051	-0.138
Sub-18	8662.317	8662.083	8662.102	8662.175	+0.073	-0.142
Sub-19	9098.256	9097.190	9097.235	9097.285	+0.050	-0.971
Sub-20	8908.330	8906.040	8906.018	8906.107	+0.089	-2.223
Sub-21	8755.014	8754.445	8754.432	8754.476	+0.044	-0.538
Sub-22	8757.128	8754.837	8754.752	8755.666	-0.086	-2.462
Sub-23	8788.448	8787.249	8787.174	8787.145	-0.029	-1.303
Sub-24	8762.659	8758.911	8758.850	8758.853	+0.003	-3.806

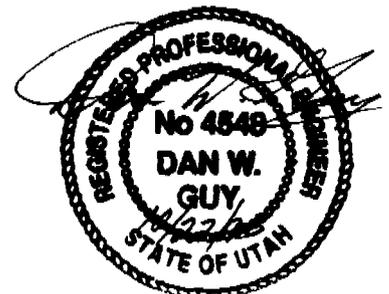
NOTE: (1) The area was walked between all stations. No visible movement, cracks or other recent subsidence effects were noted during the survey.



MOUNTAIN COAL COMPANY
 SUBSIDENCE MONITORING
GORDON CREEK NO. 8 MINE

STATION	ORIGINAL ELEVATION		SURVEY ELEVATION		CHANGE	
	10/09/88	09/28/91	10/10/92	10/09/93	Last	Acc.
SWEETS	9174.513	9174.513	9174.513	9174.513	Control	
"H"	8849.120	8845.010	8845.010	8845.010	Control	
Sub-25	8561.790	8560.915	8560.954	8560.886	-0.068	-0.904
Sub-26	8641.822	8638.621	8638.512	8638.434	-0.078	-3.388
Sub-27	8615.259	8611.952	8611.874	8611.815	-0.059	-3.444

NOTE: (1) The area was walked between all stations. No visible movement, cracks or other recent subsidence effects were noted during the survey.



**VEGETATION
MONITORING**

**VEGETATION SAMPLING:
GORDON CREEK
2/7/8 MINES**

1993



Prepared by

MT. NEBO SCIENTIFIC, INC.

330 East 400 South, Suite 6

P.O. Box 337

Springville, Utah 84663

(801) 489-6937

for

BLACKHAWK ENGINEERING

Route 1, Box 146-H5

Helper, Utah 84526

March 1994

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**VEGETATION SAMPLING:
GORDON CREEK
2/7/8 MINES**

1993

INTRODUCTION

The following report has been prepared to monitor the current condition of the vegetation of reclaimed areas at the Gordon Creek 2/7/8 Mines. The reclaimed areas have been compared with an undisturbed reference area that was previously chosen by the operator as a standard for revegetation success.

The mine site is located in the drainage of Bryner Canyon at about 8,000 ft elevation. The site is west of the Gordon Creek Numbers 3 & 6 Mines. Adjacent plant communities include Sagebrush/Grass, Oak Shrubland, Aspen, and Fir.

METHODS

Methodologies used herein were performed in accordance with the guidelines supplied by the State of Utah, Division of Oil, Gas and Mining (DOGGM).

Quantitative and qualitative data were taken on the vegetation of the reclaimed and reference areas. Sampling was conducted September 1993. Previous qualitative sampling was also conducted in 1991.

Transect and Quadrat Placement

Transect lines for sampling were placed randomly throughout the reclaimed areas resulting in several sample sites (see Sample Map). Random/regular placement of sampling quadrats were designed to provide unbiased accuracy of the data compiled. Once the transect lines were placed, regular points were then marked on them. From these marks, a random number dictated the direction and distance to place the quadrats at right angles from the transect lines.

All reclaimed areas were seeded with the same seed mix on a variety of slopes, exposures, soil conditions and water relationships, etc. Due to variability, data summaries are presented separately for each area. Reporting the data in this manner was an attempt to provide information of smaller, localized areas. The reference area was also sampled using the same methodologies as described above.

Cover and Composition

Cover estimates were made using ocular methods with meter square quadrats. Species composition and relative frequencies were also assessed from the quadrats. Additional information recorded on the raw data sheets were: estimated precipitation, slope, exposure, grazing use, animal disturbance and other appropriate notes. Plant nomenclature of the seeded species follows the same as was used in the Mining and Reclamation Plan (MRP) -- even though some of the species names have been changed in more recent literature. Otherwise, nomenclature follows "A Utah Flora", (Welsh et al., 1987).

Woody Species Density

Density of woody plant species of the reclaimed areas were made using belt transects. Depending on the area, these belts varied from 250 ft² to 150 ft² and were placed randomly throughout the study areas. Total number of individuals by species were counted in each of the belt transects. The average number was then calculated followed by the number of individuals per acre.

Density of woody plant species of the Reference Area were recorded using the point quarter distance method (Cottom and Curtis 1956). In this method, random points were placed on the sample sites and measured into four quarters. The distances to the nearest woody plant species were then recorded in each quarter. The average point-to-individual distance was equal to

the square root of the mean area per individual.

Sample Adequacy & Statistical Comparisons

Sampling adequacy for cover and woody species density was achieved using formulas from Snedocor and Cochran (1980), with the intent that 80% of the samples were within 10% of the true mean for the shrub communities of the area. The formula used is given below.

$$n_{min} = \left| \frac{1.28 (s)}{x (.1)} \right|^2$$

where,

nmin = minimum adequate sample

s = standard deviation

x = sample mean

.1 = confidence interval

Student's t-tests were also employed to compare the reclaimed disturbance and reference areas of all sites for cover and density. All sample means, standard deviations, and sample sizes were included in this report to enable the reviewers to apply further statistical tests if desired.

Photographs

Color photographs of the sample areas were taken at the time of sampling and have been submitted with this report.

Raw Data

The raw data have been summarized on a spreadsheet and are included in this report.

RESULTS

Each reclaimed area was sampled by random placement of transects and quadrats. The areas were also summarized and reported separately as opposed to "combining" all data for this report. Justification for this is because it enables the operator (and regulatory agency) to review the progress of each area individually. If areas were observed to be progressing differentially, actions may be taken to enhance the revegetation success in less productive areas.

When sampling was implemented, each sample area was marked on field maps. The detailed field maps were later reduced and generalized to show the approximate areas where the sampling occurred for this report. For more detailed contour maps of the area, refer to Plates 3-1, 3-2, 3-1A, and 9-1 of the Mining and Reclamation Plan (MRP).

Sample Area A

The vegetation was "patchy" in Sample Area A. In other words, cover was greater in

some areas, whereas, in other areas it was quite sparse. The transect lines were placed to encompass the variability of these areas. The summary results therefore represent the area as a whole. The high variance, however, made sample adequacy difficult to achieve by the standards previously set.

The total living cover of Sample Area A was estimated at 24.00% (Table 1). The area was dominated almost exclusively by grass species. The dominate species by cover and frequencies were streambank wheatgrass (Agropyron riparium) and intermediate wheatgrass (Agropyron intermedium). Refer to Table 2 for cover and frequency summaries by species.

Woody species did occur, but infrequently enough that they were not present in the random cover or density quadrats. Color photographs and raw data of the area are included in this report.

Sample Area B

The total living cover of Sample Area B was estimated at 34.50% (Table 4). Grasses again dominated the area, but shrubs and forbs were also represented. The most common grass species were mountain brome (Bromus carinatus) and orchardgrass (Dactylis glomeratus), both with average covers estimated at 12.50% (Table 5). There was also a good representation of Douglas fir (Pseudotsuga menziesii) saplings. This tree had a mean cover of 7.50% and occurred in 60% of the sample quadrats.

Douglas fir was also well represented in the woody species density sampling. The total density was 1198 individuals per acre (Table 6). Color photographs and raw data of the area are included in this report.

Sample Area C

Sample Area C appeared to look very similar to Sample Area A with respect to "patchy" cover and insignificant woody species density. The total living cover of this area was estimated at 30.57% (Table 7). As in the above sample areas, the dominant lifeform was grass. The dominate species by cover and frequencies were streambank wheatgrass (Agropyron riparium) and intermediate wheatgrass (Agropyron intermedium). Refer to Table 8 for cover and frequency by species. There were also forbs and shrubs present in the quadrats.

Woody species did occur rarely here, but infrequently enough that they were not present in the cover or density quadrats. Color photographs and raw data of the area are included in this report.

Sample Area D

This area was sampled along its entire length.. The area was used frequently by deer and elk which could have affected the sample results.

The total living cover of Sample Area D was estimated at 42.67% (Table 10). The dominate species by cover and frequency were bluebunch wheatgrass (Agropyron spicatum) and streambank wheatgrass (Agropyron riparium), however, the sample area had better species diversity. Refer to Table 11 for cover and frequency by species.

Woody species was estimated at 305 individuals per acre (Table 12). Color photographs and raw data of the area are included in this report.

Sweet's Canyon Pond

The Sweet's Canyon Pond sample area was estimated at 47.25% living ground cover (Table 13). There was a relatively better representation of forbs in this area, comprising nearly 10% of the living cover. The most common plant species in the area was mountain brome grass (Bromus carinatus). For cover by species, refer to Table 14.

Woody species density was estimated at 617 individuals per acre (Table 15) and dominated by rubber rabbitbrush (Chrysothamnus nauseosus). Color photographs and raw data of the area are included in this report.

Reference Area

The reference area chosen for a standard of revegetation success was a mountain brush /

grass community. Salina wildrye (Elymus salinus) was the dominate grass species, whereas broom snakeweed (Gutierrezia sarothrae) and bitterbrush (Purshia tridentata) were the most common shrub species (Table 17). Forb species were present, but each comprised less than 1% cover. Total living understory cover was estimated at 42.25%. There was also some overstory (or cover above breast height), but was only estimated at 0.5% (Table 16).

Woody species density was estimated at 2,265 individuals per acre. Most common species by densities were broom snakeweed, corymb eriogonum (Eriogonum corymbosum), and mountain mahogany (Cercocarpus montanus). For density estimates of all woody species, refer to Table 18. Color photographs and raw data of the area are included in this report.

DISCUSSION

Group comparison statistical tests were employed to indicate trends of the sample areas. Table 19 shows the results of the statistical analyses.

The reclaimed areas were statistically compared to the reference area that was chosen previously for a standard for future revegetation success. Student's t-test suggest that most of the reclaimed areas sampled had significantly less living cover when compared to the reference area. The exception was Sweet's Canyon Pond area. It had greater cover than the reference area. All areas had significantly less woody species density when compared to the reference area.

TABLE 1: Total cover and composition summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "A").

TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Living Cover	24.00	13.19	20
Litter	11.85	8.13	20
Bareground	38.75	19.93	20
Rock	25.40	19.33	20
COMPOSITION			
Shrubs	0.00	0.00	20
Forbs	0.00	0.00	20
Grasses	100.00	0.00	20

TABLE 2: Species cover and frequency summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "A").

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
TREES & SHRUBS	--	--	--	--
FORBS	--	--	--	--
GRASSES				
<u>Agropyron riparium</u>	12.00	12.39	20	65.00
<u>Agropyron intermedium</u>	5.00	8.51	20	30.00
<u>Agropyron spicatum</u>	3.25	8.26	20	20.00
<u>Bromus carinatus</u>	1.75	4.82	20	15.00
<u>Poa pratensis</u>	2.00	5.10	20	15.00

TABLE 3: Woody species densities of the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "A").

NUMBER/ACRE

TOTAL (no woody species observed in quadrats)

TABLE 4 : Total cover and composition summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "B").

TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Living Cover	34.50	6.50	10
Litter	7.00	3.32	10
Bareground	18.50	9.23	10
Rock	40.00	12.85	10
COMPOSITION			
Shrubs	19.68	22.23	10
Forbs	2.50	5.00	10
Grasses	77.82	21.26	10

TABLE 5: Species cover and frequency summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "B").

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
TREES & SHRUBS				
<u>Pseudotsuga menziesii</u>	7.50	9.55	10	60.00
FORBS				
<u>Cirsium sp.</u>	0.50	1.50	10	10.00
<u>Melilotus officinalis</u>	0.50	1.50	10	10.00
GRASSES				
<u>Agropyron riparium</u>	1.00	3.00	10	10.00
<u>Bromus carinatus</u>	12.50	7.16	10	100.00
<u>Dactylis glomeratus</u>	12.50	9.55	10	70.00

TABLE 6: Woody species densities of the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "B").

	NUMBER/ACRE
<u>Pseudotsuga menziesii</u>	1197.90
TOTAL	<u>1197.90</u>

TABLE 7: Total cover and composition summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "C").

TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Living Cover	30.75	9.78	20
Litter	6.50	3.57	20
Bareground	37.00	18.60	20
Rock	25.75	15.19	20
COMPOSITION			
Shrubs	1.96	6.13	20
Forbs	10.39	17.37	20
Grasses	87.65	17.28	20

TABLE 8 : Species cover and frequency summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "C").

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
TREES & SHRUBS				
<u>Rosa woodsii</u>	0.25	1.09	20	5.00
<u>Salix sp.</u>	0.25	1.09	20	5.00
FORBS				
<u>Artemisia ludoviciana</u>	0.75	2.38	20	5.00
<u>Astragalus cicer</u>	1.50	3.91	20	15.00
<u>Cirsium sp.</u>	0.25	1.09	20	5.00
<u>Epilobium halleanum</u>	0.25	1.09	20	5.00
GRASSES				
<u>Agropyron intermedium</u>	8.00	11.34	20	45.00
<u>Agropyron riparium</u>	8.50	11.95	20	50.00
<u>Agropyron spicatum</u>	1.00	2.55	20	15.00
<u>Bromus carinatus</u>	2.00	3.67	20	30.00
<u>Dactylis glomeratus</u>	4.50	9.86	20	25.00
<u>Phleum pratense</u>	2.50	6.80	20	20.00
<u>Poa pratensis</u>	1.00	2.55	20	15.00

TABLE 9: Woody species densities of the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "C").

	NUMBER/ACRE
TOTAL	(no woody species observed in quadrats)

TABLE 10: Total cover and composition summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "D").

TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Living Cover	42.67	8.83	30
Litter	13.67	6.94	30
Bareground	26.33	12.51	30
Rock	17.33	7.50	30
COMPOSITION			
Shrubs	2.78	9.02	30
Forbs	6.62	12.29	30
Grasses	90.60	18.63	30

TABLE 11 : Species cover and frequency summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "D").

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
TREES & SHRUBS				
<u>Chrysothamnus nauseosus</u>	1.00	3.27	30	10.00
FORBS				
<u>Penstemon palmeri</u>	2.00	4.00	30	23.33
<u>Aster chilensis</u>	0.17	0.90	30	3.33
<u>Machaeranthera canescens</u>	0.33	1.25	30	6.67
GRASSES				
<u>Agropyron cristatum</u>	6.50	11.91	30	36.67
<u>Agropyron intermedium</u>	4.33	8.24	30	26.67
<u>Agropyron riparium</u>	7.50	9.20	30	50.00
<u>Agropyron smithii</u>	1.50	8.08	30	3.33
<u>Agropyron spicatum</u>	11.67	14.45	30	50.00
<u>Bromus carinatus</u>	2.17	4.60	30	30.00
<u>Elymus cinereus</u>	5.33	7.85	30	43.33
<u>Phleum pratensis</u>	0.17	0.90	30	3.33

TABLE 12: Woody species densities of the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "D").

	NUMBER/ACRE
<u>Artemisia tridentata</u>	8.71
<u>Chrysothamnus nauseosus</u>	174.24
<u>Gutierrezia sarothrae</u>	113.26
<u>Purshia tridentata</u>	<u>8.71</u>
TOTAL	<u>304.92</u>

TABLE 13 : Total cover and composition summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "Sweet's Canyon Pond").

TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Living Cover	47.25	8.44	20
Litter	11.75	5.76	20
Bareground	24.50	8.79	20
Rock	16.50	8.38	20
COMPOSITION			
Shrubs	4.60	10.38	20
Forbs	9.86	16.16	20
Grasses	85.54	17.49	20

TABLE 14 : Species cover and frequency summary for the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "Sweet's Canyon Pond").

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
TREES & SHRUBS				
<u>Acer negundo</u>	0.25	1.09	20	5.00
<u>Chrysothamnus nauseosus</u>	1.75	3.63	20	25.00
FORBS				
<u>Artemisia tridentata</u>	0.25	1.09	20	5.00
<u>Aster sp.</u>	0.50	1.50	20	10.00
<u>Eriogonum subreniforme</u>	0.50	1.50	20	10.00
<u>Machaeranthera grindelioides</u>	0.50	1.50	20	10.00
<u>Melilotus officinalis</u>	0.25	1.09	20	5.00
<u>Salsola iberica</u>	0.50	1.50	20	10.00
<u>Urtica dioica</u>	2.00	7.65	20	10.00
GRASSES				
<u>Agropyron cristatum</u>	2.25	5.58	20	15.00
<u>Agropyron intermedium</u>	0.50	2.18	20	5.00
<u>Agropyron riparium</u>	4.50	7.23	20	40.00
<u>Bromus carinatus</u>	33.25	13.16	20	100.00
<u>Dactylis glomeratus</u>	0.25	1.09	20	5.00

TABLE 15 : Woody species densities of the reclaimed areas of the Gordon Creek 2/7/8 Mines (see Sample Map, Area "Sweet's Canyon Pond").

	NUMBER/ACRE
<u>Acer negundo</u>	18.15
<u>Artemisia tridentata</u>	54.45
<u>Chrysothamnus nauseosus</u>	508.20
<u>Rosa woodsii</u>	18.15
<u>Sambucus caerulea</u>	<u>18.15</u>
TOTAL	<u>1176.12</u>

TABLE 16 : Total cover and composition summary of the reference area for the Gordon Creek 2/7/8 Mines .

TOTAL COVER	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE
Overstory	0.50	2.18	20
Understory	42.25	7.15	20
Litter	10.75	4.82	20
Bareground	19.75	9.68	20
Rock	26.75	11.76	20
COMPOSITION			
Shrubs	37.70	26.84	20
Forbs	3.42	5.98	20
Grasses	60.12	25.39	20

TABLE 17: Species cover and frequency summary of the reference area for the Gordon Creek 2/7/8 Mines .

SPECIES	% MEAN COVER	STANDARD DEVIATION	SAMPLE SIZE	RELATIVE FREQUENCY
TREES & SHRUBS				
<u>Cercocarpus montanus</u>	2.25	6.80	20	10.00
<u>Eriogonum corymbosum</u>	5.50	10.83	20	25.00
<u>Gutierrezia sarothrae</u>	5.75	6.76	20	50.00
<u>Purshia tridentata</u>	4.00	10.79	20	15.00
FORBS				
<u>Machaeranthera grindelioides</u>	0.75	1.79	20	10.00
<u>Penstemon palmeri</u>	0.50	1.50	20	10.00
GRASSES				
<u>Elymus salinus</u>	23.50	9.37	20	100.00
<u>Oryzopsis hymenoides</u>	1.00	3.00	20	10.00

TABLE 18: Woody species densities of the reference area for the Gordon Creek 2/7/8 Mines .

	NUMBER/ACRE
<u>Amalanchier utahensis</u>	141.56
<u>Cercocarpus montanus</u>	471.86
<u>Gutierrezia sarothrae</u>	778.56
<u>Eriogonum corymbosum</u>	613.41
<u>Quercus gambelii</u>	70.78
<u>Purshia tridentata</u>	<u>141.56</u>
TOTAL	<u>1176.12</u>

TABLE 19: Statistical summary sheet for the Reclaimed Areas and Reference Areas at the Gordon Creek 2/7/8 Mines.

RECLAIMED AREA A			
Living Cover	x=24.00	s=13.19	n=20
Density	x=NDR	s= --	n=--
REFERENCE AREA			
Living Cover	x=42.25	s=7.15	n=20
Density	x=2264.91	s= --	n=24
STATISTICAL ANALYSES			
Living Cover	t=-5.440	df=38	SL=***
Density	t=--	df= --	SL= --
<hr/>			
RECLAIMED AREA B			
Living Cover*	x=37.40	s=9.21	n=10
Density	x=1197.90	s= --	n=8
REFERENCE AREA			
Living Cover	x=42.25	s=7.15	n=20
Density	x= 2264.91	s= --	n=24
STATISTICAL ANALYSES			
Living Cover	t=-1.191	df=28	SL=NS
Density	t=--	df= --	SL= NC

x = sample mean, s = sample standard deviation,
n = sample size, NS = nonsignificant,
NDR = No Density Recorded (see "Results")
NC = Not Calculated (differences obvious)
** = p<.05
*** = p<.005

TABLE 19 (continued)

RECLAIMED AREA C

Living Cover	x=30.75	s=9.78	n=20
Density	x=NDR	s= --	n=--

REFERENCE AREA

Living Cover	x=42.25	s=7.15	n=20
Density	x=2264.91	s= --	n=24

STATISTICAL ANALYSES

Living Cover	t=-4.245	df=38	SL=***
Density	t=--	df= --	SL= --

RECLAIMED AREA D

Living Cover	x=42.67	s=8.83	n=30
Density	x=304.92	s= --	n=20

REFERENCE AREA

Living Cover	x=42.25	s=7.15	n=20
Density	x=2264.91	s= --	n=24

STATISTICAL ANALYSES

Living Cover	t=0.177	df=48	SL=NS
Density	t=--	df= --	SL= NC

x = sample mean, s = sample standard deviation,

n = sample size, NS = nonsignificant,

NDR = No Density Recorded (see "Results")

NC = Not Calculated (differences obvious)

** = p<.05

*** = p<.005

TABLE 19 (continued)

SWEET'S CANYON POND RECLAIMED AREA

Living Cover	x=47.25	s=8.94	n=20
Density	x=304.92	s= --	n=20

REFERENCE AREA

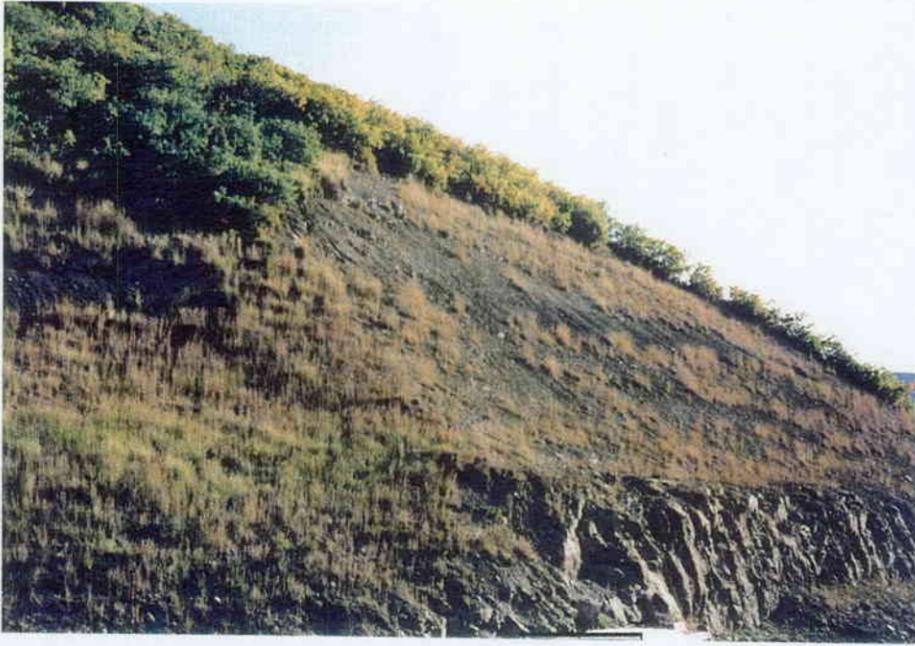
Living Cover	x=42.25	s=7.15	n=20
Density	x=2264.91	s= --	n=24

STATISTICAL ANALYSES

Living Cover	t=1.953	df=38	SL=**
Density	t=--	df= --	SL= NC

x = sample mean, s = sample standard deviation,
n = sample size, NS = nonsignificant,
NDR = No Density Recorded (see "Results")
NC = Not Calculated (differences obvious)
** = p<.05
*** = p<.005

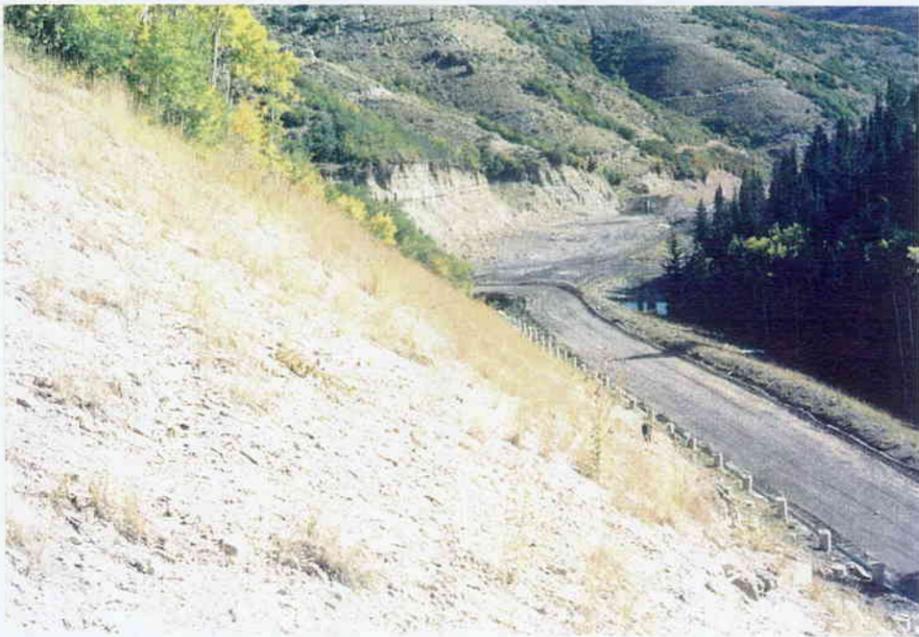
COLOR PHOTOGRAPHS



Sample Area A



Sample Area B



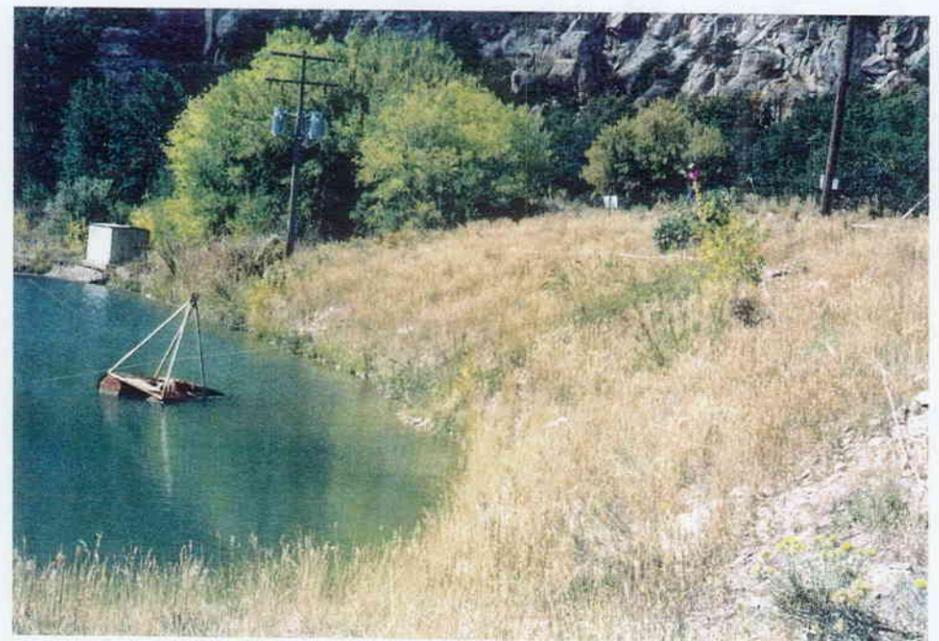
Sample Area C



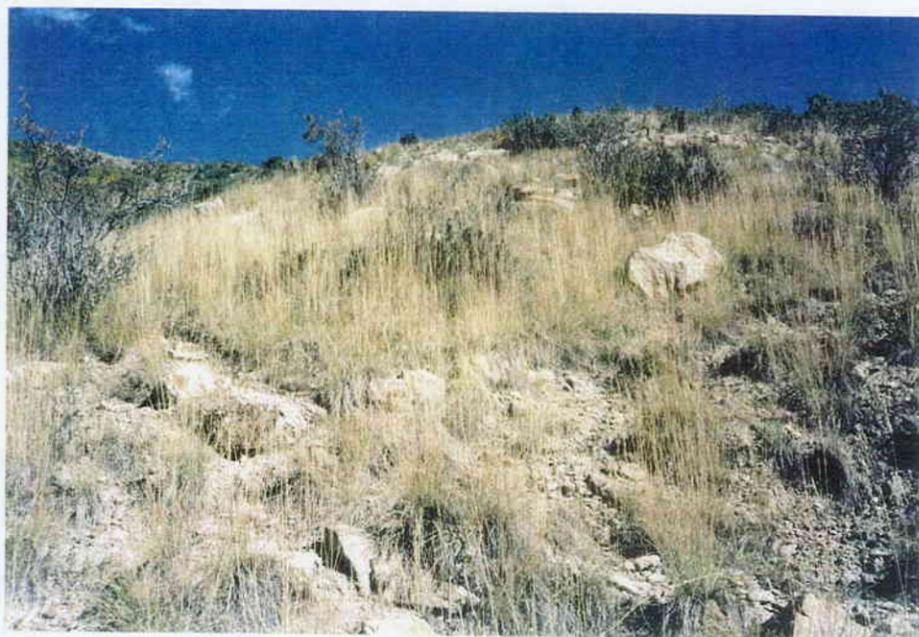
Sample Area D (1)



Sample Area D (2)

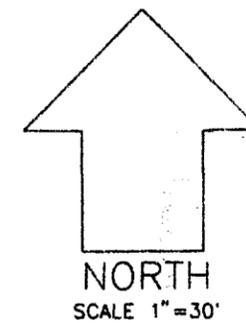
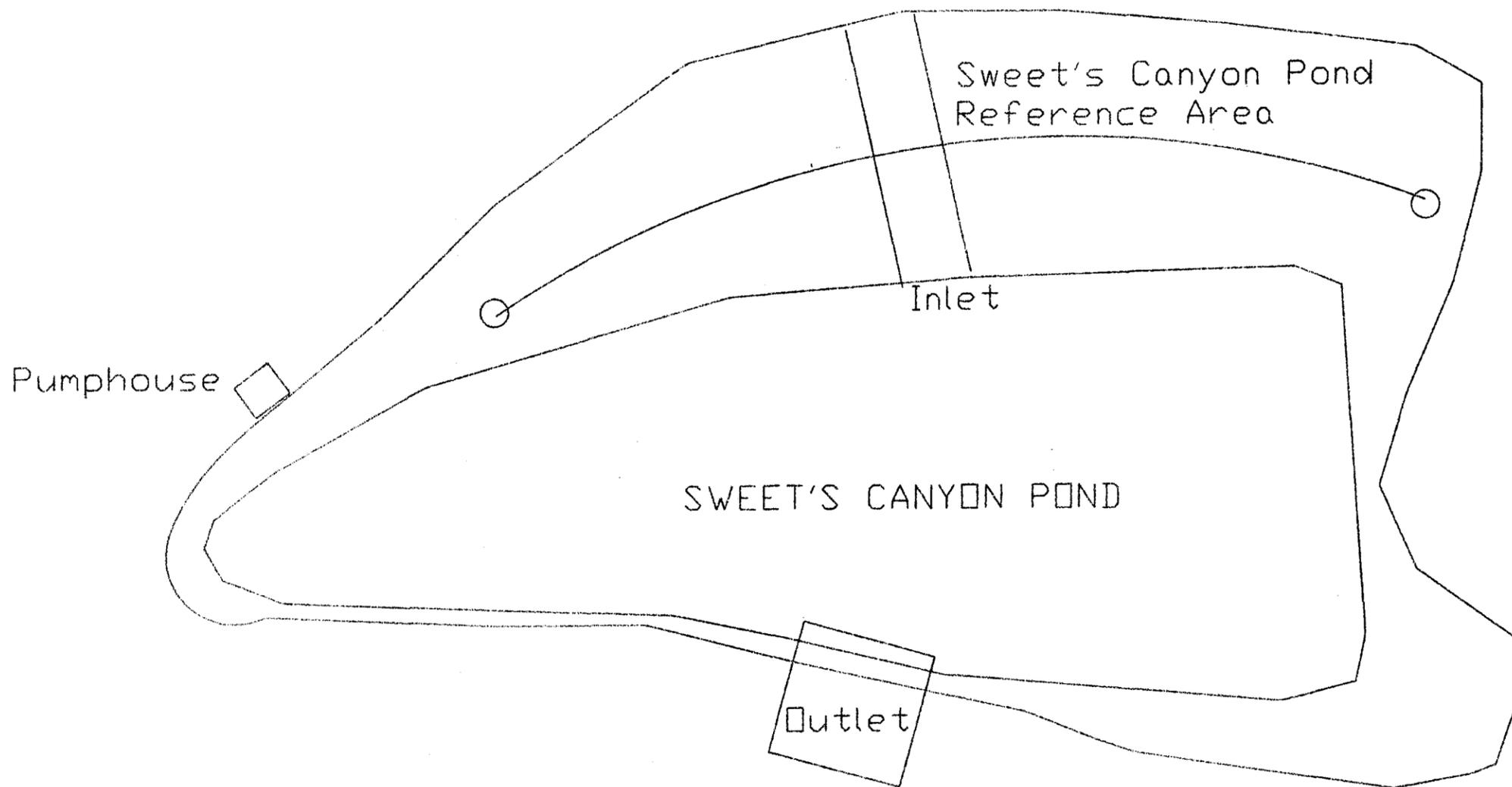


Sweets Canyon Pond Sample Area

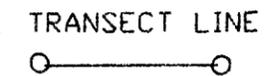


Reference Area

SAMPLE MAPS

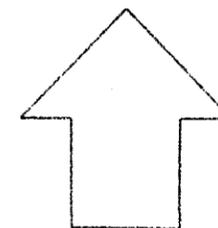
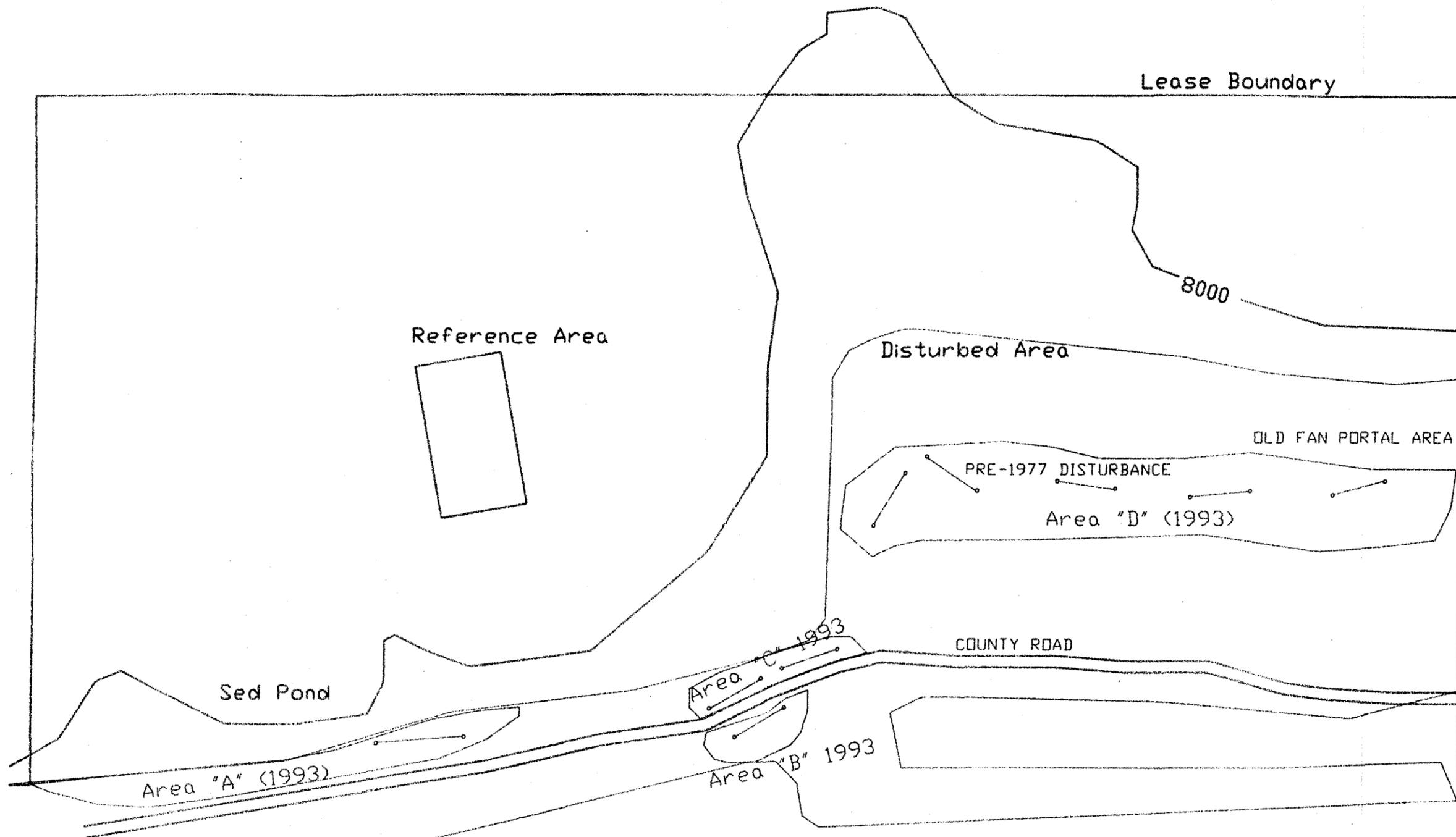


SAMPLE LOCATION MAP FOR		
SWEET'S CANYON POND MOUNTAIN COAL COMPANY		
 MT. NEBO SCIENTIFIC <small>RESEARCH AND CONSULTING</small>		
<small>DRAWN</small>	J. MAGEND	VEGSMPL.DWG
<small>CHECKED</small>	P. COLLINS	
<small>DATE</small>	3-28-94	
<small>SCALE</small>	1"=30'	



For Locations of Reference Areas
Refer to MRP (Plate 9-1)

For Detailed Information
See MRP (Plates 3-1 & 3-2)



NORTH
SCALE 1"=200'

SAMPLE LOCATION MAP	
FOR	
GORDON CRK 2/7/8 MINES	
MOUNTAIN COAL COMPANY	
 MT. NEBO SCIENTIFIC <small>RESEARCH AND CONSULTING</small>	
<small>DRAWN</small> <small>CHECKED</small> <small>DATE</small> <small>SCALE</small>	<small>J. MAGRUD</small> <small>P. COLLIER</small> <small>3-29-94</small>
<small>VEGSMPL.DWG</small>	

 **TRANSECT LINES** For Locations of Reference Areas
 Refer to MRP (Plate 9-1)

 For Detailed Information
 See MRP (Plates 3-1 & 3-2)

APPENDIX
(RAW DATA)

12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 5.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 20.00 0.00 10.00 0.00 0.00 20.00 5.00 0.00
20.00 0.00 0.00 0.00 35.00 30.00 0.00 0.00 35.00

20.00 20.00 5.00 10.00 35.00 30.00 20.00 5.00 35.00
10.00 5.00 5.00 10.00 10.00 10.00 10.00 5.00 10.00
20.00 20.00 65.00 15.00 20.00 40.00 65.00 80.00 50.00
50.00 55.00 25.00 65.00 35.00 20.00 5.00 10.00 5.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00 100.00

BEAVERCREEK/BLACKHAWK
 Mines 2,7&8
 Reclaimed Mine Site
 South End - Area "A"
 Exposure: SE
 Slope: 38 deg.
 Sample Date: 23 Sept 1993

Mean SDev Freq

TREES & SHRUBS

FORBS

GRASSES

2.00	5.10	15.00	Poa pratensis
3.25	8.26	20.00	Agropyron spicatum
1.75	4.82	15.00	Bromus carinatus
5.00	8.51	30.00	Agropyron intermedium
12.00	12.39	65.00	Agropyron riparium

COVER

24.00	13.19	Total Living Cover
11.85	8.13	Litter
38.75	19.93	Bareground
25.40	19.33	Rock

% COMPOSITION

0.00	0.00	Shrubs
0.00	0.00	Forbs
100.00	0.00	Grasses

BEAVERCREEK/BLACKHAWK

Mines 2, 7&8

Terraced Slopes - Area "E"

Exposure: N

Slope: 15 deg.

Sample Date: 23 Sept 1993

TREES & SHRUBS

<i>Pseudotsuga menziesii</i>	5.00	0.00	5.00	5.00	30.00	20.00	0.00	0.00	0.00	10.00
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FORBS

<i>Cirsium</i> sp.	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
<i>Melilotus officinalis</i>	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GRASSES

<i>Bromus carinatus</i>	20.00	5.00	5.00	5.00	5.00	10.00	15.00	15.00	25.00	20.00
<i>Agropyron riparium</i>	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>Dactylis glomeratus</i>	0.00	25.00	25.00	15.00	10.00	10.00	20.00	20.00	0.00	0.00

COVER

Total Living Cover	35.00	30.00	40.00	25.00	45.00	40.00	40.00	35.00	25.00	30.00
Litter	5.00	5.00	10.00	5.00	10.00	5.00	5.00	15.00	5.00	5.00
Bareground	10.00	40.00	10.00	15.00	20.00	15.00	20.00	30.00	15.00	10.00
Rock	50.00	25.00	40.00	55.00	25.00	40.00	35.00	20.00	55.00	55.00

% COMPOSITION

Shrubs	14.29	0.00	12.50	20.00	66.67	50.00	0.00	0.00	0.00	33.33
Forbs	0.00	0.00	12.50	0.00	0.00	0.00	12.50	0.00	0.00	0.00
Grasses	85.71	100.00	75.00	80.00	33.33	50.00	87.50	100.00	100.00	66.67

BEAVERCREEK/BLACKHAWK
 Mines 2,7&8
 Terraced Slopes - Area "B"
 Exposure: N
 Slope: 15 deg.
 Sample Date: 23 Sept 1993

Mean	SDev	Freq
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7.50	3.55	60.00	TREES & SHRUBS Pseudotsuga menziesii
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0.50	1.50	10.00	FORBS Cirsium sp.
0.50	1.50	10.00	Melilotus officinalis

12.50	7.16	100.00	GRASSES Bromus carinatus
1.00	3.00	10.00	Agropyron riparium
12.50	9.55	70.00	Dactylis glomeratus

COVER		
34.50	6.50	Total Living Cover
7.00	3.32	Litter
18.50	9.23	Bareground
40.00	12.85	Rock

% COMPOSITION		
19.68	22.23	Shrubs
2.50	5.00	Forbs
77.82	21.26	Grasses

BEAVERCREEK/BLACKHAWK

Mines 2,7&8

Reclaimed Mine Site

Slope - Area "D"

Exposure: SE

Slope: 38 deg.

Sample Date: 23 Sept 1993 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00

TREES & SHRUBS

Rosa woodsii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
Salix sp.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

FORBS

Astragalus cicer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Epilobium halleanum	0.00	0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00
Cirsium sp.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00
Artemisia ludoviciana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00

GRASSES

Phleum pratense	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dactylis glomeratus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poa pratensis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	5.00
Agropyron spicatum	0.00	5.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00
Bromus carinatus	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
Agropyron intermedium	10.00	30.00	10.00	5.00	0.00	0.00	25.00	0.00	0.00	5.00
Agropyron riparium	25.00	0.00	15.00	5.00	25.00	5.00	0.00	45.00	15.00	0.00

COVER

Total Living Cover	40.00	35.00	25.00	15.00	25.00	15.00	25.00	45.00	35.00	20.00
Litter	20.00	5.00	5.00	5.00	10.00	5.00	10.00	5.00	10.00	5.00
Bareground	10.00	40.00	20.00	55.00	40.00	70.00	50.00	40.00	45.00	20.00
Rock	30.00	20.00	50.00	25.00	25.00	10.00	15.00	10.00	10.00	55.00

% COMPOSITION

Shrubs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00
Forbs	0.00	0.00	0.00	33.33	0.00	0.00	0.00	0.00	28.57	0.00
Grasses	100.00	100.00	100.00	66.67	100.00	100.00	100.00	100.00	71.43	75.00

11.00	12.00	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	15.00	10.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00

0.00	0.00	5.00	30.00	0.00	0.00	0.00	5.00	10.00	0.00
0.00	30.00	0.00	0.00	0.00	35.00	10.00	0.00	5.00	10.00
0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.00	5.00	0.00	0.00	0.00	0.00	0.00	5.00	15.00	0.00
0.00	0.00	15.00	0.00	35.00	0.00	0.00	25.00	0.00	0.00
20.00	0.00	5.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00

35.00	40.00	25.00	30.00	45.00	40.00	20.00	35.00	45.00	20.00
5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
15.00	5.00	45.00	40.00	5.00	35.00	50.00	40.00	45.00	70.00
45.00	50.00	25.00	25.00	45.00	20.00	25.00	20.00	5.00	5.00

14.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.00	12.50	50.00	0.00	33.33	50.00
85.71	100.00	100.00	100.00	100.00	87.50	50.00	100.00	66.67	50.00

BEAVERCREEK/BLACKHAWK
 Mines 2,7&8
 Reclaimed Mine Site
 Slope - Area "C"
 Exposure: SE
 Slope: 38 deg.
 Sample Date: 23 Sept 1993

Mean	SDev	Freq	
<hr/>			
TREES & SHRUBS			
0.25	1.09	5.00	Rosa woodsii
0.25	1.09	5.00	Salix sp.
FORBS			
1.50	3.91	15.00	Astragalus cicer
0.25	1.09	5.00	Epilobium halleanum
0.25	1.09	5.00	Cirsium sp.
0.75	2.38	5.00	Artemisia ludoviciana
GRASSES			
2.50	6.80	20.00	Phleum pratense
4.50	9.86	25.00	Dactylis glomeratus
1.00	2.55	15.00	Poa pratensis
1.00	2.55	15.00	Agropyron spicatum
2.00	3.67	30.00	Bromus carinatus
8.00	11.34	45.00	Agropyron intermedium
8.50	11.95	50.00	Agropyron riparium
<hr/>			
COVER			
30.75	9.78		Total Living Cover
6.50	3.57		Litter
37.00	18.60		Bareground
25.75	15.19		Rock
<hr/>			
% COMPOSITION			
1.96	6.13		Shrubs
10.39	17.37		Forbs
87.65	17.28		Grasses

BEAVERCREEK/BLACKHAWK

Mines 2,788

Fan Portal Area

Reclaimed - Area "D"

Exposure: SE

Slope: 5-10 deg.

Sowle Date: 23 Sept 1993 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00 11.00

TREES & SHRUBS

Chrysothamnus nauseosus 0.00 0.00 0.00 0.00 0.00 10.00 0.00 0.00 0.00 0.00 0.00

FORBS

Aster chilensis 0.00 0.00 0.00 0.00 0.00 5.00 0.00 0.00 0.00 0.00 0.00

Penstemon palmeri 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Machaeranthera canescens 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

GRASSES

Agropyron smithii 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Elymus cinereus 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 10.00 0.00 0.00

Agropyron spicatum 0.00 0.00 0.00 0.00 0.00 5.00 0.00 0.00 0.00 0.00 0.00

Bromus carinatus 0.00 0.00 0.00 5.00 0.00 0.00 0.00 0.00 0.00 10.00 0.00

Agropyron riparium 0.00 15.00 20.00 5.00 20.00 10.00 10.00 15.00 5.00 25.00 25.00

Phleum pratense 5.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

Agropyron intermedium 5.00 25.00 20.00 10.00 0.00 0.00 30.00 10.00 0.00 0.00 15.00

Agropyron cristatum 30.00 0.00 0.00 5.00 10.00 0.00 0.00 15.00 20.00 0.00 10.00

COVER

Total Living Cover 40.00 40.00 40.00 25.00 30.00 30.00 40.00 40.00 35.00 35.00 50.00

Litter 5.00 5.00 25.00 5.00 5.00 10.00 10.00 20.00 15.00 10.00 15.00

Background 45.00 45.00 25.00 65.00 40.00 40.00 25.00 15.00 25.00 35.00 25.00

Rock 10.00 10.00 10.00 5.00 25.00 20.00 25.00 25.00 25.00 20.00 10.00

% COMPOSITION

Shrubs 0.00 0.00 0.00 0.00 0.00 33.33 0.00 0.00 0.00 0.00 0.00

Forbs 0.00 0.00 0.00 0.00 0.00 16.67 0.00 0.00 0.00 0.00 0.00

Grasses 100.00 100.00 100.00 100.00 100.00 50.00 100.00 100.00 100.00 100.00 100.00

12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00 21.00 22.00 23.00 24.00 25.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 15.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 5.00 5.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

0.00 45.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
10.00 10.00 5.00 0.00 5.00 25.00 25.00 25.00 0.00 10.00 10.00 15.00 5.00 5.00
0.00 0.00 40.00 0.00 0.00 10.00 20.00 5.00 35.00 25.00 40.00 30.00 40.00 30.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 10.00 0.00 0.00 5.00 0.00 10.00
5.00 0.00 0.00 0.00 10.00 25.00 0.00 10.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 15.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
40.00 0.00 0.00 45.00 10.00 0.00 5.00 5.00 0.00 0.00 0.00 0.00 0.00 0.00

55.00 55.00 45.00 60.00 40.00 60.00 50.00 45.00 45.00 35.00 50.00 50.00 50.00 50.00
20.00 10.00 10.00 10.00 15.00 20.00 25.00 25.00 20.00 20.00 25.00 20.00 10.00 20.00
20.00 15.00 25.00 25.00 25.00 10.00 15.00 10.00 20.00 25.00 5.00 20.00 10.00 20.00
5.00 20.00 20.00 5.00 20.00 10.00 10.00 20.00 15.00 20.00 20.00 10.00 30.00 10.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 0.00 0.00 37.50 0.00 0.00 0.00 0.00 0.00 0.00 0.00 10.00 10.00
100.00 100.00 100.00 100.00 62.50 100.00 100.00 100.00 100.00 100.00 100.00 100.00 90.00 90.00

BEAVERCREEK/BLACKHAWK
 Mines 2,7&8
 Fan Portal Area
 Reclaimed - Area "D"
 Exposure: SE
 Slope: 5-10 deg.
 Sample Date: 23 Sept 1993

26.00	27.00	28.00	29.00	30.00	Mean	SDev	Freq	
<hr/>								TREES & SHRUBS
15.00	5.00	0.00	0.00	0.00	1.00	3.27	10.00	Chrysothamnus nauseosus
 								FORBS
0.00	0.00	0.00	0.00	0.00	0.17	0.90	3.33	Aster chilensis
10.00	10.00	10.00	5.00	0.00	2.00	4.00	23.33	Penstemon palmeri
5.00	0.00	0.00	5.00	0.00	0.33	1.25	6.67	Machaeranthera canescens
 								GRASSES
0.00	0.00	0.00	0.00	0.00	1.50	8.08	3.33	Agropyron smithii
0.00	0.00	0.00	0.00	0.00	5.33	7.85	43.33	Elymus cinereus
10.00	25.00	0.00	15.00	20.00	11.67	14.45	50.00	Agropyron spicatum
0.00	0.00	0.00	5.00	20.00	2.17	4.60	20.00	Bromus carinatus
0.00	0.00	25.00	0.00	0.00	7.50	9.20	50.00	Agropyron riparium
0.00	0.00	0.00	0.00	0.00	0.17	0.90	3.33	Phieum pratense
0.00	0.00	0.00	0.00	0.00	4.33	8.24	26.67	Agropyron intermedium
0.00	0.00	0.00	0.00	0.00	6.50	11.91	36.67	Agropyron cristatum
<hr/>								COVER
40.00	40.00	35.00	30.00	40.00	42.67	8.83		Total Living Cover
10.00	10.00	5.00	5.00	5.00	13.67	6.94		Litter
35.00	25.00	35.00	35.00	30.00	26.33	12.51		Bareground
15.00	25.00	25.00	30.00	25.00	17.33	7.50		Rock
<hr/>								% COMPOSITION
37.50	12.50	0.00	0.00	0.00	2.78	9.02		Shrubs
37.50	25.00	28.57	33.33	0.00	6.62	12.29		Forbs
25.00	62.50	71.43	66.67	100.00	90.60	18.63		Grasses

BEAVERCREEK/BLACKHAWK

Mines 2,7&8

Sweets Canyon Pond

Exposure: SE

Slope: 5-10 deg.

Sample Date: 23 Sept 1993

TRES & SHRUBS

	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00
Chrysothamnus nauseosus	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00
Acer negundo	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00

FORBS

Artemisia ludoviciana	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Aster sp.	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	0.00
Salsola iberica	0.00	5.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Eriogonum subreniforme	0.00	5.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Urtica dioica	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.00	0.00	5.00
Machaeranthera grindelii	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Helilotus officinalis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

GRASSES

Dactylis glomeratus	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Agropyron riparium	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	10.00	25.00
Agropyron intermedium	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00
Bromus carinatus	40.00	40.00	35.00	35.00	50.00	65.00	40.00	15.00	15.00	15.00
Agropyron cristatum	15.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00

COVER

Total Living Cover	60.00	50.00	45.00	65.00	50.00	65.00	50.00	50.00	45.00	45.00
Litter	5.00	10.00	10.00	10.00	10.00	10.00	10.00	5.00	10.00	10.00
Bareground	15.00	15.00	35.00	15.00	35.00	15.00	35.00	35.00	5.00	20.00
Rock	20.00	25.00	10.00	10.00	5.00	10.00	5.00	10.00	40.00	25.00

% COMPOSITION

Shrubs	8.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.44	0.00
Forbs	0.00	20.00	22.22	0.00	0.00	0.00	10.00	70.00	0.00	11.11
Grasses	91.67	80.00	77.78	100.00	100.00	100.00	90.00	30.00	55.56	88.89

11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00

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5.00 0.00 0.00 5.00 0.00 15.00 0.00 0.00 20.00 5.00
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40.00 40.00 40.00 30.00 35.00 5.00 30.00 35.00 25.00 35.00
0.00 0.00 0.00 10.00 0.00 0.00 0.00 0.00 0.00 0.00

45.00 45.00 45.00 45.00 35.00 30.00 40.00 40.00 50.00 45.00
10.00 10.00 10.00 25.00 20.00 5.00 10.00 25.00 10.00 20.00
25.00 30.00 30.00 20.00 25.00 40.00 25.00 25.00 25.00 20.00
20.00 15.00 15.00 10.00 20.00 25.00 25.00 10.00 15.00 15.00

0.00 0.00 0.00 0.00 0.00 16.67 0.00 12.50 10.00 0.00
0.00 11.11 11.11 0.00 0.00 16.67 25.00 0.00 0.00 0.00
100.00 88.89 88.89 100.00 100.00 66.67 75.00 87.50 90.00 100.00

BEAVERCREEK/BLACKHAWK
 Mines 2,7&8
 Sweets Canyon Pond
 Exposure: SE
 Slope: 5-10 deg.
 Sample Date: 23 Sept 1993

Mean	SDev	Freq
------	------	------

1.75	3.63	25.00	TREES & SHRUBS
0.25	1.09	5.00	Chrysothamnus nauseosus
			Acer negundo

0.25	1.09	5.00	FORBS
0.50	1.50	10.00	Artemisia ludoviciana
0.50	1.50	10.00	Aster sp.
0.50	1.50	10.00	Salsola iberica
0.50	1.50	10.00	Eriogonum subreniforme
2.00	7.65	10.00	Urtica dioica
0.50	1.50	10.00	Machaeranthera grindelioides
0.25	1.09	5.00	Melilotus officinalis

0.25	1.09	5.00	GRASSES
4.50	7.23	40.00	Dactylis glomeratus
0.50	2.18	5.00	Agropyron riparium
33.25	13.16	100.00	Agropyron intermedium
2.25	5.58	15.00	Bromus carinatus
			Agropyron cristatum

COVER		
47.25	8.44	Total Living Cover
11.75	5.76	Litter
24.50	8.79	Bareground
16.50	8.38	Rock

% COMPOSITION		
4.60	10.38	Shrubs
9.85	16.16	Forbs
85.54	17.49	Grasses

BEAVERCREEK/BLACKHAWK

Mines 2, 7&8

Reference Area

Grass/Mtn Brush

Exposure: SSE

Slope: 30 deg.

Sample Date: 23 Sept 1993 1.00 2.00 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.00

TREES & SHRUBS

<i>Purshia tridentata</i>	0.00	20.00	0.00	15.00	0.00	0.00	0.00	0.00	45.00	0.00
<i>Gutierrezia sarothrae</i>	0.00	15.00	0.00	0.00	0.00	0.00	0.00	15.00	0.00	20.00
<i>Cercocarpus montanus</i>	0.00	0.00	0.00	25.00	20.00	0.00	0.00	0.00	0.00	0.00
<i>Eriogonum corymbosum</i>	0.00	0.00	0.00	0.00	0.00	25.00	0.00	0.00	0.00	0.00

FORBS

<i>Penstemon palmeri</i>	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00	5.00
<i>Machaeranthera gringelii</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	0.00

GRASSES

<i>Oryzopsis hymenoides</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00
<i>Elymus salinus</i>	35.00	15.00	35.00	10.00	30.00	20.00	35.00	20.00	5.00	15.00

COVER

Overstory	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00
Understory	35.00	50.00	35.00	50.00	40.00	45.00	40.00	40.00	50.00	40.00
Litter	5.00	10.00	10.00	10.00	5.00	10.00	5.00	10.00	20.00	5.00
Bareground	35.00	5.00	10.00	30.00	25.00	20.00	25.00	25.00	5.00	5.00
Rock	25.00	35.00	45.00	10.00	20.00	25.00	30.00	25.00	25.00	50.00

% COMPOSITION

Shrubs	0.00	70.00	0.00	80.00	40.00	55.56	0.00	37.50	90.00	50.00
Forbs	0.00	0.00	0.00	0.00	0.00	0.00	12.50	12.50	0.00	12.50
Grasses	100.00	30.00	100.00	20.00	60.00	44.44	87.50	50.00	10.00	62.50

11.00 12.00 13.00 14.00 15.00 16.00 17.00 18.00 19.00 20.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
5.00 15.00 10.00 10.00 5.00 0.00 15.00 5.00 0.00 0.00
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 0.00 10.00 0.00 0.00 40.00 0.00 15.00 20.00 0.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
0.00 5.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 5.00

0.00 0.00 10.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
30.00 15.00 15.00 30.00 35.00 15.00 20.00 30.00 35.00 25.00

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00
35.00 35.00 45.00 40.00 40.00 55.00 35.00 50.00 55.00 30.00
10.00 5.00 15.00 10.00 10.00 15.00 10.00 20.00 20.00 10.00
35.00 10.00 20.00 25.00 30.00 20.00 25.00 20.00 5.00 20.00
20.00 50.00 20.00 25.00 20.00 10.00 30.00 10.00 20.00 40.00

14.29 42.86 44.44 25.00 12.50 72.73 42.86 40.00 36.36 0.00
0.00 14.29 0.00 0.00 0.00 0.00 0.00 0.00 0.00 16.67
85.71 42.86 55.56 75.00 87.50 27.27 57.14 60.00 63.64 83.33

BEAVERCREEK/BLACKHAWK
 Mines 2,7&8
 Reference Area
 Grass/Mtn Brush
 Exposure: SSE
 Slope: 30 deg.
 Sample Date: 23 Sept 1993

Mean SDev Freq

TREES & SHRUBS
 4.00 10.79 15.00 Purshia tridentata
 5.75 6.76 50.00 Gutierrezia sarothrae
 2.25 6.80 10.00 Cercocarpus montanus
 5.50 10.83 25.00 Eriogonum corymbosum

FORBS
 0.50 1.50 10.00 Penstemon palmeri
 0.75 1.79 10.00 Machaeranthera grindelioides

GRASSES
 1.00 3.00 10.00 Oryzopsis hymenoides
 23.50 9.37 100.00 Elymus salinus

COVER
 0.50 2.18 Overstory
 42.25 7.15 Understory
 10.75 4.82 Litter
 19.75 9.68 Bareground
 26.75 11.76 Rock

% COMPOSITION
 37.70 26.84 Shrubs
 3.42 5.98 Forbs
 60.12 25.39 Grasses

**ANNUAL
IMPOUNDMENT
CERTIFICATIONS**

MOUNTAIN COAL COMPANY
1993 ANNUAL POND INSPECTION REPORT

POND: SED. POND 2

LOCATION: G.C. 2/7/8

IMPOUNDMENTS

(1) Stability	<u>Slopes Stable.</u>
(2) Structural Weakness/Erosion	<u>Minor Erosion on Inlet</u>
(3) Potential Safety Hazards	<u>No Structural Weakness</u>
(4) Depth of Impounded Water	<u>28"</u>
(5) Existing Storage Capacity	<u>1.78 Ac. Ft.</u>
(6) Monitoring Procedures	<u>Quarterly Inspection.</u>
	<u>U.P.D.E.S. Discharge.</u>

SEDIMENT PONDS ONLY

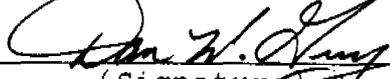
(7) Sediment Accumulation (Elev.)	<u>7881.0</u>
(8) Sediment Cleanout Level (Elev.)	<u>7881.8</u>
(9) Principle Spillway (Elev.)	<u>7893.0</u>
(10) Emergency Spillway (Elev.)	<u>7893.7</u>
(11) Existing Sediment Capacity (To Cleanout)	<u>0.16 Ac. Ft.</u>

GENERAL

(12) Comments/Recommendations	<u>Open Channel Spillway</u>
	<u>Added 10/92. Grouted</u>
	<u>10/93. No Discharge.</u>

STATEMENT

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.


(Signature)

11-04-93
(Date)



MOUNTAIN COAL COMPANY
1993 ANNUAL POND INSPECTION REPORT

POND: SED. POND 7A

LOCATION: G.C. 2/7/8

IMPOUNDMENTS

(1) Stability	<u>Slopes Stable.</u>
	<u>Revegetated.</u>
(2) Structural Weakness/Erosion	<u>None Noted.</u>
(3) Potential Safety Hazards	<u>None Noted.</u>
(4) Depth of Impounded Water	<u>15"</u>
(5) Existing Storage Capacity	<u>0.93 Ac. Ft.</u>
(6) Monitoring Procedures	<u>Quarterly Inspection.</u>

SEDIMENT PONDS ONLY

(7) Sediment Accumulation (Elev.)	<u>7928.5</u>
(8) Sediment Cleanout Level (Elev.)	<u>7932.0</u>
(9) Principle Spillway (Elev.)	<u>7939.5</u>
(10) Emergency Spillway (Elev.)	<u>7940.5</u>
(11) Existing Sediment Capacity (To Cleanout)	<u>0.21 Ac. Ft.</u>

GENERAL

(12) Comments/Recommendations	<u>Overflow to Sed. Pond 2.</u>
	<u>No Discharge.</u>

STATEMENT

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

Dan W. Guy
(Signature)

11-04-93
(Date)



MOUNTAIN COAL COMPANY
1993 ANNUAL POND INSPECTION REPORT

POND: SWEET'S CANYON

LOCATION: G.C. 2/7/8

IMPOUNDMENTS

(1) Stability	<u>Slopes Stable.</u>
	<u>Vegetated.</u>
(2) Structural Weakness/Erosion	<u>None Noted.</u>
(3) Potential Safety Hazards	<u>None Noted.</u>
(4) Depth of Impounded Water	<u>60"</u>
(5) Existing Storage Capacity	<u>2.10 Ac. Ft.</u>
	<u>(Not a Sed. Pond.)</u>
(6) Monitoring Procedures	<u>Quarterly Inspection.</u>

SEDIMENT PONDS ONLY

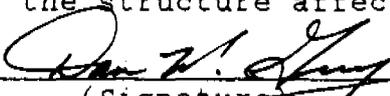
(7) Sediment Accumulation (Elev.)	<u>N/A</u>
(8) Sediment Cleanout Level (Elev.)	<u>N/A</u>
(9) Principle Spillway (Elev.)	<u>N/A</u>
(10) Emergency Spillway (Elev.)	<u>N/A</u>
(11) Existing Sediment Capacity (To Cleanout)	<u>N/A</u>

GENERAL

(12) Comments/Recommendations	<u>Pond for Water Fill</u>
	<u>and Fish Only.</u>
	<u>Operating Properly.</u>

STATEMENT

I hereby certify that; I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved design and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and, that inspections and inspection reports are made by myself and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.


(Signature)

11-04-93
(Date)

