

S  
O  
L  
D  
I  
E  
R  
  
C  
R  
E  
E  
K  
  
C  
O  
A  
L

ANNUAL  
REPORT

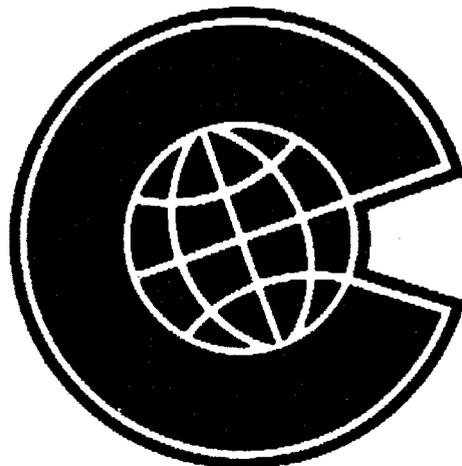
1995

# Soldier Creek Coal Company

Soldier Canyon Mine and  
Banning Loadout

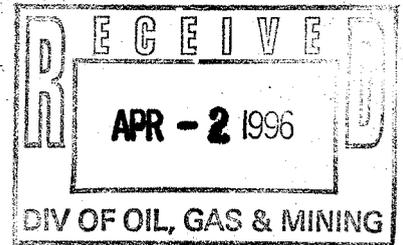
---

**1995 ANNUAL REPORT**



# COAL MINING AND RECLAMATION OPERATIONS FOR 1995

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:** Soldier Creek Coal Company  
**Mine Name:** Soldier Canyon Mine and Banning Loadout  
**Mailing Address:** P.O. Box 1029, Wellington, Utah 84542  
**Company Representative:** R. T. Olsen  
**Resident Agent:** C. T. Corporation System  
**Permit Number:** ACT/007/018, ACT/007/034  
**MSHA ID Number:** 42-00077 and 42-01756  
**Date of Initial Permanent Program Permit:** June 10, 1985  
**Date of Permit Renewal:** February 3, 1997  
**Quantity of Coal Mined (tonnage) 1995:** 480,895

Mine Sequence Maps are attached.

A. General

1. Discuss anomalies, missing data and monitoring changes made throughout the year.

No anomalies or monitoring changes were made and no data are missing for 1995 except when some monitoring stations were not accessible.

2. Summarize any corrective actions and the results that may have occurred during the year.

No corrective actions were taken.

**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.

Mine discharge from outfall <sup>003</sup>~~001~~ of the Soldier Canyon Mine UPDES permit is estimated as follows:

MONTH	ESTIMATED DISCHARGE	CUMULATIVE DISCHARGE
January	10,085,000 gallons	10,085,000 gallons
February	7,280,000	17,365,000
March	8,060,000	25,425,000
April	7,800,000	33,225,000
May	11,165,000	44,390,000
June	11,850,000	56,240,000
July	12,245,000	68,485,000
August	12,245,000	80,730,000
September	11,850,000	92,580,000
October	12,245,000	104,825,000
November	11,850,000	116,675,000
December	12,245,000	128,920,000 gallons

Outfalls 002 and <sup>003</sup>~~001~~ did not discharge during 1995.

- b. Discuss the past five years of data comparing changes in discharge.

Mine discharge has not changed significantly in the last five years. Mine inflows are shown on the maps attached to this section of the annual report.

- c. Discuss trends, if existent, and exceedence of water quality.

No trends are apparent in the Soldier Creek monitoring data.

There were no exceedences of mine water discharge limitations during 1995.

**2. Springs**

- a. Are there seasonal trends/or changes in water quality for each quarter?

Seasonal trends and changes in water quality are shown on the water quality disk for each sampling station. Seasonal trends and changes are typical and do not exceed those of past years.

- b. Provide an analysis of changes in quantity of flow.

The data do not exhibit any changes in flow which are not within the expected ranges.

3. Surface Water

- a. Include comparisons of upstream and downstream water quality and quantity for monitoring sites for each quarter.

Water quality downstream from the mine is higher in TDS than water located upstream from the mine. No attempt has been made to balance flows and quality parameters of sources above the mine and the mine discharge with downstream water quality and quantity.

C. Summarized Water Monitoring Data

1. List of monitoring points and their locations and respective frequencies of monitoring.

This information is contained in the Soldier Creek M&RP in Tables 7.31-1 and 7.31-2.

2. UPDES permit number, discharge points, and locations.

Soldier Creek discharged water under UPDES Permit UT0023680. There are three discharge locations as follows:

Discharge Point	001 at latitude 39°42'02" longitude 110°36'39"
	002 at latitude 39°41'52" longitude 110°36'46"
	003 at latitude 39°42'09" longitude 110°36'38"

3. Summary of findings based on water monitoring during 1995.

Statistical summaries for water monitoring locations are included in the enclosed computer disk.

4. Submit water monitoring as DOS-based files.

Current as well as historical results from water monitoring are contained on the enclosed disk, in Lotus format. Water monitoring at the Banning Loadout consists of an annual sample taken from the sump. A copy of the analysis sheet from this sample is attached to this section.

# SOLDIER CREEK COAL COMPANY

A SUBSIDIARY OF THE COASTAL CORPORATION  
P.O. BOX 1029 - 12 MILES NORTH OF CITY  
WELLINGTON, UTAH 84542  
TEL: (801) 637-6360 - FAX: (801) 637-0108

## FACSIMILE TRANSMITTAL

DATE: 3-20 No. of Pages (Including Cover Sheet) 2

TO: Barry Barnum

COMPANY: Skyline

FROM: Dave Spillman

REMARKS: Banning sump analytical results

attached. Field quality for this sample is

as follows: °F H<sub>2</sub>O - 61.3 (Air 55)

4/cm - 1,436

pH - 7.64

Thanks,

Dave

**CONFIDENTIALITY NOTICE:** THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY DESIGNATED ABOVE, IS CONFIDENTIAL AND MAY CONTAIN INFORMATION THAT IS LEGALLY PRIVILEGED OR EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, COPYING OR USE OF OR RELIANCE UPON THE INFORMATION CONTAINED IN AND TRANSMITTED WITH THIS FACSIMILE TRANSMISSION BY OR TO ANYONE OTHER THAN THE RECIPIENT DESIGNATED ABOVE BY THE SENDER IS NOT AUTHORIZED AND STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY THE SENDER BY TELEPHONE AND RETURN IT TO THE SENDER BY U.S. MAIL, OR DESTROY IT IF AUTHORIZATION IS GRANTED BY THE SENDER. THANK YOU.

**AGZ**

**Analytical Results**

ACZ Laboratories, Inc.  
30400 Downhill Drive  
Steamboat Springs, CO 80487  
(800) 334-5493

Lab Sample ID: L7853-04  
Client Sample ID: Banning Sump  
Client Project ID:  
ACZ Report ID: RG19401

Soldier Creek Coal Company  
P.O. Box 1029  
Wellington, UT 84542  
Dave Spillman

Date Sampled: 11/6/95 10:30  
Date Received: 11/10/95  
Date Reported: 11/30/95

Sample Matrix: Ground Water

**Metals Analysis**

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Calcium, dissolved	M6010 ICP	182.0		mg/L	0.2	1	11/15/95	jaw
Iron, dissolved	M6010 ICP	0.11		mg/L	0.01	0.05	11/15/95	jaw
Magnesium, dissolved	M6010 ICP	214.0		mg/L	0.2	1	11/15/95	jaw
Manganese, dissolved	M6010 ICP	0.021	B	mg/L	0.005	0.03	11/15/95	jaw
Potassium, dissolved	M6010 ICP	2.0		mg/L	0.3	1	11/15/95	jaw
Sodium, dissolved	M6010 ICP	270.0		mg/L	0.3	1	11/15/95	jaw

**Wet Chemistry**

Parameter	EPA Method	Result	Qual	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	M2320B							
Bicarbonate as CaCO3		429		mg/L	2	10	11/16/95	ss
Carbonate as CaCO3			U	mg/L	2	10	11/16/95	ss
Hydroxide as CaCO3			U	mg/L	2	10	11/16/95	ss
Total Alkalinity		429		mg/L	2	10	11/16/95	ss
Chloride	M325.2 - Colorimetric (RFA)	76		mg/L	1	5	11/15/95	hm
Lab Filtration	***						11/13/95	ch
Lab Filtration & Acidification	***						11/13/95	ch
Nitrate as N, dissolved	M353.2 - Automated	0.91		mg/L	0.02	0.1	11/11/95	ss
Nitrate/Nitrite as N, dissolved	M353.2 - Automated Cadmium Reductio	0.91		mg/L	0.02	0.1	11/11/95	ss
Nitrite as N, dissolved	M353.2 - Automated		U	mg/L	0.01	0.05	11/11/95	ss
Residue, Filterable (TDS) @180C	M160.1 - Gravimetric	2720		mg/L	10	20	11/13/95	sak
Sulfate	M375.3 - Gravimetric	1390		mg/L	4	8	11/13/95	sak
TDS (calculated)	Calculation	2390		mg/L	10	50	11/30/95	calc
TDS (ratio)	Calculation	1.14					11/30/95	calc

**Inorganic Qualifiers (based on EPA CLP 3/90)**

U = Analyte was analyzed for but not detected at the indicated MDL  
B = Analyte concentration detected at a value between MDL and PQL  
PQL = Practical Quantitation Limit

*S. Habermehl*

Project Manager: Scott Habermehl

D. Precipitation or Other Climatological Data.

No precipitation or other climatological data are collected at Soldier Creek or Banning.

E. Subsidence Monitoring Report.

1. Brief description of monitoring system.

The subsidence monitoring system at the Soldier Canyon Mine consists of selected surveyed stations located over active areas of second mining.

2. List of all monitoring points.

The subsidence monitoring points, with amount of measured displacement, are listed in the attached table.

3. Map showing monitoring points.

Since the locations of the monitoring points are given in the attached table no map is included.

4. Owners or occupants notified.

All owners (there are no occupants) have been previously notified so no notifications were made during 1995.

5. Proposed mining sequence changes.

No mining sequence changes are proposed.

SOLDIER CREEK COAL COMPANY  
Soldier Canyon Mine  
1995 Subsidence Monitoring Survey

Point No.	Year Established	Original Elevation	1995 Northing	1995 Easting	1995 Elevation	Elevation Difference
112-SS	1980	7,691.43	100,664.01	44,629.67	7,691.55	+0.12
113-SS	1980	7,755.71	102,787.31	44,216.88	7,755.38	-0.33
92-1SS	1992	7,816.70	103,218.07	43,526.47	7,816.54	-0.16
93-1SS	1993	7,734.21	101,962.20	44,207.09	7,734.18	-0.03
93-2SS	1993	7,739.36	101,119.87	44,511.66	7,739.63	+0.27

F. **Vegetation Data**

No vegetation activities were undertaken during 1995 and no data were developed.

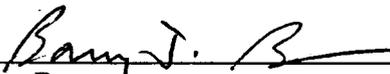
**G. Annual Impoundment Certification**

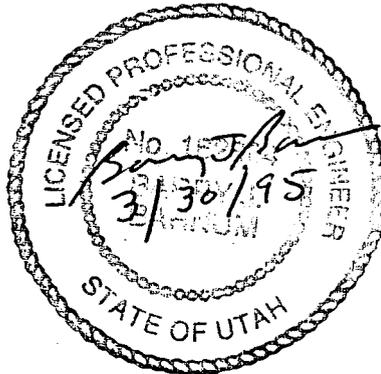
Impoundment certifications are attached in this section of the annual report.

March 30, 1995

I, Barry J. Barnum, do certify that on March 28, 1995, I personally inspected the sedimentation pond located at the Soldier Canyon Mine, and it:

1. Has been basically constructed and maintained as designed, and in accordance with the approved plan and R645-301-533.
2. This impoundment meets the SCS Class A criteria in TR60.
3. Is monitored according to UPDES Permit No. UT-0023680
4. The overflow elevation is 6649.5 feet. The maximum observed depth of water for the past year 1.5 feet.
5. The capacity of the pond is 3.3 acre feet.
6. No fires have occurred in the construction material.
7. No hazardous conditions or instability of the dam or embankment have been detected.

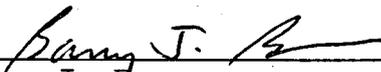
  
\_\_\_\_\_  
Barry J. Barnum  
Registered Professional Engineer  
Utah Registration No. 162604

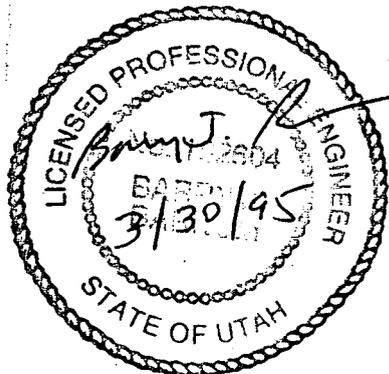


March 30, 1995

I, Barry J. Barnum, do certify that on March 28, 1995, I personally inspected the sedimentation pond located at the Banning Loadout associated with the Soldier Canyon Mine, and it:

1. Has been basically constructed and maintained as designed, and in accordance with the approved plan and R645-301-533.
2. This impoundment meets the SCS Class A criteria in TR60.
3. Is monitored according to UPDES Permit No. UT-0040000.
4. The overflow elevation is 5495.2 feet. The maximum observed depth of water for the past year 0.0 feet.
5. The capacity of the pond is 1.45 acre feet.
6. No fires have occurred in the construction material.
7. No hazardous conditions or instability of the dam or embankment have been detected.

  
\_\_\_\_\_  
Barry J. Barnum  
Registered Professional Engineer  
Utah Registration No. 162604

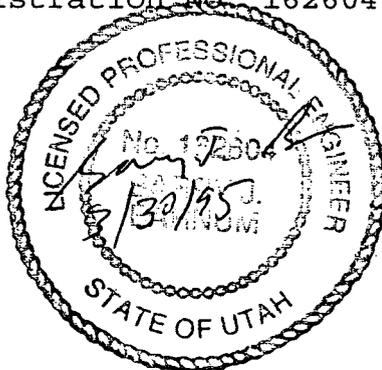


March 30, 1995

I, Barry J. Barnum, do certify that on March 28, 1995, I personally inspected the sewage lagoon associated with the Soldier Canyon Mine, and it:

1. Has been basically constructed and maintained as designed, and in accordance with the approved plan and R645-301-533.
2. This impoundment meets the SCS Class A criteria in TR60.
3. The top of impounded water is approximately 3.8 feet below the top of the dike.
4. The capacity of the pond is 2.1 acre feet.
5. No fires have occurred in the construction material.
6. No hazardous conditions or instability of the dam or embankment have been detected. Large brush growing on the dike, especially around the south-west corner of the pond should be removed.

  
\_\_\_\_\_  
Barry J. Barnum  
Registered Professional Engineer  
Utah Registration No. 162604



H. Annual Overburden, Spoil, Refuse, Roof, Floor, and Mid-Seam Data.

Attached is a copy of the annual laboratory analysis used to determine the toxicity of the coal at the Banning loadout.

# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 708-953-9300 FAX: 708-953-9306



Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:

4665 PARIS STREET  
SUITE B-200  
DENVER, CO 80239  
TEL: (303) 373-4772  
FAX: (303) 373-4791

March 5, 1996

CT&E SKYLINE  
P.O. BOX 690  
PRICE UT 84501

Sample identification by  
CTE SKYLINE

2ND ORIGINAL  
SAMPLE ID:33-12063

Kind of sample COAL (Composite/Banning Loadout)

Sample taken by CTE SKYLINE

Date received December 14, 1995

Analysis report no. 72-325401

<u>PARAMETER</u>	<u>RESULTS</u>	<u>UNITS</u>
pH	8.02	s.u.
Conductivity	537	umho/cm
Saturation Percent	74.60	%
Nitrate Nitrogen, NO <sub>3</sub>	2.90	mg/Kg
Non-Sulfate Sulfur	0.06	%
Total Organic Sulfur	0.43	%
Calcium Carbonate Equivalent	2.39	%
Acid Base Potential	8.3	T/1000 T
Neutralization Potential	23.9	T/1000 T
Maximum Acid Potential	15.6	T/1000 T

Results: Results are reported as indicated, on an air dry basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*Byron C. Cate*

Denver Laboratory



# COMMERCIAL TESTING & ENGINEERING CO.

GENERAL OFFICES: 1919 SOUTH HIGHLAND AVE., SUITE 210-B, LOMBARD, ILLINOIS 60148 • TEL: 708-953-9300 FAX: 708-953-9306



Member of the SGS Group (Société Générale de Surveillance)

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
4665 PARIS STREET  
SUITE B-200  
DENVER, CO 80239  
TEL: (303) 373-4772  
FAX: (303) 373-4791

March 5, 1996

CT&E SKYLINE  
P.O. BOX 690  
PRICE UT 84501

Sample identification by  
CTE SKYLINE

2ND ORIGINAL  
SAMPLE ID: 33-12063

Kind of sample COAL (Composite/Banning Loadout)

Sample taken by CTE SKYLINE

Date received December 14, 1995

Analysis report no. 72-325401

<u>PARAMETER</u>	<u>RESULTS</u>	<u>UNITS</u>
Boron, B	0.26	mg/L
Arsenic, As	<0.01	mg/L
Cadmium, Cd	<0.01	mg/L
Copper, Cu	<0.01	mg/L
Selenium, Se	<0.01	mg/L
Lead, Pb	<0.05	mg/L
Mercury, Hg	<0.0002	mg/L
Molybdenum, Mo	<0.05	mg/L
Zinc, Zn	0.01	mg/L
Barium, Ba	0.34	mg/L

Results: Results are reported as indicated, on an extract basis.

Respectfully submitted,  
COMMERCIAL TESTING & ENGINEERING CO.

*Byron C. Cat*

Denver Laboratory



- I. A current copy of the annual report of officers submitted to the Department of Commerce.

Updated information regarding the officers of Soldier Creek Coal Company and associated companies is located on the disk included with this report.

J. Any other information required to be submitted.

Annual air quality surveys are required at the Banning Loadout and the Soldier Canyon Mine. These surveys were conducted by personnel currently certified by the State of Utah to conduct EPA Method 9 air quality surveys. The results are attached.

Coastal States Energy Company  
EPA Method 9  
Air Opacity Source Evaluation Report

Facility: BANNING LOADOUT

Date: 10-31-95

Observer: KEITH ZOBEL

*Keith Zobel*

Source: <u>BELT INTO CRUSHER</u>	
Distance to Source: <u>125'</u>	HEIGHT: <u>20'</u>
Wind Direction: <u>N-NE</u>	Wind Speed: <del>10-15</del> <u>5-10 mph</u>
Ambient Temperature: <u>18°</u>	Relative Humidity: <u>—</u>

Diagram:

OVERCAST  
NO SUN.

No.	Hr./Min.	Seconds				Average
		0	15	30	45	
1	13:25	0	0	0	0	
2	13:26	0	0	0	0	
3	13:27	0	0	0	0	
4	13:28	0	0	0	0	
5	13:29	0	0	0	0	
6	13:30	0	0	0	0	0

# Coastal States Energy Company

EPA Method 9

## Air Opacity Source Evaluation Report

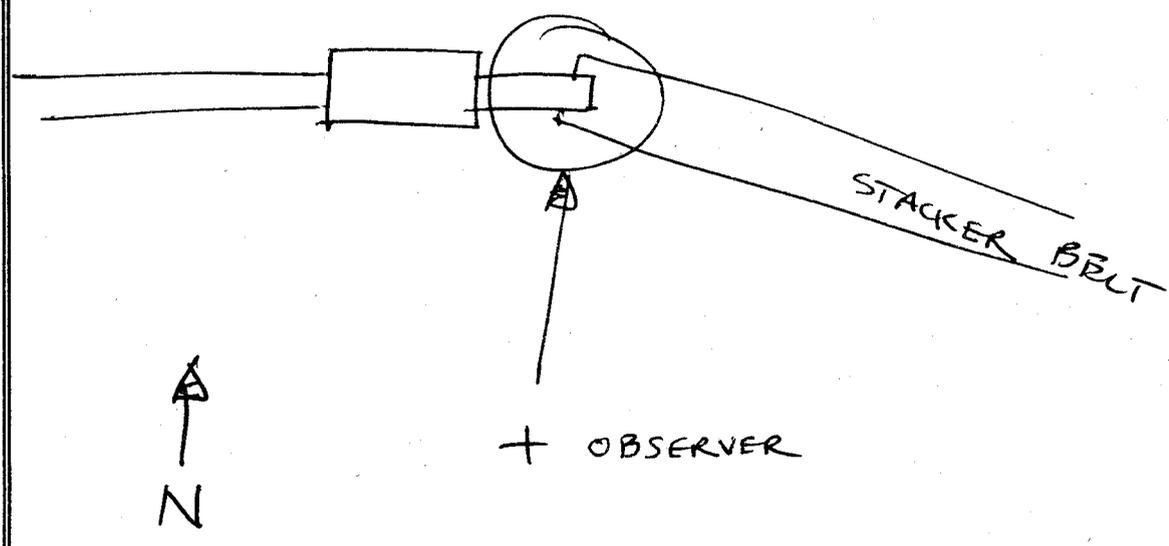
Facility: BANNING LOADOUT

Date: 10-31-95 Observer: BARRY BARNUM  
~~KATHY BARNUM~~

OVERCAST Barnum

Source: <u>CRUSHER TO STACKER BELT</u>	
Distance to Source: <u>125</u>	<u>10' HEIGHT</u>
Wind Direction: <u>N-NE</u>	Wind Speed: <u>5-10</u>
Ambient Temperature: <u>18</u>	Relative Humidity:

Diagram:



No.	Hr./Min. <del>13:35</del>	Seconds				Average
		0	15	30	45	
1	13:35	15	5	0	15	
2	13:46	5	5	5	10	
3	13:37	10	5	5	10	
4	13:38	5	5	5	5	
5	13:39	10	10	10	10	
6	13:40	10	10	5	10	7.7

**Coastal States Energy Company**  
 EPA Method 9  
 Air Opacity Source Evaluation Report

Facility: BANNING LOADOUT

Date: 10-31-95

Observer: KEITH ZOBELL

*Keith Zobell*

Source: <u>STACKER BELT</u>	
Distance to Source: <u>250'</u>	HEIGHT <u>40'</u>
Wind Direction: <u>N</u>	Wind Speed: <u>5-10</u>
Ambient Temperature: <u>17</u>	Relative Humidity:
Diagram: <u>CLOUDY - OVERCAST - NO SUN</u>	

No.	Hr./Min.	Seconds				Average
		0	15	30	45	
1	14:08	0	0	0	0	
2	14:09	0	0	0	0	
3	14:10	5	0	0	5	
4	14:11	0	0	0	0	
5	14:12	5	5	0	0	
6	14:13	0	0	5	0	1.04

Coastal States Energy Company  
EPA Method 9  
Air Opacity Source Evaluation Report

Facility: SOLDIER CANYON MINE

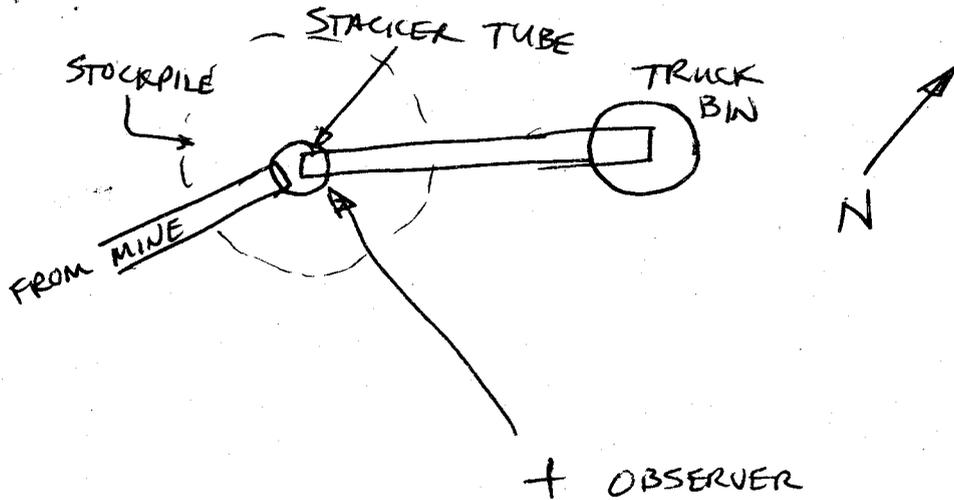
Date: 10-31-95

Observer: KEITH ZOBELL

*Keith Zobell*

Source: <u>TOP OF STACKING TUBE</u>	
Distance to Source: <u>125'</u>	HEIGHT: <u>35'</u>
Wind Direction: <u>N</u>	Wind Speed: <u>5-10 MPH</u>
Ambient Temperature: <u>17</u>	Relative Humidity:

Diagram: CLOUDY - OVERCAST



No.	Hr./Min.	Seconds				Average
		0	15	30	45	
1	14:45	0	0	0	0	
2	14:46	0	0	0	0	
3	14:47	0	0	0	0	
4	14:48	0	0	0	0	
5	14:49	0	0	0	0	
6	14:50	0	0	0	0	0

# Coastal States Energy Company

EPA Method 9

## Air Opacity Source Evaluation Report

Facility: SOLDIER ~~GREEK~~ CANYON MINE

Date: 10-31-95

Observer: KEITH ZOBELL

*Keith Zobell*

Source: <u>TRUCK BIN</u>						
Distance to Source: <u>130'</u>			HEIGHT: <u>35'</u>			
Wind Direction: <u>N</u>			Wind Speed: <u>5-10 MPH</u>			
Ambient Temperature: <u>17</u>			Relative Humidity:			
Diagram: <u>OVERCAST</u>						
No.	Hr./Min.	Seconds				Average
		0	15	30	45	
1	15:03	0	0	0	0	
2	15:04	0	0	0	0	
3	15:05	0	0	0	0	
4	15:06	0	0	0	0	
5	15:07	0	0	0	0	
6	15:08	0	0	0	0	0