



ACT/012/019 #6

**ANNUAL ENGINEERING REPORT  
COTTONWOOD SEDIMENT POND  
1996**

**This report is submitted as required by Federal and State regulations:**

**R645-301-514.300  
30 CFR 77.216-4  
30 CFR 817.49**

**NORTH POND (#1)**

**Design data:**

<b>Top of Dam Elevation</b>	<b>7368.30</b>
<b>Toe of Dam Elevation</b>	<b>7345.20</b>
<b>Spillway Crest Elevation</b>	<b>7365.00</b>
<b>Total Storage Capacity</b>	<b>2.15 ac.ft.</b>
<b>Sediment Storage Capacity</b>	<b>0.90 ac.ft.</b>
<b>Control Points</b>	<b>1-7367.81 B.M.</b>

**Operational data: North Pond cleaned during 4th Quarter.**

	<b><u>ACCUMULATED SEDIMENT</u></b>	<b><u>WATER ELEVATION</u></b>	<b><u>CONTROL POINT ELEVATION</u></b>
<b>1st Quarter 3-7-96</b>	<b>0.0</b>	<b>7354.51</b>	<b>No Change</b>
<b>2nd Quarter 6-27-95</b>	<b>0.24</b>	<b>7354.61</b>	<b>No Change</b>
<b>3rd Quarter 9-23-96</b>	<b>0.24</b>	<b>7354.48</b>	<b>No Change</b>
<b>4th Quarter 12-13-96</b>	<b>0.0 Cleaned</b>	<b>7354.56</b>	<b>No Change</b>

**SOUTH POND (#2)**

**Design data:**

<b>Top of Dam Elevation</b>	<b>7339.92</b>
<b>Toe of Dam Elevation</b>	<b>7317.00</b>
<b>Spillway Crest Elevation</b>	<b>7335.00</b>
<b>Total Storage Capacity</b>	<b>1.88 ac.ft.</b>
<b>Sediment Storage Capacity</b>	<b>0.30 ac.ft.</b>
<b>Control Points</b>	<b>7336.56 B.M.</b>

	<b><u>ACCUMULATED SEDIMENT</u></b>	<b><u>WATER ELEVATION</u></b>	<b><u>CONTROL POINT ELEVATION</u></b>
<b>1st Quarter 3-7-96</b>	<b>0.00</b>	<b>7328.57</b>	<b>No Change</b>
<b>2nd Quarter 6-27-96</b>	<b>0.12</b>	<b>7329.13</b>	<b>No Change</b>
<b>3rd Quarter 9-23-96</b>	<b>0.12</b>	<b>7329.09</b>	<b>No Change</b>
<b>4th Quarter 12-13-96</b>	<b>Frozen</b>	<b>7329.67</b>	<b>No Change</b>

**INSPECTION:**

**Visual inspections were made during each quarter, no stability problems or other concerns were found.**

**ANNUAL ENGINEERING REPORT  
COTTONWOOD EXPLORATION SITE SEDIMENT PONDS  
1996**

This report is submitted as required by Federal and State regulations:

**R645-301-514.300  
30 CFR 77.216-4  
30 CFR 817.49**

**Design data:**

	<u>SEDIMENT CAPACITY</u>	<u>TOTAL CAPACITY</u>
North Basin	.047 ac.ft.	.107 ac.ft.
South Basin	.115 ac.ft.	.511 ac.ft.
TOTAL	.245 ac.ft.	.696 ac.ft.

**Operational data:**

**ACCUMULATED SEDIMENT (AC.FT.)**

	<u>NORTH BASIN</u>	<u>SOUTH BASIN</u>
1st Quarter 3-7-96	0.0	0.0
2nd Quarter 6-13-96	0.0	.050
3rd Quarter 9-23-96	0.0	.050
4th Quarter 12-13-96	0.0	.050

**WATER ELEVATION**

	<u>NORTH BASIN</u>	<u>SOUTH BASIN</u>
<b>1st Quarter</b>	<b>Dry</b>	<b>Dry</b>
<b>2nd Quarter</b>	<b>Dry</b>	<b>Dry</b>
<b>3rd Quarter</b>	<b>Dry</b>	<b>Dry</b>
<b>4th Quarter</b>	<b>Dry</b>	<b>Dry</b>

**Inspection:**

**Visual inspections were made during each quarter, no stability problems or other concerns were found.**

**ANNUAL ENGINEERING REPORT  
COTTONWOOD WASTE ROCK DETENTION POND  
1996**

This report is submitted as required by Federal and State regulations:

R645-301-514.300  
30 CFR 77.216-4  
30 CFR 817.49

**Design data:**

Top of Dam Elevation	6772.00
Toe of Dam Elevation	6755.00
Spillway Crest Elevation	6770.00

Total Storage Capacity	4.58 ac.ft.
Sediment Storage Capacity	2.41 ac.ft.

Control Points	0+00 6770.0
	0+30 6772.0
	0+67 6772.0
	1+05 6772.0

**Operational data:**

	<u>ACCUMULATED SEDIMENT</u>	<u>WATER ELEVATION</u>	<u>CONTROL POINT ELEVATION</u>
1st Quarter 3-7-96	0.0	6755.79	No Change
2nd Quarter 6-27-96	0.0	6755.15	No Change
3rd Quarter 9-23-96	0.0	6761.82	No Change
4th Quarter 12-13-96	Frozen	6760.03	No Change

**Inspection:** Visual inspections were made during each quarter, no stability problems or other concerns were found. Repairs were completed on the inlet rip-rap ditch. This was done to correct damage from high runoff during a late third quarter storm event.

**COTTONWOOD/WILBERG/DES BEE DOVE**

**ACT/015/019 AND ACT/015/017**

**2nd QUARTER 1996**

**INTRODUCTION**

#7 Copy to Act/015/017 #6

The original Waste Rock Disposal Site is located on a 16 acre right-of-way from the BLM located approximately two miles from the Cottonwood/Wilberg mine site along the east side of State Road 57.

The top-soil and sub-soil that had been placed on the north end of the original site was seeded during the second quarter.

A new disposal site was constructed during the spring and summer of 1990 on an approved right-of-way from the BLM located west of State Road 57 and 1.75 miles south of the Cottonwood/Wilberg mine site. This facility is designed for 784,000 cubic yards of material and is planned to last for the life of the mines which it serves.

**OPERATION**

Refuse piles are leveled in lifts according to plan with trash and extraneous material sorted according to the permitted plan. Rip Rap was placed in the northwest inlet ditch during the second quarter.

**INSPECTION**

The new waste storage site was inspected on June 27, 1996 for structural stability. Inspection of the operation of this facility is conducted on a continual basis. At the time of inspection, refuse covered approximately 50% of the active site.

This area does not show any signs of instability or weakness. The small seep at the inlet to the sediment pond had a minimal amount of water flowing. Water seepage was occurring in the ditch leading to the pond.

No new rills or sluffing were observed during this inspection.

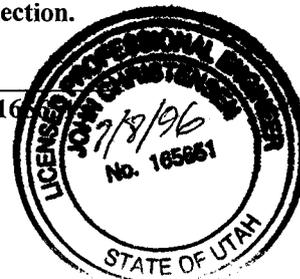
The sediment pond and dam at the new site were inspected. No signs of instability or weakness were found. The discharge structure and emergency spillway were intact and operational according to design.

**CERTIFICATION**

I do hereby certify that the Cottonwood/Wilberg/Des Bee Dove Waste Rock Sites are constructed according to sound engineering practices, and I do also certify that there was no evidence of significant instability structural weakness, or other hazardous conditions at the time of this inspection.

*John Christensen*  
John Christensen

P.E. #16



**COTTONWOOD/WILBERG/DES BEE DOVE**

*Orig. #6* ACT/015/019 AND ACT/015/017

1st QUARTER 1996

*Copy per 10/5/017 #6*

**INTRODUCTION**

The original Waste Rock Disposal Site is located on a 16 acre right-of-way from the BLM located approximately two miles from the Cottonwood/Wilberg mine site along the east side of State Road 57.

Top-soil and sub-soil had been placed on the north end of the original site.

A new disposal site was constructed during the spring and summer of 1990 on an approved right-of-way from the BLM located west of State Road 57 and 1.75 miles south of the Cottonwood/Wilberg mine site. This facility is designed for 784,000 cubic yards of material and is planned to last for the life of the mines which it serves.

**OPERATION**

Refuse piles are leveled in lifts according to plan with trash and extraneous material sorted according to the permitted plan. A new berm had been established and seeded during the first quarter.

**INSPECTION**

The new waste storage site was inspected on March 28, 1996 for structural stability. Inspection of the operation of this facility is conducted on a continual basis. At the time of inspection, refuse covered approximately 20% of the active site.

This area does not show any signs of instability or weakness. The small seep at the sediment pond area still could not be observed due to water elevation of the pond. Water seepage was occurring in the ditch leading to the pond.

No new rills or sluffing were observed during this inspection.

The sediment pond and dam at the new site were inspected. No signs of instability or weakness were found. The discharge structure and emergency spillway were intact and operational according to design.

**CERTIFICATION**

I do hereby certify that the Cottonwood/Wilberg/Des Bee Dove Waste Rock Sites are constructed according to sound engineering practices, and I do also certify that there was no evidence of significant instability structural weakness, or other hazardous conditions at the time of this inspection.

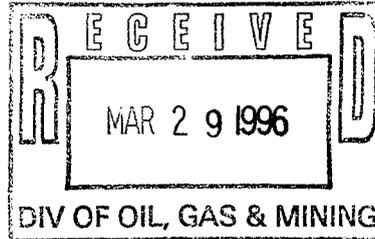
*John Christensen 1/3/96*  
John Christensen P.E. #165651





March 28, 1996

Utah Coal Regulatory Program  
Division of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203



Attention: Ms. Pamela Grubaugh-Littig

Re: **ANNUAL REPORTS FOR 1995, PACIFICORP, DES BEE DOVE MINES,  
ACT/015/017, DEER CREEK MINE, ACT/015/018  
COTTONWOOD/WILBERG MINE, ACT/015/019, TRAIL MOUNTAIN MINE,  
ACT/015/009, EMERY COUNTY, UTAH**

*Copy for each  
mine  
to Folder #6*

Dear Ms. Grubaugh-Lettig:

*Copy Susan  
Fax Bill (PFO)*

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company ("Energy West") as mine operator, hereby submits one (1) copy of the 1995 Annual Reports for the above referenced mines. The materials are organized in accordance with the Division's instructions.

Please allow an extension of thirty days for submittal of the Hydrologic and Subsidence Monitoring reports. As I discussed with you earlier this week, these two reports will be completed by May 1, 1996.

*He called 3/28  
I told him to talk to inspectors for approval  
Pgl  
3/29*

If you have questions regarding this information, please call me at 687-4722 or Richard Northrup at 687-4822.

Sincerely,

Val Payne  
Sr. Environmental Engineer

Encl.

- cc B. Webster
- B. Malencik
- Susan White
- File

