NM2 - 7

MONITORING REPORTS YEAR(S):

2000-2006

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

2006 FEB 22 PM 1 21

February 20, 2006

Mr. Ed Martin
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Re: Annual Report: Permit NM-02-0007
BP Cahn Waste Management Facility
NW/4 Sec. 33 - T32N - R10W, San Juan County, NM

Dear Mr. Martin:

On behalf of BP America Production Co., Blagg Engineering, Inc. (BEI) is submitting this annual report for the Cahn Waste Management Facility, Permit NM-02-0007. This report is for 2005 calendar year monitoring. Attached are spread sheets that summarize the weekly evaporation pond and monthly sump monitoring test results.

General Pond Monitoring

Produced water inflow to the Cahn Evaporation Pond is through a pipeline from the Schneider Waste Management Facility. No water haulers or other pipelines discharge water to the facility. Weekly monitoring has not indicated the generation of dissolved sulfide or hydrogen sulfide gas during any inspections. Tested pH levels have had measured values ranging between 8.8 - 9.4 units. Minimum freeboard was measured at 1.0 feet on July 8, 2005 when the Schneider Evaporation Pond was being emptied for a relining project. The year-end freeboard was measured at 2.2 feet.

Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 2005 calendar year and no treatment zone monitoring was required or performed.

Evaporation Pond Sludge Thickness

All sludge/sediment was removed from the pond in 2003 during installation of a new liner. This facility receives water via pipeline transfer from the Schneider Waste Management Facility and little to no sediments generally enter the pond. A sediment thickness inspection/measurement on October 11, 2005 found no new sediments had accumulated in the pond.

Leak Detection System Monitoring

The top liner leak detection system remained dry for the entire 2005 monitoring year. An older, deep leak detection system has remained in place since the facility was relined in 2003. This system continues to capture fluids at a very low rate (< 1 gallon/week) from prior liquids trapped between the deep, abandon liner system.

Questions or comments concerning this transmittal may be directed to myself at (505)632-1199 or to Don Brooks with BP at (505)326-9200.

Respectfully submitted:
Blagg Engineering, Inc.

Jeffrey C. Blagg, P.E.,
President

Attachments: Monitoring Spread Sheets

cc: Denny Foust, NMOCD Aztec District Office
Don Brooks, BP SJ Operations Center

BP - America Production Company
Cahn Waste Management Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 27, 2005 (KAG)

BLAGG ENGINEERING, INC.

INSPECT DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
01/03/05	8-12	20	ND	0.0	2.54	5.4	9.1	2.00	Y	Water transfer from Schneider off.
01/14/05	5-10	35	ND	0.0	1.29	0.5	9.2	1.65	Y	Water transfer from Schneider off, Ice on pond surface
01/21/05	CALM	0	ND	0.0	0.73	3.8	9.2	1.60	Y	Water transfer from Schneider off.
01/28/05	CALM	0	ND	0.0	1.40	1.3	9.1	1.55	Y	Water transfer from Schneider off.
02/02/05	5-10	185	ND	0.0	0.83	8.6	9.2	1.55	Y	Water transfer from Schneider off.
02/08/05	5-8	190	ND	0.0	1.21	6.5	9.2	1.50	Y	Water transfer from Schneider off.
02/16/05	9-13	265	ND	0.0	7.00	10.9	9.2	1.40	Y	Water transfer from Schneider off.
02/21/05	4-9	45	ND	0.0	1.69	12.4	9.2	1.33	Y	Water transfer from Schneider off.
03/03/05	CALM	0	ND	0.0	2.00	7.9	9.3	1.40	Y	Water transfer from Schneider off.
03/07/05	5-12	180	ND	0.0	0.68	13.9	9.3	1.40	Y	Water transfer from Schneider off.
03/14/05	10-15	190	ND	0.0	0.69	7.9	9.1	1.40	Y	Water transfer from Schneider off.
03/22/05	0-2	45	ND	0.0	1.40	6.0	9.4	1.50	Y	Water transfer from Schneider off.
03/28/05	CALM	0	ND	0.0	0.16	10.7	9.3	1.50	Y	Water transfer from Schneider off.
04/04/05	5-10	80	ND	0.0	0.15	12.8	9.3	1.50	Y	Water transfer from Schneider off.
04/11/05	0-3	270	ND	0.0	0.45	13.1	9.3	1.60	Y	Water transfer from Schneider off.
04/20/05	10-20	190	ND	0.0	3.50	14.7	9.2	1.60	Y	Water transfer from Schneider off.
04/25/05	8-10	190	ND	0.0	1.70	13.8	9.2	1.55	Y	Water transfer from Schneider off.
05/02/05	0-3	100	ND	0.0	0.16	18.6	9.3	1.55	Y	Water transfer from Schneider off.
05/09/05	5-9	170	ND	0.0	0.19	26.4	9.3	1.50	Y	Water transfer from Schneider off.
05/17/05	2-6	20	ND	0.0	0.73	25.2	9.3	1.60	Y	Water transfer from Schneider on.
05/23/05	4-12	205	ND	0.0	0.19	20.1	9.3	1.60	Y	Water transfer from Schneider on.
05/31/05	5-7	260	ND	0.0	0.00	18.1	9.3	1.60	Y	Water transfer from Schneider on.
06/03/05	3-6	190	ND	0.0	0.00	17.1	9.3	1.60	Y	Water transfer from Schneider on.
06/10/05	CALM	0	ND	0.0	0.00	17.1	9.3	1.60	Y	Water transfer from Schneider off.
06/14/05	CALM	0	ND	0.0	0.10	16.2	9.3	1.70	Y	Water transfer from Schneider off.
06/21/05	4-7	170	ND	0.0	0.16	22.6	9.2	1.80	Y	Water transfer from Schneider on.
06/29/05	0-4	155	ND	0.0	0.34	22.1	9.3	1.70	Y	Water transfer from Schneider on.

BP - America Production Company
Cahn Waste Management Facility
Field Data Summary

SW/4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 27, 2005 (KAG)

BLAGG ENGINEERING, INC.

INSPECT DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
07/08/05	4-10	240	ND	0.0	0.05	17.4	9.1	1.00	Y	Water transfer from Schneider on.
07/12/05	3-7	170	ND	0.0	0.01	25.7	9.3	1.90	Y	Water transfer from Schneider on.
07/19/05	CALM	0	ND	0.0	0.23	21.7	9.3	1.90	Y	Water transfer from Schneider on.
07/25/05	2-5	260	ND	0.0	0.20	22.2	9.3	2.00	Y	Water transfer from Schneider on.
08/01/05	4-7	135	ND	0.0	1.12	24.2	9.3	2.10	Y	Water transfer from Schneider off.
08/08/05	0-2	90	ND	0.0	0.04	21.0	9.3	2.15	Y	Water transfer from Schneider off.
08/16/05	2-3	20	ND	0.0	0.14	18.8	9.3	2.20	Y	Water transfer from Schneider off.
08/22/05	CALM	0	ND	0.0	0.28	21.4	9.2	2.30	Y	Water transfer from Schneider off.
08/26/05	0-4	30	ND	0.0	0.11	18.8	9.2	2.50	Y	Water transfer from Schneider off.
09/06/05	CALM	0	ND	0.0	0.72	20.4	9.0	2.50	Y	Water transfer from Schneider off.
09/13/05	0-2	10	ND	0.0	0.78	14.3	9.1	2.60	Y	Water transfer from Schneider off.
09/19/05	4-8	30	NA	0.0	0.26	11.2	9.0	2.70	Y	Water transfer from Schneider off.
09/26/05	4-8	185	NA	0.0	0.22	20.9	9.1	2.75	Y	Water transfer from Schneider off.
10/07/05	0-3	45	NA	0.0	0.44	13.2	9.2	2.80	Y	Water transfer from Schneider off, Repair Freeboard Indicator
10/11/05	6-12	220	NA	0.0	4.45	17.0	9.1	2.75	Y	Water transfer from Schneider off, Measure Sediment: None
10/18/05	CALM	0	NA	0.0	1.23	14.3	9.1	2.70	Y	Water transfer from Schneider off.
10/25/05	0-2	VARI	NA	0.0	1.83	19.6	9.1	2.75	Y	Water transfer from Schneider off.
11/03/05	0-2	80	NA	0.0	4.00	10.6	9.0	2.75	Y	Water transfer from Schneider off.
11/07/05	CALM	0	ND	0.0	4.70	17.3	9.1	2.75	Y	Water transfer from Schneider off.
11/16/05	0-2	150	ND	0.0	3.90	1.9	9.2	2.85	Y	Water transfer from Schneider off.
11/22/05	2-8	20	ND	0.0	1.86	0.9	9.1	2.25	Y	Water transfer from Schneider on, ice on 50% of surface
11/29/05	15-22	270	ND	0.0	1.68	1.1	9.0	2.10	Y	Water transfer from Schneider on.
12/05/05	0-1	270	ND	0.0	2.44	0.0	8.9	2.20	Y	Water transfer from Schneider off, thin ice on entire surface
12/13/05	8-14	260	ND	0.0	1.94	2.1	8.8	2.20	Y	Water transfer from Schneider off.
12/19/05	0-1	90	ND	0.0	2.06	0.2	9.4	2.20	Y	Water transfer from Schneider off, thin ice on entire surface
12/26/05	4-7	10	ND	0.0	1.12	1.9	9.0	2.20	Y	Water transfer from Schneider off.

BP - America Production Company
Cahn Waste Management Facility
Leak Detection - Monthly Insepection Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 14, 2005 (KAG)

BLAGG ENGINEERING, INC.

	SW SUMP				SE SUMP			
INITIAL DATE	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
01/19/04	0.0	1.28	4.0	9.0	0.0	0.92	3.7	9.1
02/02/05	0.0	0.08	6.8	8.9	0.0	0.12	7.0	9.0
03/03/05	0.0	0.65	7.5	9.1	0.0	0.44	8.8	9.0
04/04/05	0.0	0.40	11.6	9.1	0.0	0.21	11.3	9.0
05/02/05	0.0	0.99	13.4	9.1	0.0	1.44	13.7	9.1
06/03/05	0.0	1.21	17.6	9.1	0.0	1.46	17.5	9.1
07/12/05	0.0	0.07	22.4	9.2	0.0	0.32	22.0	9.2
08/01/05	0.0	0.22	24.9	9.2	0.0	0.63	25.7	9.2
09/06/05	0.0	3.04	22.0	9.2	0.0	7.07	21.6	9.2
10/07/05	0.0	0.11	14.0	9.3	0.0	0.72	14.8	9.3
11/03/05	0.0	0.83	15.8	9.0	0.0	3.55	16.0	9.1
12/13/05	0.0	0.36	15.1	9.1	0.0	0.09	15.6	9.2

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

February 7, 2003

RECEIVED
FEB 12 2003
Environmental Bureau
Oil Conservation Division

Ms. Martyne J. Kieling
New Mexico Oil Conservation Division
1220 South St. Francis Frive
Santa Fe, New Mexico 87505

Re: Annual Report: Permit NM-02-0007
BP Cahn Waste Management Facility
NW/4 Sec. 33 - T32N - R10W, San Juan County, NM

Dear Ms. Kieling:

On behalf of BP America Production Co., Blagg Engineering, Inc. (BEI) is submitting this annual report for the Cahn Waste Management Facility, Permit NM-02-0007 . This report is for 2002 calendar year monitoring. Attached are spread sheets that summarize the weekly evaporation pond and monthly sump monitoring test results.

General Pond Monitoring

Weekly evaporation pond monitoring has not indicated the generation of dissolved sulfide or hydrogen sulfide gas during any inspections. Tested pH levels were stable at values in excess of 9.0. Discharges to this pond are via a pipeline from the Schneider Waste Management Facility and no water haulers or other pipelines emit water to the facility. During the entire year freeboard was in excess of 2.8 feet and the pond water depth was less than 6-inches. During the summer months of July and August there was only trace water in the pond. The aeration system was not operated for the entire year due to the very low water levels.

Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 2002 calendar year and no treatment zone monitoring was required or performed.

Evaporation Pond Sludge Thickness

Sludge thickness was measured in the pond on August 23, 2002 during a period when the pond water level was negligible. Maximum sludge thickness was measured to be less than 2-inches thick throughout the pond. Most of the base was covered with crystallized salts that would re-dissolve

m/M 2-12-03

when water levels were increased.

Leak Detection System Monitoring

No substantial leaks into or from the leak detection system were observed during the 2002 calendar year.

Questions or comments concerning this transmittal may be directed to myself at (505)632-1199 or to Brittany Benko with BP at (505)326-9200.

Respectfully submitted:
Blagg Engineering, Inc.

Jeffrey C. Blagg, P.E.,
President

attachments: Monitoring Spread Sheets

cc: Denny Foust, NMOCD Aztec District Office
Brittany Benko, BP San Juan Operations Center

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: JANUARY 2, 2003 (KAG)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
01/08/02	1-3	FROM EAST	ND	0.0	1.14	3.8	9.4	3.05	Y	CAL INST @ SCHNEIDER H20 XFER FROM SCH
01/14/02	3-8	30	ND	0.0	1.14	2.3	9.4	3.00	Y	CAL pH 7=7,10=10 CAL DO TO ATMOS 82% H2S METER CAL H2O XFER FROM SCH
01/22/02	4-8	10	ND	0.0	2	3.3	9.5	3.00	Y	CAL pH 7=7,10=10 CAL DO TO ATMOS 82% H2S METER CAL H2O XFER FROM SCH
01/28/02	2-6	10	ND	0.0	0.54	3.6	9.4	3.05	Y	CAL pH 7=7,10=10 CAL DO TO ATMOS 82% H2S METER CAL H2O XFER FROM SCH TERM H20 XFER DUE TO LOW FLOW VOLUME
02/04/02	0-4	35	ND	0.0	0.16	3.0	9.5	3.05	Y	CALpH 7=7,10=10 CALDO TO ATMOS (82%) H2S FAC CAL RESTART H20 XFER
02/15/02	4-8	115	ND	0.0	0.24	3.9	9.5	3.00	Y	CAL INST @ SCHNEIDER H20 XFER FROM SCH
02/20/02	8-15	290	ND	0.0	0.6	8.1	9.5	2.90	Y	CAL INST @ SCHNEIDER H20 XFER FROM SCH
02/26/02	5-12	230	ND	0.0	0.44	8.3	9.5	2.90	Y	CAL pH 7=7,10=10 DO TO ATMOS (82%) H2S TO STANDARD 10ppm H20 XFER FROM SCHNEIDER
03/05/02	3-8	185	ND	0.0	0.64	13.1	9.6	2.80	Y	CAL PH 7=7,10=10 CALDO TOATMOS H2S CAL PREVIOUSLY @ OFFICE H20 XFER FROM SCHNEIDER
03/16/02	0-3	95	ND	0.0	0.51	11.6	9.5	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
03/19/02	5-12	260	ND	0.0	0.66	14.7	9.5	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
03/28/02	5-9	255	ND	0.0	1.94	11.3	9.6	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
04/02/02	6-12	180	ND	0.0	1.08	22.1	9.5	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
04/13/02	4-7	270	ND	0.0	0.93	23.0	9.5	3.00	Y	CAL pH7=7,10=10 CAL DO TO ATMOS (82) H2S PRE CAL
04/17/02	12-20	185	ND	0.0	2.31	21.0	9.6	2.90	Y	CAL PH 7=7,10=10 CALDO TOATMOS H2S CAL PREVIOUSLY @ OFFICE H20 XFER FROM SCHNEIDER
04/26/02	3-5	220	ND	0.0	0.52	22.4	9.6	2.80	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
05/02/02	3-5	20	ND	0.0	2.1	7.0	9.5	2.80	Y	CAL INST @ OFFICE pH 7=7, 10=10 DO TO ATMOS (82%) H2S TO CAL GAS (5 ppm) TERM H2S XFER SINCE VACUUM LINE IS REPAIRED
05/06/02	4-7	180	ND	0.0	0.42	20.0	9.2	2.90	Y	RE-INITIATE H20 XFER FROM SCHNEIDER CAL pH 7=7 10=10 CAL DO TO ATMOS (82%) H2S PRECAL
05/13/02	4-7	170	ND	0.0	0.41	23.0	9.3	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
05/23/02	4-10	195	ND	0.0	0.93	22.0	9.2	2.80	Y	CAL INST @ OFFICE SEE SCHNEIDER REPORT H20 XFER FROM SCH
05/29/02	CALM	NA	ND	0.0	NA	23.2	9.2	2.80	Y	H20 XFER FROM SCHNIEDER CAL pH 7=7 10=10 H2S PRE-CAL
06/04/02	4-8	195	ND	0.0	3	27.0	9.3	2.80	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
06/14/02	4-6	260	ND	0.0	0.4	27.3	9.4	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
06/18/02	0-1	360	ND	0.0	1.30	26.0	9.3	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
06/25/02	0-3	70	ND	0.0	0.69	20.0	9.3	2.90	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S CAL @ OFFICE
07/03/02	CALM	NA	ND	0.0	0.44	26.4	9.3	3.00	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: JANUARY 2, 2003 (KAG)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
07/11/02	3-8	170	ND	0.0	0.31	28.0	9.3	3.00	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) CAL H2S METER TO STANDARD
07/19/02	2-4	120	ND	0.0	NA	28.3	9.3	3.20	Y	H20 XFER FROM SCHNEIDER CAL INST @ SCHNEIDER
07/23/02	0-2	120	ND	0.0	NA	29.0	9.4	3.20	Y	TERMINATE H20 XFER CAL INST @ SCHNEIDER
08/01/02	2-3	45	ND	NA	NA	NA	NA	3.30	Y	'POND SURFACR IS SALT CRYSTALS-NO FLUID ON SURFACE. <0.3 OF FLUID
08/08/02	CALM	NA	ND	NA	NA	NA	NA	3.30	Y	POND 100% SALT COVERED-NO LIQUID CAL @ OFFICE @ 0800
08/15/02	0-2	140	ND	0.0	NA	NA	NA	3.30	Y	'SALT COVERING POND-NO LIQUID H2S PRECAL
08/23/02	2-6	180	ND	0.0	NA	NA	NA	3.30	Y	'SALT COVERING 100%-NO LIQUID H2S PRECAL
08/30/02	5-10	165	ND	0.0	NA	NA	NA	3.30	Y	NO H20 IN POND
09/03/02	5-10	NORTH	ND	0.0	NA	NA	NA	3.30	Y	CAL pH7=7,10=10 CAL DO TO ATMOS (82) H2S PRE CAL POND 100% SALT COVERD NO H20
09/12/02	0-3	190	ND	0.0	NA	23.6	9.2	3.00	Y	CAL pH 7=7 10=10 CAL DO TO ATMOS (82%) H2S PRECAL H20 IN POND FROM RECENT RAINFALL-TO SHALLOW TO MEASURE DO
09/21/02	10-15	270	ND	0.0	NA	19.1	9.3	3.00	Y	'CAL pH 7=7 10=10 CAL H2S PREVIOUSLY
09/27/02	3-10	160-190	ND	0.0	NA	24.5	9.2	3.00	Y	'CAL pH 7=7 10=10 CAL H2S PREVIOUSLY
10/04/02	CALM	NA	ND	0.0	0.11	17.7	9.1	3.00	Y	'CAL pH 7=7 10=10 H2S PRECAL CAL DO TO ATMOS (82%)
10/12/02	1-5	10	ND	0.0	0.10	16.0	9.2	3.00	Y	----------
10/17/02	5-12	165	ND	0.0	0.09	20.0	9.7	3.10	Y	'INST CAL @ OFFICE DO @82% pH 7=7 10=10 H2S PRE CAL ROMOVE DUCK & BURY
10/24/02	2-6	350	ND	0.0	N/A	14.4	9.5	3.10	Y	'CAL pH 7=7 10=10 CAL DO TO ATMOS (82%) CAL H2S PREVIOUSLY - 10% OF POND BOTTOM EXPOSED W/O WATER COVER
10/28/02	4-8	270	ND	0.0	N/A	11.7	9.6	3.10	Y	'CAL pH 7=7 10=10 H2S PRECAL H20 TOO LOW FOR DO
11/07/02	0-2	200	ND	0.0	N/A	14.8	9.6	3.10	Y	'CAL pH 7=7 10=10 H2S PRECAL H20 TOO LOW FOR DO MEASURE BEGIN H20 XFER FROM SCHNEIDER
11/13/02	0-3	170	ND	0.0	0.09	11.9	9.6	3.00	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
11/19/02	2-5	180	ND	0.0	0.10	9.4	9.5	2.90	Y	H20 XFER FROM SCHNEIDER CAL INST @ SCHNEIDER
11/26/02	2-4	195	ND	0.0	0.39	6.9	9.6	3.00	Y	H20 XFER FROM SCH. CAL pH 7=7,10=10 CAL O2 TO ATMOS (82%) H2S PRECAL
12/02/02	0-1	RAIN	ND	0.0	0.18	6.2	9.6	3.00	Y	'CAL INST @ OFFICE pH 7=7 10=10 DO TO ATMOS (82%) H2S W/4 GAS STANDARD
12/11/02	8-10	180	ND	0.0	0.04	3.1	9.6	3.00	Y	'CAL INST @SCHNEIDER
12/19/02	10-15	270	ND	0.0	0.03	2.4	9.5	2.90	Y	'CAL INST @SCHNEIDER
12/27/02	0-1	FROMEAST	ND	0.0	0.04	1.3	9.7	2.90	Y	'CAL pH7=7 10=10 CAL DO TO ATMOS (82%) H20 XFER FROM SCHNEIDER ICE ON ~ 50% OF SURFACE H2S PRECAL
12/31/02	1-3	DUENORTH	ND	0.0	0.03	2.0	9.6	2.90	Y	'CAL INST @ CAHN H20 XFER FROM SCHNEIDER

BP / AMOCO
Cahn Waste Mgmt. Facility
Leak Detection - Monthly Insepection Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: JANUARY 2, 2003 (KAG)

BLAGG ENGINEERING, INC.

	SW SUMP				SE SUMP			
INITIAL DATE	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
01/14/02	0.0	0.31	4.6	9.5	0.0	0.09	5.5	9.4
02/20/02	0.0	0.11	4.8	9.5	0.0	0.37	3.5	9.5
03/19/02	0.0	0.03	6.5	9.6	0.0	0.09	6.5	9.5
04/02/02	0.0	0.09	9.0	9.6	0.0	0.19	8.6	9.6
04/26/02	0.0	0.63	12.4	9.6	0.0	0.09	13.9	9.7
05/02/02	0.0	0.36	10.0	9.5	0.0	0.07	10.9	9.7
06/25/02	0.0	0.09	17.2	9.2	0.0	0.00	19.4	9.3
08/08/02	0.0	0.09	22.0	9.2	0.0	0.41	22.5	9.2
09/03/02	0.0	0.02	22.5	9.3	0.0	0.04	23.9	9.4
10/12/02	0.0	0.02	23.0	9.2	0.0	0.08	24.7	9.3
11/13/02	0.0	0.03	15.2	9.4	0.0	0.00	16.0	9.5
12/02/02	0.0	0.03	7.0	9.6	0.0	0.09	8.0	9.4
12/31/02	0.0	0.14	5.9	9.5	0.0	0.01	6.4	9.6

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

RECEIVED
FEB 25 2002
Environmental Bureau
Oil Conservation Division

February 18, 2002

Ms. Martyne J. Kieling
New Mexico Oil Conservation Division
1220 South St. Francis Frive
Santa Fe, New Mexico 87505

Re: Annual Report: Permit NM-02-0007
BP-Amoco Cahn Waste Management Facility
NW/4 Sec. 33 - T32N - R10W, San Juan County, NM

Dear Ms. Kieling:

On behalf of BP-Amoco, Blagg Engineering, Inc. (BEI) is submitting an annual report with respect to treatment zone monitoring and leak detection inspections at the subject Cahn Waste Management Facility, Permit NM-02-0007. This NMOCD permit was issued on February 1, 1999 and this annual report is for the 2001 calendar year monitoring. Attached, please find spread sheets that summarize the weekly evaporation pond and monthly sump monitoring test results.

General Pond Monitoring

Weekly evaporation pond monitoring has not indicated the existence or generation of hydrogen sulfide gas at the Cahn Waste Management Facility. No dissolved sulfide was detected in the pond water and pH levels were stable at values in excess of 9.0. Discharges to this pond are via a pipeline from the Schneider Waste Management Facility and no water haulers or other pipelines emit water to the facility. Water levels in the pond were at accumulations of less than approximately 3-inches for the period between July 23 - December 31, 2001.

Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 2001 calendar year and no treatment zone monitoring was required or performed.

Evaporation Pond Sludge Thickness

Sludge thickness was measured in the pond on October 24, 2001 during a period when the pond water level was low. Maximum sludge thickness was measured to be less than 1-inch thick throughout the pond. Most of the base was covered with crystallized salts that would re-dissolve when water levels were increased.

Leak Detection System Monitoring

No substantial leaks into or from the leak detection system were observed during the 2001 calendar year.

Questions or comments concerning the this transmittal may be directed to Jeff Blagg of Blagg Engineering at (505)632-1199 or to Buddy Shaw with BP-Amoco at (505)326-9219.

Respectfully submitted:
Blagg Engineering, Inc.

Jeffrey C. Blagg, P.E.,
President

attachments: Monitoring Spread Sheets

cc: Denny Foust, NMOCD Aztec District Office
B.D. Shaw, BP-Amoco San Juan Operations Center

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: JANUARY 2, 2002 (KAG)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
01/02/01	4-8	150	ND	0.0	0.25	3.0	9.4	2.60	Y	WATER XFER CONTINUING CALIBRATEpH
01/12/01	2-4	130	ND	0.0	1.05	3.0	9.5	2.50	Y	'WATER XFER CONTINUING
01/18/01	1-3	100	ND	0.0	1.9	1.0	9.4	2.50	Y	H20 XFER CONTINUING 02 TO ATMOS H20 SURFACE FROZEN
01/25/01	8-18	280	ND	0.0	1.5	8.4	9.4	2.40	Y	WATER XFER CONTINUING CALIBRATE pH 7=7,10=10
01/31/01	1-4	0	ND	0.0	2.32	1.5	9.4	2.30	Y	H20 XFER CONTINUING CALIBRATE pH 7=7,10=10 1/2" ICE ON ENTIRE POND
02/06/01	1-5	N20E	ND	0.0	5.21	7.0	9.5	2.30	Y	H20 XFER CONTINUING CAL DO TO ATMOS MINOL (<5%) AMOUNT OF ICE ON H20
02/16/01	0-2	S45W	ND	0.0	1.08	9.4	9.3	2.10	Y	H20 XFER CONTINUING CAL.DO TO ATMOS CAL pH
02/26/01	5-10	N30E	ND	0.0	11.5	7.0	9.5	2.10	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
03/08/01	1	270	ND	0.0	2.33	7.6	9.4	2.00	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
03/16/01	4-8	140	ND	0.0	2.3	9.7	9.6	2.00	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
03/21/01	2-5	S10W	ND	0.0	0.88	13.6	9.6	1.90	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
03/30/01	10-15	S45E	ND	0.0	0.71	14.6	9.76	1.75	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
04/04/01	2-4	225	ND	0.0	3.85	13.8	9.4	2.00	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
04/12/01	4-8	190	ND	0.0	3.60	11.7	9.4	2.00	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
04/19/01	7-14	240	ND	0.0	1.21	15.8	9.4	2.00	Y	CALIBRATE INST @SCHNEIDER H2O XFER CONTINUING
04/27/01	CALM	0	ND	0.0	1.22	14.9	9.4	2.00	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
05/02/01	2-8	250	ND	0.0	0.54	15.9	9.4	2.00	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
05/10/01	8-12	250	ND	0.0	4.85	16.4	9.4	2.00	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
05/16/01	0-2	N30E	ND	0.0	3.20	17.4	9.4	2.10	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
05/22/01	2-6	S10W	ND	0.0	3.60	15.5	9.4	1.90	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
05/30/01	7-12	310	ND	0.0	2.20	16.5	9.3	2.20	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
06/07/01	0-5	165	ND	0.0	2.10	30.7	9.4	2.30	Y	CAL INST @ SCHNEIDER H20 XFER FROM SCHNEIDER
06/13/01	8-17	210	ND	0.0	1.15	19.1	9.5	2.40	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: JANUARY 2, 2002 (KAG)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
06/21/01	CALM	0	ND	0.0	1.86	18.6	9.5	2.50	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
06/28/01	2-4	140	ND	0.0	2.50	21.6	9.4	2.60	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
07/06/01	CALM	0	ND	0.0	1.11	24.2	9.5	2.70	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING SAMPLE STEEL 55 GAL DRUM NO LABEL 1/2 FULL, YELLOW VISCUS
07/10/01	1	90	ND	0.0	2.20	27.2	9.3	2.70	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING
07/18/01	1-3	70	ND	0.0	2.00	21.4	9.5	2.90	Y	CAL pH 7=7 10=10 DO TO ATMOS MINOR H20 XFER FROM SCHNEIDER TURN OFF
07/23/01	2-6	110	ND	0.0	0.09	28.4	9.5	3.10	Y	CAL pH 7=7 10=10 DO TO ATMOS RESTART H20 XFER FROM CAHN 80% OF POND BOTTOM SHOWING MICRTSTACS
07/30/01	1-3	48	ND	0.0	NA	NA	9.3	3.10	Y	H20 LEVEL TO LOW TO MEASUR DO OR TEMP. BOTOM EXPOSED ON 50%+ OF POND
08/06/01	0-3	98	ND	NA	NA	NA	NA	3.10	Y	H20 LEVEL TO LOW TO MEASUR DO OR TEMP. BOTOM EXPOSED ON 50%+ OF POND
08/14/01	3-7	175	ND	0.0	1.90	23.2	9.4	3.00	Y	VERY MUDDY FROM RAIN CAL INST @ SCHNEIDER H20 LEVEL UP IN POND FROM RECENT PRECIP
08/24/01	1-6	55	ND	0.0	1.30	19.8	9.5	3.00	Y	CALIBRATE INSTRUMENTS @ SCHNEIDER
08/30/01	2-4	125	ND	0.0	0.33	17.9	9.4	3.10	Y	CALIBRATE INSTRUMENTS @ SCHNEIDER
09/07/01	4-7	300	ND	0.0	NA	NA	NA	3.30	Y	H20 LEVEL TO LOW TO 75% LINER BOTTOM EXPOSED BEGIN H20 XFER FROM SCHNEIDER
09/18/01	3-5	30	ND	0.0	NA	19.7	9.4	3.10	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER FOM SCHNEIDER
09/26/01	2-7	70	ND	0.0	NA	NA	NA	3.20	Y	PUMP SUMPS, H20 XFER FROM SCHNEIDER, POND COVERED W/ SALT LAYER-COULDN'T SAMPLE H20 TOO SHALLOW
10/05/01	5-7	240	ND	0.0	NA	NA	NA	3.20	Y	SALT BUILD UP ON PONDS PROHIBITED MEASURING PARAMETER H20 XFER FROM SCHNEIDER
10/13/01	2-4	90	ND	0.0	0.09	10.3	9.5	3.10	Y	CALIBRATE DO TO ATM, pH7=7,10=10 H20 XFER CONTINUING POND 99% COVERED W/H20 SOUTH 1/2 HAS SALT LAYER
10/18/01	2-4	185	ND	NA	NA	NA	NA	3.20	Y	END H20 XFER FROM SCHNEIDER-FLOWING @ TRICKLE ONLY, POND-99% SALT COVERED, 20% DRY, 30% WITH TRACE OF H20
10/24/01	10-22	205	ND	NA	NA	NA	NA	3.20	Y	SALT CRYSTALS ON 90% OF POND H20 XFER OFF
11/02/01	3-8	25	ND	NA	NA	NA	NA	3.25	Y	SALT CRYSTALS ON 80% OF POND H20 TO LOW TO SAMPLE
11/08/01	4-8	225	ND	0.0	NA	NA	NA	3.25	Y	SALT CRYSTALS ON 80% OF POND H20 TO LOW TO MEASURE
11/14/01	5-10	180	ND	0.0	NA	NA	NA	3.25	Y	SALT CRYSTALS ON 95% OF POND H20 TO LOW TO MEASURE
11/19/01	0-4	170	ND	0.0	NA	NA	NA	3.25	Y	SALT CRYSTALS ON 95% OF POND H20 TO LOW TO MEASURE
11/26/01	2-4	80	ND	0.0	2.15	3.5	9.5	3.10	Y	SALT IN POND DISSOLVED RECENT SNOW ON GROUND CAL pH 7=7, 10=10 CAL DO TO ATMOS
12/03/01	5-11	15	ND	0.0	1.95	12.0	9.5	3.10	Y	H20 XFER FROM SCHNEIDER CAL pH 7=7, 10=10 CAL DO TO ATMOS
12/14/01	4-10	20	ND	0.0	1.15	1.8	9.5	3.05	Y	H20 XFER FROM SCHNEIDER FROZEN CAL pH 7=7, 10=10 CAL DO TO ATMOS H2S PRE CAL.
12/19/01	1	120	ND	0.0	NA	1.6	9.4	3.10	Y	'END H20 XFER FROM SCHNEIDER CAL pH 7=7, 10=10

BP / AMOCO

Cahn Waste Mgmt. Facility

Leak Detection - Monthly Insepection Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 4 2001 (KAG)

BLAGG ENGINEERING, INC.

	SW SUMP				SE SUMP			
INITIAL DATE	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
01/02/01	0.0	0.00	5.0	9.5	0.0	0.10	4.7	9.4
02/06/01	0.0	1.56	2.0	9.1	0.0	1.25	1.9	9.2
03/08/01	0.0	0.00	6.0	9.7	0.0	0.14	5.0	9.6
04/04/01	0.0	3.56	9.9	9.3	0.0	2.62	10.7	9.2
05/02/01	0.0	0.09	13.1	9.4	0.0	0.88	14.5	9.6
06/13/01	0.0	0.00	19.8	9.4	0.0	0.00	20.6	9.5
07/10/01	0.0	0.31	22.1	9.5	0.0	0.09	23.1	9.5
08/24/01	0.0	0.11	18.3	9.6	0.0	0.04	19.0	9.5
09/18/01	0.0	0.11	19.3	9.4	0.0	0.03	19.5	9.5
10/13/01	0.0	0.10	16.2	9.4	0.0	0.36	15.9	9.4
11/26/01	0.0	0.36	11.0	9.4	0.0	0.11	10.5	9.5
12/03/01	0.0	0.17	11.5	9.4	0.0	0.03	11.7	9.5

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

February 19, 2001

Ms. Martyne J. Kieling
New Mexico Oil Conservation Division
1220 South St. Francis Frive
Santa Fe, New Mexico 87505

Re: BP-Amoco Cahn Waste Management Facility
NW/4 Sec. 33 - T32N - R10W, San Juan County, NM
Permit NM-02-0007 Annual Report

Dear Ms. Kieling:

On behalf of BP-Amoco, Blagg Engineering, Inc. (BEI) is submitting an annual report with respect to treatment zone monitoring and leak detection inspections at the subject Cahn Waste Management Facility. An NMOCD permit for this facility was issued on February 1, 1999. This annual report is for the 2000 calendar year monitoring.

General Pond Monitoring

Weekly evaporation pond monitoring has not indicated the existence or generation of hydrogen sulfide gas at the Cahn Waste Management Facility. No dissolved sulfide was detected in the pond water and pH levels were stable at values in excess of 9.0.

Attached, please find spread sheets that include summaries of weekly evaporation pond monitoring and monthly sump monitoring test results.

Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 2000 calendar year and no treatment zone monitoring was required or performed.

Evaporation Pond Sludge Thickness

Sludge thickness was measured in the pond on November 21, 2000 during a period when the pond water level was low. Maximum sludge thickness was measured to be less than 1-inch thick throughout the pond. Most of the base had less than ¼-inch sludge thickness.

Leak Detection System Monitoring

No substantial leaks into or from the leak detection system were observed during the 2000 calendar

year. Beginning on April 13, 2000 a series of sump pump-off tests were run to determine the inflow rates into the two pond leak detection sumps. This testing comprised of measuring the depth to water in each sump, then pumping the water from the sumps using a standard vacuum truck. The volume of water removed from the sumps was recorded and then for a period of weeks following the pumping the volume of water that re-entered the sumps was measured. Several pump tests were run to verify the test results. Attached is a summary of the pump-off test results.

The pump test results indicate that immediately after pumping the instantaneous flow rate into the sumps ranged between 5.3-10.5 gallons per day (gpd). However, over time the flow rate into the sumps would quickly decrease after several weeks to a rate of less than 0.2 gpd. This indicates that after a small amount of back pressure builds up in the sump system that the pond loss rate into the system is markedly reduced.

Recommendations

Based on the results of the Year 2000 Cahn Waste Management Facility monitoring, BEI recommends monthly monitoring rather than weekly monitoring at the facility. Pond freeboard, dissolved sulfide and pH values tend to change very slowly and monthly monitoring is believed to be adequate for detecting the possible generation of hydrogen sulfide gas. Additionally, BP-Amoco personnel not associated with monitoring are at the facility several times per week for other purposes and if a site hazard is observed this will be communicated to the BP-Amoco HSE team for immediate response.

Questions or comments concerning the this transmittal may be directed to Jeff Blagg of Blagg Engineering at (505)632-1199 or to Buddy Shaw with BP-Amoco at (505)326-9219.

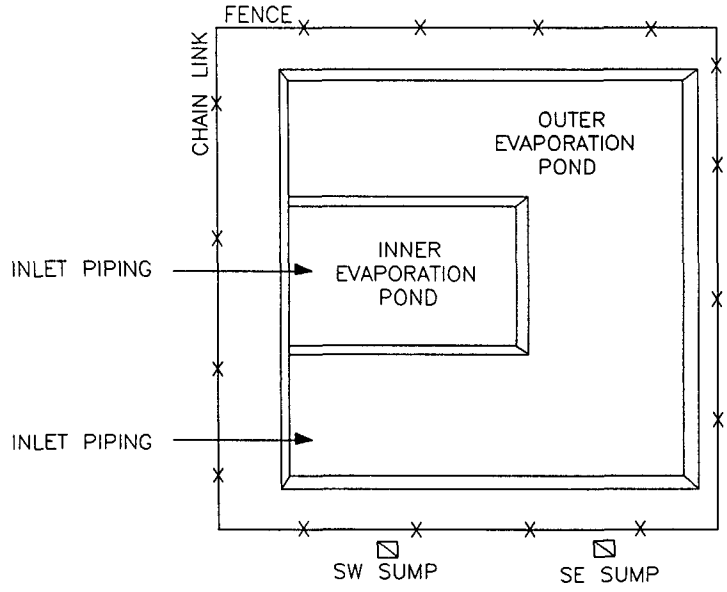
Respectfully submitted:
Blagg Engineering, Inc.

Jeffrey C. Blagg, P.E.,
President

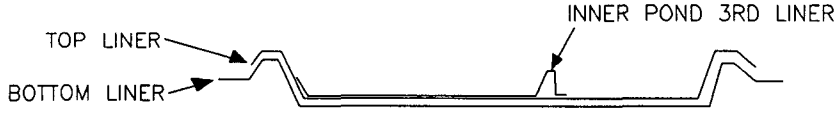
attachments: Site Diagram
Monitoring Spread Sheets
Sump Pumping Recovery Tests

cc: Denny Foust, NMOCD Aztec District Office
B.D. Shaw, BP-Amoco San Juan Operations Center

PLAN VIEW



SIDE VIEW



LEGEND

N

0 200 400 FEET

AMOCO PRODUCTION CO.
CAHN WASTE MGMT. FAC.
SAN JUAN CO., NEW MEXICO

DECEMBER 2000

BLAGG ENGINEERING, INC.
CONSULTING ENGINEERING SERVICES

P.O. BOX 87
BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

EVAP. POND SCHEMATIC

FIGURE 1	DRWN BY: JCB
CAHN2	PROJ MGR: JCB

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 31, 2000 (KAT)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
01/05/00	<5	N 20 E	ND	0.0	0.63	3.2	9.8	3.25	Y	AERATION SYSTEM NOT IN OPERATION
01/11/00	<5	-	ND	0.0	2.67	4.9	9.8	3.25	Y	AERATION SYSTEM NOT IN OPERATION
01/19/00	<5	N 61 E	ND	0.0	1.56	5.7	8.8	3.25	Y	AERATION SYSTEM NOT IN OPERATION
01/24/00	<5	N 47 E	ND	0.0	1.62	5.8	8.9	3.25	Y	AERATION SYSTEM NOT IN OPERATION
01/31/00	<5	N 25 E	ND	0.0	1.05	6.6	9.9	3.25	Y	AERATION SYSTEM NOT IN OPERATION
02/09/00	<5	N 14 W	ND	0.0	3.10	6.8	9.8	3.25	Y	AERATION SYSTEM NOT IN OPERATION
02/16/00	7	N 19 E	ND	0.0	4.23	3.7	9.3	3.25	Y	AERATION SYSTEM NOT IN OPERATION
02/21/00	8	N 37 E	ND	0.0	3.37	3.9	9.3	3.25	Y	AERATION SYSTEM NOT IN OPERATION
02/28/00	13	S 33 W	ND	0.0	0.56	9.8	9.2	3.25	Y	AERATION SYSTEM NOT IN OPERATION
03/10/00	<5	N 38 W	ND	0.0	0.52	8.6	9.7	2.25	Y	AERATION SYSTEM NOT IN OPERATION
03/23/00	10	S 65 W	ND	0.0	0.03	14.9	9.7	2.00	Y	AERATION SYSTEM NOT IN OPERATION
04/03/00	12	170	ND	0.0	3.39	13.3	9.7	1.70	Y	AERATION SYSTEM NOT IN OPERATION
04/07/00	12	304	ND	0.0	2.45	13.7	9.6	1.80	Y	AERATION SYSTEM NOT IN OPERATION
04/12/00	<1	295	ND	0.0	0.45	14.4	9.8	2.00	Y	AERATION SYSTEM NOT IN OPERATION
04/19/00	8-14	290	ND	0.0	0.65	14.9	9.9	2.00	Y	AERATION SYSTEM NOT IN OPERATION
04/26/00	<2	201	ND	0.0	0.24	15.9	9.7	2.10	Y	AERATION SYSTEM NOT IN OPERATION
05/05/00	7	158	ND	0.0	1.76	16.4	9.7	2.30	Y	AERATION SYSTEM NOT IN OPERATION
05/10/00	15-22	220	ND	0.0	0.11	22.2	9.6	2.30	Y	AERATION SYSTEM NOT IN OPERATION
05/15/00	3-8	0	ND	0.0	0.18	23.3	9.8	1.70	Y	AERATION SYSTEM NOT IN OPERATION
05/22/00	10-19	255	ND	0.0	0.37	23.9	9.8	2.00	Y	AERATION SYSTEM NOT IN OPERATION
05/30/00	4-10	11	ND	0.0	0.24	24.2	9.7	2.10	Y	AERATION SYSTEM NOT IN OPERATION

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 31, 2000 (KAT)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
06/07/00	4-10	180	ND	0.0	0.29	26.8	9.9	2.20	Y	AERATION SYSTEM NOT IN OPERATION
06/22/00	0	0	ND	0.0	0.14	29.7	9.3	2.50	Y	AERATION SYSTEM NOT IN OPERATION
06/29/00	10-17	330	ND	0.0	0.22	32.2	9.4	2.70	Y	AERATION SYSTEM NOT IN OPERATION
07/05/00	3-6	135	ND	0.0	0.00	25.0	9.4	2.90	Y	AERATION SYSTEM NOT IN OPERATION
07/14/00	<5	S 75 E	ND	0.0	0.00	23.6	9.5	3.20	Y	OIL BUILD UP ON SURFACE NW CORNER. SALT CRYSTALS AROUND PERIMETER
07/21/00	CALM	0	ND	0.0	0.00	25.6	9.4	3.30	Y	AERATION SYSTEM NOT IN OPERATION
07/27/00	8-15	255	ND	0.0	0.00	24.9	9.4	2.50	Y	AERATION SYSTEM NOT IN OPERATION
08/03/00	<3	S 16 W	ND	0.0	0.36	33.0	9.3	3.00	Y	AERATION SYSTEM NOT IN OPERATION
08/10/00	4-8	190	ND	0.0	0.00	33.3	9.4	3.10	Y	AERATION SYSTEM NOT IN OPERATION
08/18/00	3-5	95	ND	0.0	0.00	30.4	9.3	3.20	Y	AERATION SYSTEM NOT IN OPERATION
08/24/00	3-10	200	ND	0.0	0.00	34.1	9.5	3.00	Y	AERATION SYSTEM NOT IN OPERATION
09/08/00	<1	290	ND	0.0	0.00	29.6	9.4	3.10	Y	AERATION SYSTEM NOT IN OPERATION
09/13/00	5-10	195	ND	0.0	0.00	28.4	9.3	3.10	Y	AERATION SYSTEM NOT IN OPERATION
09/25/00	2-4	230	ND	0.0	0.00	- -	9.4	3.20	Y	H20 IN POND TO SMALL TO MEASURE
10/05/00	2-4	180	ND	0.0	0.00	- -	- -	3.20	Y	H20 IN POND TO SMALL TO MEASURE
10/13/00	0-2	140	ND	0.0	0.00	- -	- -	3.20	Y	BEGIN H20 TRANSFER FROM SCHNEIDER POND
10/20/00	1-3	15	.ND	0.0	0.00	- -	- -	3.20	Y	H20 TRANSFER CONTINUING @ TRICKLE
10/26/00	2-4	90	ND	0.0	0.00	17.2	9.3	3.05	Y	H20 TRANSFER CONTINUING @ SLOW RATE
11/03/00	5-8	98	ND	0.0	0.00	9.6	9.4	3.00	Y	H20 TRANSFER CONTINUING
11/10/00	4-7	120	ND	0.0	2.20	4.9	9.3	3.00	Y	H20 TRANSFER CONTINUING
11/15/00	10-18	295	ND	0.0	0.82	10.6	9.3	2.95	Y	H20 TRANSFER CONTINUING
11/21/00	4-6	110	ND	0.0	0.55	9.0	9.2	2.90	Y	MEASURE SLUDGE : < 1" THROUGHOUT POND
11/30/00	8-14	270	ND	0.0	1.40	8.0	9.5	2.90	Y	H20 TRANSFER CONTINUING
12/05/00	5-9	230	ND	0.0	1.20	7.1	9.1	3.00	Y	H20 TRANSFER CONTINUING
12/21/00	0-4	90	ND	0.0	1.72	4.0	9.5	2.80	Y	H20 TRANSFER CONTINUING
12/29/00	1-3	185	ND	0.0	1.84	2.0	9.4	2.60	Y	H20 TRANSFER CONTINUING

BP / AMOCO

Cahn Waste Mgmt. Facility

Leak Detection - Monthly Insepection Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 31, 2000 (KAT)

BLAGG ENGINEERING, INC.

	SW SUMP				SE SUMP			
INITIAL DATE	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
01/31/00	0.0	0.00	7.8	8.4	0.0	0.00	8.4	8.5
02/28/00	0.0	0.11	8.1	9.3	0.0	0.13	7.2	8.5
03/23/00	0.0	0.13	9.6	9.6	0.0	0.21	9.0	9.5
04/19/00	0.0	2.04	9	9.6	0.0	0.96	9.1	9.8
05/10/00	0.0	0.22	10.2	9.7	0.0	0.36	10.4	9.9
06/22/00	0.0	0.03	11.4	9.4	0.0	0.08	11.8	9.2
07/05/00	0.0	0.0	12.9	9.3	0.0	0.0	13.3	9.3
08/24/00	0.0	0.0	15.1	9.4	0.0	0.0	14.3	9.5
09/08/00	0.0	0.0	15.1	9.4	0.0	0.0	15.3	9.5
10/05/00	0.0	0.0	13.3	9.4	0.0	0.0	14.2	9.3
11/03/00	0.0	0.0	13.1	9.3	0.0	0.0	14.4	9.3
12/05/00	0.0	0.0	7.1	9.2	0.0	0.00	7.9	9.3

BP-AMOCO CAHN EVAPORATION POND
SUMP PUMPING X RECOVERY TESTS

Southwest Sump

Date	Time	Initial DTW	Final DTW	Pump Vol	Comments
04/13/00	840	5.2'	6.6'	5 bbl	Pump sump with SSS
04/19/00	830		5.8'		Inspection: recovery @ 3.1 gal/d
04/26/00	1115		5.6'		Inspection: recovery @ 0.7 gal/d
05/05/00	1100		5.4'		Inspection: recovery @ 0.5 gal/d
05/10/00	1345	5.3'	6.6'	5 bbl	Pump sump with SSS (7.8 gal/d)
05/11/00	1115		6.3'		Inspection: recovery @ 7.0 gal/d
05/12/00	800	6.2'	7.6'	0.5 bbl	Pump sump with SSS (10.5 gal/d)
05/15/00	930		6.6'		Inspection: recovery @ 7.8 gal/d
05/22/00	1440		5.8'		Inspection: recovery @ 2.7 gal/d
05/24/00	1030	5.7'	7.5'	1.5 bbl	Pump sump with SSS (5.3 gal/d)
05/30/00	800	6.1'	7.6'	1.0 bbl	Pump sump with SSS (7.0 gal/d)
06/07/00	1315		6.0'		Inspection: recovery @ 5.4 gal/d
06/22/00	1100		5.5'		Inspection: recovery @ 0.8 gal/d
06/29/00	1115		5.3'		Inspection: recovery @ 0.7 gal/d
07/05/00	1425		5.2'		Inspection: recovery @ 0.4 gal/d
10/26/00	1130		4.6'		Inspection: recovery @ 0.1 gal/d

Southeast Sump

Date	Time	Initial DTW	Final DTW	Pump Vol	Comments
04/13/00	840	5'	6.4'	5 bbl	Pump sump with SSS
04/19/00	830		5.5'		Inspection: recovery @ 3.5 gal/d
04/26/00	1115		5.3'		Inspection: recovery @ 0.7 gal/d
05/05/00	1100		5.2'		Inspection: recovery @ 0.3 gal/d
05/10/00	1345	5.1'	6.4'	3 bbl	Pump sump with SSS (4.7 gal/d)
05/11/00	1115		6'		Inspection: recovery @ 9.4 gal/d
05/12/00	800	5.9	7.3'	0.5 bbl	Pump sump with SSS (10.5 gal/d)
05/15/00	930		6.5'		Inspection: recovery @ 6.3 gal/d
05/22/00	1440		5.7'		Inspection: recovery @ 2.7 gal/d
05/24/00	1030	5.6	7.3'	1.5 bbl	Pump sump with SSS (5.3 gal/d)
05/30/00	800	6	7.3'	0.75 bbl	Pump sump with SSS (5.3 gal/d)
06/07/00	1315		5.8'		Inspection: recovery @ 4.4 gal/d
06/22/00	1100		5.3'		Inspection: recovery @ 0.8 gal/d
06/29/00	1115		5.2'		Inspection: recovery @ 0.3 gal/d
07/05/00	1425		5.1'		Inspection: recovery @ 0.3 gal/d
10/26/00	1130		4.4'		Inspection: recovery @ 0.15 gal/d

STATE OF NEW MEXICO
ENERGY MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

✓ Telephone ____ Personal Time 4:00 Date 3-13-00

Originating Party: Martyne Kieling

Other Parties: Buddy Shaw

Subject: Cahn - Freeze thaw Schneider Sumps Have Quite a bit of water and it looks to Be Pond water acording to PH

Discussion: Buddy will get with Jeff Blagg and Begin Pumping Sumps to check to See if water Returns. Drop water level to check for leak. Buddy will also be checking PH of water (Seem High)

Conclusions or Agreements: They will Send a report on what is Done about investigating liquid.

Distribution

Signed Martyne Kieling

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

March 7, 2000

Ms. Martyne J. Kieling
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: BP-Amoco Cahn Waste Management Facility
NW/4 Sec. 33 - T32N - R10W, San Juan County, NM
Permit NM-02-0007 Annual Report

Dear Ms. Kieling:

On behalf of BP-Amoco, Blagg Engineering, Inc. is submitting an annual report with respect to treatment zone monitoring and leak detection inspections at the subject Cahn Waste Management Facility. An NMOCD permit for this facility was issued on February 1, 1999. This annual report is for the 1999 calendar year monitoring. Attached, please find a spread sheet that includes a summary of weekly evaporation pond monitoring test results.

Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 1999 calendar year and no treatment zone monitoring was required or performed.

Leak Detection System Monitoring

No leaks into or from the leak detection system were observed during the 1999 calendar year.

Questions or comments concerning the this transmittal may be directed to Jeff Blagg of Blagg Engineering at (505)632-1199 or to Buddy Shaw with Amoco at (505)326-9219.

Respectfully submitted:
Blagg Engineering, Inc.

Jeffrey C. Blagg, P.E.,
President

cc: Denny Foust, NMOCD Aztec District Office
B.D. Shaw, BP-Amoco San Juan Operations Center

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 30, 1999 (REP)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
02/09/99	<5	N 54 E	ND	0.0	0.47	8.5	9.5	2.50	Y	
02/16/99	<5	N 42 E	ND	0.0	0.13	4.0	9.5	2.50	Y	SW SUMP 2.5 FT., SE SUMP 3.5 FT.
02/23/99	<5	N 23 W	ND	0.0	0.03	6.2	10.1	2.75	Y	SW SUMP 0.5 FT., SE SUMP 1.5 FT.
03/02/99	10	S 65 W	ND	0.0	0.05	7.7	9.6	2.75	Y	SW SUMP 1.0 FT., SE SUMP 2.5 FT.
03/09/99	<5	N 45 E	ND	0.0	0.08	7.6	9.6	3.00	Y	SW SUMP 2.5 FT., SE SUMP 2.5 FT.
03/17/99	9	S 30 W	ND	0.0	0.14	11.5	9.6	3.50	Y	SAME AS ABOVE, AERATION INITIATED 03/17/99 .
03/24/99	<5	S 25 W	ND	0.0	0.55	13.1	9.8	3.50	Y	SAME AS ABOVE .
03/29/99	<5	N 40 W	ND	0.0	1.66	9.5	9.8	3.75	Y	SAME AS ABOVE .
04/09/99	23	S 32 W	ND	0.0	4.77 *	9.9	9.8	2.25	Y	* DISS. OXY. METER NOT CALIBRATED
04/14/99	<5	N 10 E	ND	0.0	5.16 *	11.8	9.5	2.25	Y	* DISS. OXY. METER NOT CALIBRATED
04/23/99	<5	S 25 E	ND	0.0	5.72 *	12.6	9.6	2.25	Y	* DISS. OXY. METER NOT CALIBRATED
04/28/99	<5	N 12 E	ND	0.0	0.92	12.3	9.6	2.25	Y	SW SUMP 2.5 FT., SE SUMP 2.5 FT.
05/04/99	12	N 65 W	ND	0.0	0.08	9.4	9.7	2.25	Y	SW SUMP 1.75 FT., SE SUMP 1.75 FT.
05/10/99	15	S 58 W	ND	0.0	0.14	12.5	9.7	2.25	Y	SW SUMP 1.75 FT., SE SUMP 1.75 FT.
05/17/99	<5	S 34 W	ND	0.0	0.23	19.9	10.5	2.25	Y	SW SUMP 1.75 FT., SE SUMP 1.75 FT.
05/24/99	8	S 35 W	ND	0.0	0.27	15.8	11.3	2.25	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
06/03/99	10	S 27 W	ND	0.0	0.20	18.6	11.9	2.25	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
06/10/99	<5	S 50 W	ND	0.0	0.16	18.2	9.9	2.25	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
06/16/99	<5	S 65 W	ND	0.0	0.12	20.0	10.4	2.25	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
06/22/99	8	S 85 W	ND	0.0	0.07	22.0	9.7	1.25	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
06/29/99	<5	S 42 W	ND	0.0	0.08	20.4	9.9	2.25	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
07/06/99	<5	N 19 E	ND	0.0	0.03	22.5	9.5	2.50	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
07/14/99	<5	N 15 E	ND	0.0	0.03	19.8	9.8	2.50	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.

BP / AMOCO
Cahn Waste Mgmt. Facility
Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 30, 1999 (REP)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
07/20/99	8	N 21 E	ND	0.0	0.19	18.0	9.8	2.50	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
07/26/99	<5	N 48 E	ND	0.0	0.25/0.03	19.2	9.7	2.50	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
08/02/99	<5	N 17 E	ND	0.0	0.08 *	20.3	9.8	2.50	Y	* AERATION SYSTEM NOT IN OPERATION
08/09/99	<5	N 19 W	ND	0.0	0.12/0.04	19.8	9.8	2.50	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
08/16/99	<5	N 48 E	ND	0.0	0.43/0.02	19.2	9.9	3.00	Y	STARTED WATER TRANSFER FROM SCHEIDER
08/25/99	<5	N 06 E	ND	0.0	0.51/0.43	21.3	9.7	2.50	Y	SW SUMP 2.50 FT., SE SUMP 2.50 FT.
08/31/99	<5	N 56 E	ND	0.0	0.60/0.12	23.0	9.6	3.00	Y	SW SUMP 3.50 FT., SE SUMP 3.00 FT.
09/10/99	<5	N 04 E	ND	0.0	0.24/0.02	19.5	9.6	3.00	Y	SW SUMP 3.50 FT., SE SUMP 3.00 FT.
09/15/99	<5	N 42 E	ND	0.0	0.22/0.07	17.7	9.6	3.00	Y	SW SUMP 3.50 FT., SE SUMP 3.00 FT.
09/20/99	<5	N 18 E	ND	0.0	0.20/0.08	19.4	9.7	3.00	Y	SW SUMP 3.50 FT., SE SUMP 3.00 FT.
09/29/99	<5	S 33 E	ND	0.0	0.06 *	19.4	9.9	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
10/05/99	7	N 15 E	ND	0.0	0.02 *	17.6	9.8	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
10/14/99	<5	N 42 E	ND	0.0	0.02 *	18.1	9.7	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
10/20/99	<5	N 51 E	ND	0.0	0.02 *	17.9	9.8	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
10/27/99	<5	N 48 E	ND	0.0	0.03 *	18.2	9.7	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
11/05/99	<5	N 56 W	ND	0.0	0.02 *	18.6	9.9	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
11/10/99	<5	N 33 E	ND	0.0	0.02 *	17.8	9.6	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
11/17/99	<5	N 39 E	ND	0.0	0.00 *	10.0	9.1	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
11/24/99	<5	N 26 E	ND	0.0	0.00 *	15.0	9.9	3.00	Y	* AERATION SYSTEM NOT IN OPERATION
11/30/99	<5	N 30 E	ND	0.0	0.00 *	9.8	9.6	3.25	Y	* AERATION SYSTEM NOT IN OPERATION
12/10/99	<5	N 33 W	ND	0.0	3.76 *	8.8	9.2	3.25	Y	* AERATION SYSTEM NOT IN OPERATION
12/16/99	<5	N 42 E	ND	0.0	4.22 *	8.7	0.6	3.25	Y	* AERATION SYSTEM NOT IN OPERATION
12/23/99	7	N 18 E	ND	0.0	2.86*	8.9	0.2	3.25	Y	* AERATION SYSTEM NOT IN OPERATION
12/30/99	<5	N 56 E	ND	0.0	2.29*	8.7	0.3	3.25	Y	* AERATION SYSTEM NOT IN OPERATION

BP / AMOCO

Cahn Waste Mgmt. Facility

Leak Detection - Monthly Insepection Field Data Summary

SW / 4, Section 28, T 32 N, R 10 W, N.M.P.M
San Juan County, New Mexico

REVISED DATE: DECEMBER 30, 1999 (REP)

BLAGG ENGINEERING, INC.

	SW SUMP				SE SUMP			
INITIAL DATE	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
02/09/99	0.0	0.11	7.0	9.5	0.0	0.26	6.5	9.5
03/09/99	0.0	0.01	6.5	9.6	0.0	0.00	6.9	9.4
04/28/99	0.0	0.86	12.3	10.0	0.0	1.04	10.4	10.0
05/24/99	0.0	0.17	12.7	9.9	0.0	0.09	14.4	9.7
06/29/99	0.0	0.00	18.8	9.9	0.0	0.00	19.5	9.5
07/26/99	0.0	0.00	18.0	9.8	0.0	0.00	18.8	9.7
08/31/99	0.0	0.09	22.8	9.4	0.0	0.05	23.2	9.2
09/29/99	0.0	0.00	20.3	9.8	0.0	0.00	21.2	9.7
10/27/99	0.0	0.00	17.6	9.9	0.0	0.00	17.0	9.7
11/30/99	0.0	0.00	12.5	9.3	0.0	0.00	11.3	9.1
12/30/99	0.0	0.00	5.4	9.6	0.0	0.00	3.6	9.7

BLAGG ENGINEERING, INC.
P.O. Box 87, Bloomfield, New Mexico 87413
Phone: (505)632-1199 Fax: (505)632-3903

February 24, 1999

Ms. Martyne J. Kieling
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: Amoco Production Company
Cahn Waste Management Facility, NW/4 Sec. 33 - T32N - R10W
Permit NM-02-0007 Annual Report

Dear Ms. Kieling:

On behalf of Amoco Production Company, Blagg Engineering, Inc. is submitting an annual report with respect to treatment zone monitoring and leak detection inspections at the subject Cahn Waste Management Facility. An NMOCD permit for this facility was issued on February 1, 1999. Annual reporting criteria stipulated in this permit require data results be submitted to NMOCD by March 1 for the prior years monitoring. Note that since this permit was issued in February, 1999 no monitoring data is available for the 1998 calendar year. Submittal of this report for the 1998 calendar year is to satisfy the requirements of the permit.

Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 1998 calendar year and no treatment zone monitoring was required or performed.

Leak Detection System Monitoring

No leaks into or from the leak detection system were observed during the 1998 calendar year.

Questions or comments concerning the this transmittal may be directed to Jeff Blagg of Blagg Engineering at (505)632-1199 or to Buddy Shaw with Amoco at (505)326-9200.

Respectfully submitted:
Blagg Engineering, Inc.

Jeffrey C. Blagg, P.E.,
President

cc: Denny Foust, NMOCD Aztec District Office
B.D. Shaw, Amoco San Juan Operations Center

5-499
mjk