

**NM2 - 7**

**MONITORING  
REPORTS  
YEAR(S):**

**2010 - 2007**

***BLAGG ENGINEERING, INC.***

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

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CERTIFIED: 7007 0220 0004 3556 7721

2011 FEB 22 P 12: 53

February 17, 2011

Mr. Brad Jones  
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. Jones:

On behalf of BP America Production Co., Blagg Engineering, Inc. (BEI) is submitting this 2010 calendar year annual report for the Cahn Waste Management Facility, Permit NM-02-0007. 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 other pipelines discharge water to the facility. Weekly monitoring has not indicated the generation of dissolved sulfide or hydrogen sulfide gas during any inspections. Between June 22, 2010 and October 19, 2010 the pond was primarily dry or had a small amount of precipitation water on top of a salt precipitate. At year end 2010 a trace amount of residual precipitation water was in the pond, with a freeboard of 3.3 feet.

**Landfarm Treatment Zone Monitoring**

No landfarm cells were constructed during the 2010 calendar year and no treatment zone monitoring was required or performed.

**Evaporation Pond Sludge Thickness**

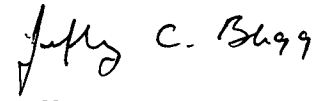
Pond sludge thickness was measured on September 7, 2010. On this date the pond was dry and salt precipitation covered the entire base. The average salt/sediment thickness was measured at 3.9 inches, with the majority of this accumulation being the salt precipitate.

### **Leak Detection System Monitoring**

The primary top liner leak detection system remained dry for the entire 2010 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 ( $< 0.1$  gallon/week) from prior liquids trapped within the deep, abandon liner system.

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

Respectfully submitted:  
***Blagg Engineering, Inc.***



Jeffrey C. Blagg, P.E.,  
President

Attachments: Monitoring Spread Sheets

cc: Brandon Powell, NMOCD Aztec District Office  
Jeff Peace, P.E., 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 28, 2010 (JCB)

BLAGG ENGINEERING, INC.

INSPECT DATE	WIND SPEED mph	WIND DIR.	H2S ppm	DISS. SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
INSPECT DATE	WIND SPEED mph	WIND DIR.	H2S ppm	DISS. SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE-BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
01/05/2010	2-5	NE	0.0	0.0	TLTM	2.0	7.9	>3.3	Y	Base Salt Covered. Water transfer from Schnelder off
01/15/2010	4-8	N	0.0	0.0	TLTM	3.6	8.4	>3.3	Y	Base Salt Covered. Water transfer from Schnelder off
01/20/2010	0		0.0	0.0	TLTM	3.9	8.3	3.3	Y	Base Salt Covered. Water transfer from Schnelder off
01/30/2010	0-1	N	0.0	0.0	TLTM	3.8	8.4	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
02/06/2010	0-4	N	0.0	0.0	TLTM	3.2	8.1	3.1	Y	Base Salt Covered. Water transfer from Schnelder off
02/10/2010	2-4	NE	0.0	0.0	TLTM	3.1	8.9	3.1	Y	Base Salt Covered. Water transfer from Schnelder off
02/18/2010	10-15	N	0.0	0.0	TLTM	1.0	8.1	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
02/24/2010	0		0.0	0.0	TLTM	13.3	8.6	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
03/01/2010	1-3	E	0.0	0.0	TLTM	6.2	8.1	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
03/09/2010	5-8	E	0.0	0.0	TLTM	9.0	8.4	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
03/18/2010	0		0.0	0.0	TLTM	11.2	8.5	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
03/29/2010	5-10	SE	0.0	0.0	0.89	15.8	8.5	3.1	Y	Base Salt Covered. Water transfer from Schnelder on
04/05/2010	20-40	SW	0.0	0.0	1.02	16.1	8.5	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
04/15/2010	0		0.0	0.0	0.89	18.4	9.1	3.2	Y	Base Salt Covered. Water transfer from Schnelder on
04/20/2010	0		0.0	0.0	0.59	18.6	9.2	3.2	Y	Base Salt Covered. Water transfer from Schnelder on
04/30/2010	20-35	W	0.0	0.0	0.97	20.0	9.2	3.0	Y	Base Salt Covered. Water transfer from Schnelder on
05/03/2010	10-20	W	0.0	0.0	1.17	21.2	8.7	2.9	Y	Base Salt Covered. Water transfer from Schnelder on
05/10/2020	15-30	S	0.0	0.0	Meter Down	24.2	8.4	2.9	Y	Base Salt Covered. Water transfer from Schnelder off
05/18/2010	0		0.0	0.0	Meter Down	15.0	8.4	3.0	Y	Base Salt Covered. Water transfer from Schnelder on
05/25/2020	0		0.0	0.0	1.46	13.0	8.0	3.1	Y	Base Salt Covered. Water transfer from Schnelder off
06/01/2010	5-10	SW	0.0	0.0	1.69	27.2	8.4	3.2	Y	Base Salt Covered. Water transfer from Schnelder off
06/08/2010	10-20	SW	0.0	0.0	1.50	34.2	9.0	3.3	Y	Base Salt Covered. Water transfer from Schnelder off
06/15/2010	5-10	N	0.0	0.0	TLTM	12.2	9.4	>3.3	Y	Base Salt Covered. Water transfer from Schnelder off
06/22/2010	5-10	N	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schnelder off. Pond Dry.
06/28/2010	0		0.0					>3.3	Y	Base Salt Covered. Water transfer from Schnelder off. Pond Dry.

# 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 28, 2010 (JCB)

BLAGG ENGINEERING, INC.

INSPECT DATE	WIND SPEED mph	WIND DIR.	H2S ppm	DISS. SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	FREE- BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
07/07/2010	5-8	E	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
07/14/2010	5-10	S	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
07/19/2010	10-15	S	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
07/27/2010	0-3	N	0.0	0.0	TLTM	28.0	8.7	3.3	Y	Base Salt Covered. Water transfer from Schneider off.
08/02/2010	0		0.0	0.0	TLTM	23.0	8.5	>3.3	Y	Base Salt Covered. Water transfer from Schneider off.
08/10/2010	5-10	NE	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
08/17/2010	0-1	E	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
08/24/2010	0-2	E	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
08/30/2010	5-10	S	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
09/07/2010	5-8	N	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
09/13/2010	3-5	N	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
09/20/2010	2-5	NE	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
09/29/2010	2-5	N	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
10/04/2010	2-4	S	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
10/11/2010	3-6	S	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
10/19/2010	5-10	N	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
10/29/2010	0		0.0	0.0	TLTM	12.1	8.6	>3.3	Y	Base Salt Covered. Water transfer from Schneider off.
11/04/2010	10-15	N	0.0	0.0	TLTM	2.5	9.4	>3.3	Y	Base Salt Covered. Water transfer from Schneider off.
11/10/2010	0-3	S	0.0	0.0	TLTM	3.3	9.2	>3.3	Y	Base Salt Covered. Water transfer from Schneider off.
11/15/2010	5-10	N	0.0	0.0	TLTM	-0.3	10.2	>3.3	Y	Base Salt Covered. Water transfer from Schneider off.
11/22/2010	10-20	W	0.0	0.0	TLTM	3.0	9.5	>3.3	Y	Base Salt Covered. Water transfer from Schneider off.
12/01/2010	1-3	N	0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. 1" Ice.
12/06/2010	0		0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
12/13/2010	0		0.0					>3.3	Y	Base Salt Covered. Water transfer from Schneider off. Pond Dry.
12/20/2010	0-1	NE	0.0	0.0	TLTM	4.0	8.3	>3.3	Y	Base Salt Covered. Water transfer from Schneider off.
12/27/2010	0		0.0	0.0	TLTM	1.0	9.2	3.3	Y	Base Salt Covered. 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 28, 2010 (JCB)

**BLAGG ENGINEERING, INC.**

INITIAL DATE	SW SUMP				SE SUMP			
	DISSOLVED SULFIDE	DISSOLVED OXYGEN	TEMP.	pH	DISSOLVED SULFIDE	DISSOLVED OXYGEN	TEMP.	pH
	ppm	ppm	celcius		ppm	ppm	celcius	
01/05/10	0.0	0.10	5.8	8.6	0.0	0.44	6.2	8.4
02/06/10	0.0	0.61	5.0	8.7	0.0	0.38	5.1	8.5
03/01/10	0.0	0.11	7.2	8.4	0.0	0.77	6.9	8.2
04/05/10	0.0	0.41	14.7	8.8	0.0	0.16	15.1	8.9
05/03/10	0.0	0.08	22.2	8.9	0.0	0.19	22.4	8.9
06/01/10	0.0	0.15	13.7	8.7	0.0	0.95	13.7	9.2
07/07/10	0.0	0.09	21.0	8.5	0.0	1.01	22.1	8.5
08/02/10	0.0	0.35	20.7	8.2	0.0	2.60	22.2	8.6
09/07/10	0.0	0.34	20.8	8.3	0.0	1.90	20.7	8.5
10/04/10	0.0	0.16	19.6	8.8	0.0	1.20	19.5	9.1
11/04/10	0.0	0.08	18.0	9.0	0.0	0.94	17.5	9.0
12/01/10	0.0	2.60	7.8	9.1	0.0	5.40	8.1	9.2

**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 28, 2010 (JCB)

**BLAGG ENGINEERING, INC.**

INITIAL DATE	SW SUMP				SE SUMP			
	DISSOLVED SULFIDE	DISSOLVED OXYGEN	TEMP.	pH	DISSOLVED SULFIDE	DISSOLVED OXYGEN	TEMP.	pH
	ppm	ppm	celcius		ppm	ppm	celcius	
01/05/10	0.0	0.10	5.8	8.6	0.0	0.44	6.2	8.4
02/06/10	0.0	0.61	5.0	8.7	0.0	0.38	5.1	8.5
03/01/10	0.0	0.11	7.2	8.4	0.0	0.77	6.9	8.2
04/05/10	0.0	0.41	14.7	8.8	0.0	0.16	15.1	8.9
05/03/10	0.0	0.08	22.2	8.9	0.0	0.19	22.4	8.9
06/01/10	0.0	0.15	13.7	8.7	0.0	0.95	13.7	9.2
07/07/10	0.0	0.09	21.0	8.5	0.0	1.01	22.1	8.5
08/02/10	0.0	0.35	20.7	8.2	0.0	2.60	22.2	8.6
09/07/10	0.0	0.34	20.8	8.3	0.0	1.90	20.7	8.5
10/04/10	0.0	0.16	19.6	8.8	0.0	1.20	19.5	9.1
11/04/10	0.0	0.08	18.0	9.0	0.0	0.94	17.5	9.0
12/01/10	0.0	2.60	7.8	9.1	0.0	5.40	8.1	9.2

**BLAGG ENGINEERING, INC.**

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

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February 22, 2010

Mr. Brad Jones  
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. Jones:

On behalf of BP America Production Co., Blagg Engineering, Inc. (BEI) is submitting this 2009 calendar year annual report for the Cahn Waste Management Facility, Permit NM-02-0007. 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 other pipelines discharge water to the facility. Weekly monitoring has not indicated the generation of dissolved sulfide or hydrogen sulfide gas during any inspections. Between April and December the pond was primarily dry or had a small amount of precipitation water on top of a salt precipitate. At year end 2009 a trace amount of residual water was in the pond, with a freeboard of 3.3 feet.

**Landfarm Treatment Zone Monitoring**

No landfarm cells were constructed during the 2009 calendar year and no treatment zone monitoring was required or performed.

**Evaporation Pond Sludge Thickness**

Pond sludge thickness was measured on November 6, 2009. On this date there was about 1-inch of water in the pond and salt precipitation covered the entire base. The average salt/sediment thickness was measured at 4.1 inches, with the majority of this accumulation being the salt precipitate.

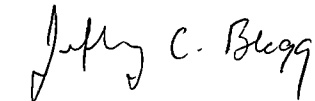


### **Leak Detection System Monitoring**

The primary top liner leak detection system remained dry for the entire 2009 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 ( $< 0.1$  gallon/week) from prior liquids trapped within the deep, abandon liner system.

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

Respectfully submitted:  
***Blagg Engineering, Inc.***



Jeffrey C. Blagg, P.E.,  
President

Attachments: Monitoring Spread Sheets

cc: Brandon Powell, NMOCD Aztec District Office  
Buddy Shaw, 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 29, 2009 (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
01/05/09	2-5	FROM 270	ND	0.0	NA	1.2	8.2	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
01/15/09	CALM	0	0	0.0	NA	4.7	8.6	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
01/21/09	5-10	N 10 E	0	0.0	TLTM	6.0	9.0	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
01/26/09	10-15	FROM 180	0	0.0	TLTM	6.4	9.1	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
02/03/09	CALM	0	0	0.0	TLTM	9.7	9.2	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
02/09/09	2-4	FROM 225	0	0.0	TLTM	9.3	9.2	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
02/19/09	5-10	FROM 20	0	0.0	TLTM	3.8	9.2	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
02/27/09	2-4	FROM 20	0	0.0	TLTM	3.7	9.2	3.20	Y	Salt covering entire base - Trace precipitation water on top of salt
03/06/09	5-8	FROM 10	0	0.0	TLTM	2.2	9.6	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
03/11/09	5-8	FROM 0	0	0.0	TLTM	1.8	9.6	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
03/16/09	CALM	0	0	0.0	TLTM	4.7	9.6	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
03/27/09	0-5	S	0	0.0	TLTM	4.0	9.4	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
04/06/09	5-10	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
04/17/09	5-8	FROM 270	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
04/24/09	2-4	FROM 270	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
04/30/09	CALM	0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
05/07/09	5-10	FROM 270	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
05/14/09	5-10	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
05/20/09	10-15	FROM 0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
05/27/09	5-10	FROM 20	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
06/01/09	2-4	FROM 270	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
06/09/09	10-20	FROM 210	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
06/15/09	2-5	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
06/25/09	5-10	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
06/29/09	10-15	FROM 170	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
07/03/09	CALM	0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
07/13/09	CALM	0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
07/17/09	10-15	FROM 0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
07/22/09	2-4	FROM 90	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt

# 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 29, 2009 (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
07/27/09	CALM	0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
08/03/09	0-2	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
08/10/09	5-10	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
08/19/09	4-8	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
08/24/09	CALM	0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
09/03/09	2-4	FROM 270	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
09/08/09	5-10	FROM 0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
09/16/09	2-4	FROM 0	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
09/21/09	5-10	FROM 180	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - no water
09/30/09	20-30	FROM 250	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - no water
10/07/09	10-12	FROM 180	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - no water
10/15/09	2-4	FROM 90	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - Trace precipitation water on top of salt
10/23/09	2-4	FROM 90	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - Trace precipitation water on top of salt
10/28/09	4-8	FROM 180	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - Trace precipitation water on top of salt
11/06/09	5-10	FROM 180	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - Trace precipitation water on top of salt
11/11/09	2-5	FROM 45	0	NA	NA	NA	NA	3.3	Y	Measure Salt Thickness (Annual Measurements) Ave=4.1"
11/18/09	5-10	FROM 180	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - Trace precipitation water on top of salt
11/25/09	5-10	FROM 20	0	NA	NA	NA	NA	3.3	Y	Salt covering entire base - Trace precipitation water on top of salt
12/02/09	15-20	FROM 270	0	NA	NA	NA	NA	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
12/09/09	5-10	FROM 270	0	0.0	NA	2.6	9.1	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
12/16/09	2-4	FROM 90	0	0.0	NA	0.9	8.4	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
12/23/09	5-10	FROM 180	0	0.0	NA	3.9	8.6	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt
12/28/09	0-2	FROM 210	0	0.0	NA	4.1	8.4	3.30	Y	Salt covering entire base - Trace precipitation water on top of salt

**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 03, 2009 (KAG)

**BLAGG ENGINEERING, INC.**

INITIAL DATE	SW SUMP				SE SUMP			
	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
01/05/09	0.0	0.66	7.2	9.2	0.0	0.09	6.6	9.2
01/26/09	0.0	0.09	6.5	9.2	0.0	0.13	6.8	9.3
02/03/09	0.0	0.08	7.1	9.2	0.0	0.02	7.6	9.2
03/06/09	0.0	0.08	5.2	9.5	0.0	0.03	4.7	9.6
05/12/09	0.0	0.00	12.7	9.2	0.0	0.06	13.3	9.2
06/01/09	0.0	0.09	20.0	9.6	0.0	0.13	20.4	9.7
07/03/09	0.0	0.19	21.5	9.9	0.0	0.50	22.0	10.2
08/03/09	0.0	0.65	23.0	9.7	0.0	0.29	24.2	9.6
09/03/09	0.0	0.49	23.1	9.7	0.0	0.66	23.8	9.7
10/07/09	0.0	0.49	15.4	9.8	0.0	0.72	14.8	9.7
11/06/09	0.0	0.51	11.2	9.4	0.0	0.30	12.6	9.3
12/02/09	0.0	0.25	9.6	9.2	0.0	0.16	10.0	9.0

***BLAGG ENGINEERING, INC.***

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

RECEIVED

February 11, 2009

FEB 17 2009

Environmental Bureau  
Oil Conservation Division

Mr. Brad Jones  
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. Jones:

On behalf of BP America Production Co., Blagg Engineering, Inc. (BEI) is submitting this 2008 calendar year annual report for the Cahn Waste Management Facility, Permit NM-02-0007. 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 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 8.2 - 9.9 units. During the period between April 22 - November 25, 2008 the pond was primarily empty of water with the base surface covered with a salt precipitate. At year end 2008 a trace amount of residual water was in the pond, with a freeboard of 3.2 feet.

**Landfarm Treatment Zone Monitoring**

No landfarm cells were constructed during the 2008 calendar year and no treatment zone monitoring was required or performed.

**Evaporation Pond Sludge Thickness**

Pond sludge thickness was measured on June 12, 2008. On this date there was no water in the pond and salt precipitation covered the entire base. The average salt/sediment thickness was measured at 4.4 inches, with the majority of this accumulation being the salt precipitate.

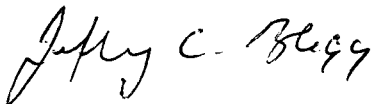
### **Leak Detection System Monitoring**

The primary top liner leak detection system remained dry for the entire 2008 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 ( $< 0.1$  gallon/week) from prior liquids trapped within the deep, abandon liner system.

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

Respectfully submitted:

***Blagg Engineering, Inc.***

A handwritten signature in black ink, appearing to read "Jeffrey C. Blagg". The signature is written in a cursive, flowing style.

Jeffrey C. Blagg, P.E.,  
President

Attachments: Monitoring Spread Sheets

cc: Brandon Powell, NMOCD Aztec District Office  
Larry Schlotterback, 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 30, 2008 (KAG)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celsius	pH	FREE- BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
01/02/08	CALM	0	0	0.0	TLTM	1.9	9.7	3.20	Y	H2O XFER FROM SCHNEIDER OFF
01/11/08	4-8	FROM 180	0	NA	NA	NA	NA	3.20	Y	ICE ON ENTIRE SURFACE
01/16/08	3-5	FROM 90	0	NA	NA	NA	NA	3.20	Y	'THICK ICE ON POND SURFACE
01/24/08	4-8	FROM 45	0	0.0	3.20	3.4	9.7	3.20	Y	H2O XFER FROM SCHNEIDER OFF
01/29/08	10-15	FROM 225	0	0.0	2.10	0.3	9.7	3.20	Y	'THICK ICE ON ENTIRE SURFACE
02/04/08	CALM	0	0	NA	NA	NA	NA	3.10	Y	'ABOUT 20" NEW SNOW ON GROUND SURFACE
02/14/08	8-15	FROM 210	0	0.0	TLTM	7.8	9.7	3.00	Y	H2O XFER OFF
02/22/08	CALM	0	0	0.0	1.74	6.9	9.6	3.00	Y	H2O XFER OFF
02/29/08	10-15	FROM 0	0	0.0	TLTM	5.6	9.6	3.10	Y	H2O XFER OFF
03/03/08	5-12	FROM 190	0	0.0	1.10	11.0	9.8	3.00	Y	H2O XFER OFF
03/10/08	5-8	FROM N10W	0	0.0	3.70	1.5	9.7	3.10	Y	H2O XFER OFF
03/16/08	5-10	FROM 270	0	0.0	0.72	14.0	9.7	3.20	Y	H2O XFER OFF
03/26/08	5-10	FROM 30	0	0.0	3.75	9.0	9.7	3.20	Y	H2O XFER OFF
04/04/08	CALM	0	0	0.0	5.60	8.6	9.8	3.30	Y	H2O XFER OFF
04/08/08	CALM	0	0	0.0	TLTM	9.6	9.9	3.30	Y	H2O XFER OFF
04/14/08	0-5	FROM 180	0	0.0	TLTM	22.5	9.7	3.30	Y	H2O XFER OFF. SALT FORMING ALONG EDGES
04/22/08	CALM	0	0	NA	NA	NA	NA	3.30	Y	SALT FORMED ON ENTIRE BASE W/ THIN LAYER OF H2O
04/28/08	5-10	FROM 225	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
05/05/08	3-5	FROM 0	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
05/14/08	5-10	FROM 90	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
05/19/08	CALM	0	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
05/27/08	0-4	FROM 180	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
06/06/08	5-10	FROM 235	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
06/11/08	15-25	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
06/12/08	NA	NA	NA	NA	NA	NA	NA	3.30	Y	ANNUAL SLUDGE MEASUREMENTS, AVG SALT THICKNESSES 4.4"
06/18/08	0-5	FROM 90	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
06/24/08	5-10	N20E	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
07/02/08	CALM	0	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
07/08/02	2-7	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF

# 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 30, 2008 (KAG)

BLAGG ENGINEERING, INC.

INITIAL DATE	WIND SPEED mph	WIND DIRECTION bearing	H2S ppm	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celsius	pH	FREE- BOARD ft.	LINER / BERM INTEGRITY	COMMENTS
07/17/08	5-10	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
07/22/08	CALM	0	0	0.0	TLTM	33.0	9.3	3.30	Y	POND COVERED W/ SALT & +/- 1" RECENT PRECIP H2O
07/30/08	0-5	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
08/08/08	0-3	DUE WEST	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
08/12/08	CALM	0	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
08/21/08	CALM	0	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
08/29/08	2-5	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
09/04/08	5-8	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
09/09/08	0-3	FROM 45	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
09/15/08	5-8	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
09/23/08	3-5	FROM 45	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
10/02/08	3-5	FROM 180	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
10/06/08	5-8	FROM 195	0	0.0	TLTM	22.0	9.2	3.30	Y	POND COVERED W/ SALT & +/- 1" RECENT PRECIP H2O
10/14/08	5-8	FROM 180	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
10/23/08	10-12	FROM 180	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
10/29/08	5-10	FROM 190	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
11/06/08	10-15	FROM 270	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
11/14/08	2-5	FROM 180	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
11/18/08	5-8	FROM 180	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
11/25/08	10-15	FROM NORTH	0	NA	NA	NA	NA	3.30	Y	'SALT ON ENTIRE BASE, XFER FROM SCHNEIDER OFF
12/05/08	CALM	0	0	NA	TLTM	8.0	8.2	3.30	Y	POND COVERED W/ SALT & +/- 2" RECENT PRECIP H2O
12/12/08	0-5	FROM 90	0	0.0	TLTM	14.7	9.3	3.30	Y	POND COVERED W/ SALT & +/- 2" RECENT PRECIP H2O
12/19/08	10-12	FROM 225	0	0.0	TLTM	3.8	9.8	3.30	Y	POND COVERED W/ SALT & +/- 2" RECENT PRECIP H2O
12/24/08	CALM	0	0	0.0	TLTM	-1.1	9.5	3.30	Y	POND COVERED W/ SALT & +/- 2" RECENT PRECIP H2O
12/29/08	5-8	FROM 20	0	NA	NA	NA	NA	3.20	Y	THICK ICE COVERING SURFACE



**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 05, 2008 (KAG)

**BLAGG ENGINEERING, INC.**

INITIAL DATE	SW SUMP				SE SUMP			
	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
01/02/08	0.0	0.00	5.7	9.5	0.0	0.09	6.1	9.5
02/04/08	0.0	0.05	4.6	9.5	0.0	0.10	4.1	9.5
03/03/08	0.0	0.08	5.9	9.4	0.0	1.09	6.1	9.3
04/04/08	0.0	0.19	7.0	9.6	0.0	0.64	6.6	9.4
05/05/08	0.0	1.20	10.1	9.4	0.0	1.50	9.3	9.2
06/06/08	0.0	0.91	25.1	9.6	0.0	0.14	26.0	9.7
07/02/08	0.0	0.10	23.3	9.3	0.0	0.21	22.1	9.2
08/12/08	0.0	0.12	26.4	9.4	0.0	0.09	27.8	9.4
09/04/08	0.0	0.02	22.2	9.0	0.0	0.09	22.0	9.1
10/02/08	0.0	0.10	20.6	9.1	0.0	0.15	19.9	9.1
11/06/08	0.0	NA	13.6	9.0	0.0	NA	14.0	8.1
12/04/08	0.0	0.18	10.0	9.2	0.0	0.06	9.8	9.2

***BLAGG ENGINEERING, INC.***

P.O. Box 87, Bloomfield, New Mexico 87413

Phone: (505)632-1199 Fax: (505)632-3903

RECEIVED

2008 FEB 1 PM 12 28

January 29, 2008

Mr. Brad Jones  
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 2007 calendar year annual report for the Cahn Waste Management Facility, Permit NM-02-0007. 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 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 9.2 - 9.9 units. Minimum freeboard was measured at 1.5 feet beginning on February 27, 2007. At year end 2007 water evaporation from the pond resulted in a freeboard of 3.2 feet.

**Landfarm Treatment Zone Monitoring**

No landfarm cells were constructed during the 2007 calendar year and no treatment zone monitoring was required or performed.

**Evaporation Pond Sludge Thickness**

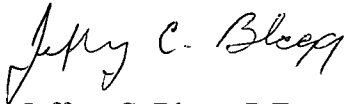
Pond sludge thickness was measured on August 3, 2007. On this date the water level in the pond was minimal (less than 9"± free water) with salt precipitation accumulation covering the entire base. The average salt/sediment thickness measured was 0.5 inches, with the majority of this accumulation believed to be salt.

### **Leak Detection System Monitoring**

The top liner leak detection system remained dry for the entire 2007 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 ( $< 0.1$  gallon/week) from prior liquids trapped within the deep, abandon liner system.

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

Respectfully submitted:  
***Blagg Engineering, Inc.***

A handwritten signature in black ink, appearing to read "Jeffrey C. Blagg".

Jeffrey C. Blagg, P.E.,  
President

Attachments: Monitoring Spread Sheets

cc: Brandon Powell, NMOCD Aztec District Office  
Larry Schlotterback, 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: JANUARY 02, 2008 (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
01/02/07	CALM	0	ND	0.0	1.32	0.9	9.9	1.60	Y	'ICE ON ENTIRE SURFACE
01/08/07	3-5	FROM 30	ND	0.0	2.12	0.5	9.8	1.60	Y	ICE (1/4"-1/2") ON ENTIRE SURFACE
01/16/07	1-3	FROM 30	ND	0.0	2.14	0.3	9.8	1.60	Y	1" THICK ICE ON SURFACE
01/23/07	2-4	FROM 210	ND	0.0	1.96	0.2	9.8	1.60	Y	'ICE (1"-1 1/2" THICK) ON SURFACE
02/01/07	4-6	FROM 100	ND	0.0	1.37	0.3	9.7	1.60	Y	'ICE (1/2"-1" THICK) ON SURFACE
02/06/07	3-8	FROM 45	ND	0.0	3.33	2.1	9.7	1.60	Y	ICE (1/4"-1/2") ON ENTIRE SURFACE
02/12/07	15-28	FROM 270	ND	0.0	2.72	3.2	9.7	1.60	Y	'ICE ALL MELTED
02/19/07	2-5	FROM 210	ND	0.0	1.94	6.3	9.8	1.60	Y	Water transfe from Schneider Pond
02/27/07	20-30	FROM 260	ND	0.0	2.41	7.3	9.7	1.50	Y	
03/06/07	10-15	FROM 270	ND	0.0	4.20	8.0	9.6	1.50	Y	
03/12/07	4-6	FROM 0	ND	0.0	2.86	9.1	9.7	1.55	Y	
03/19/07	6-10	FROM 0	ND	0.0	2.70	7.9	9.7	1.55	Y	
03/27/07	10-15	FROM 180	ND	0.0	1.90	15.7	9.4	1.50	Y	
04/02/07	10-20	FROM 180	ND	0.0	1.70	14.0	9.3	1.50	Y	
04/09/07	10-15	FROM 260	ND	0.0	0.77	14.7	9.2	1.50	Y	
04/17/07	2-5	FROM 180	ND	0.0	0.85	12.7	9.5	1.50	Y	
04/24/07	10-30	FROM 270	ND	0.0	1.31	10.0	9.5	1.55	Y	Fresh cow tracks around pond perimeter
04/30/07	0-2	FROM 180	ND	0.0	0.70	20.4	9.5	1.60	Y	
05/04/07	5-10	FROM 180	ND	0.0	0.60	21.0	9.2	1.60	Y	
05/09/07	0-5	FROM 270	ND	0.0	1.81	21.3	9.3	1.60	Y	
05/16/07	5-10	FROM 180	ND	0.0	0.75	23.8	9.4	1.70	Y	
05/22/07	15-25	FROM 310	ND	0.0	0.58	20.3	9.5	1.70	Y	
05/28/07	CALM	0	ND	0.0	0.63	16.7	9.5	1.95	Y	
06/01/07	2-4	FROM 180	ND	0.0	0.49	17.1	9.4	2.00	Y	
06/06/07	12-15	FROM 180	ND	0.0	0.34	16.8	9.3	2.15	Y	
06/15/07	2-4	FROM 10	ND	0.0	1.52	17.4	9.2	2.30	Y	
06/19/07	0-4	FROM 190	ND	0.0	1.3	24.6	9.3	2.40	Y	
06/25/07	CALM	0	ND	0.0	1.32	24.1	9.3	2.60	Y	
07/02/07	5-8	FROM 180	ND	0.0	0.61	28.6	9.3	2.60	Y	

# 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: JANUARY 02, 2008 (K4G)

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
07/09/07	0-3	FROM 45	ND	0.0	2.07	27.7	9.3	2.90	Y	
07/16/07	5-8	FROM 45	ND	0.0	2.39	23.8	9.2	3.00	Y	
07/25/07	5-10	FROM 180	ND	0.0	3.10	26.6	9.2	3.10	Y	
07/31/07	3-8	FROM 90	ND	0.0	N/A	28.0	9.4	3.10	Y	
08/03/07	0-4	FROM 180	ND	0.0	N/A	28.6	9.4	3.10	Y	Conduct Annual Sludge Thickness Measurements
08/07/07	2-4	FROM 180	ND	0.0	N/A	26.1	9.4	3.10	Y	
08/13/07	CALM	0	ND	0.0	N/A	26.1	9.4	3.10	Y	
08/20/07	0-2	FROM 90	ND	0.0	N/A	24.6	9.4	3.20	Y	Salt crystals forming on corners and edges
08/27/07	CALM	0	ND	0.0	N/A	24.7	9.6	3.20	Y	Salt forming on all edges of pond
09/05/07	0-3	FROM 190	ND	N/A	N/A	N/A	N/A	3.30+	Y	Salt forming on majority of pond surface.
09/10/07	5-8	FROM 315	ND	N/A	N/A	N/A	N/A	3.30+	Y	Salt on entire surface, with minor water on top of salt
09/17/07	0-3	FROM 135	ND	N/A	N/A	N/A	N/A	3.30+	Y	
09/24/07	5-8	FROM 180	ND	0.0	N/A	23.4	9.6	3.30	Y	
10/01/07	0-5	FROM 120	ND	N/A	N/A	NA	NA	3.30+	Y	
10/10/07	0-3	FROM 90	ND	0.0	N/A	26.3	9.6	3.30	Y	
10/15/07	8-10	FROM 180	ND	N/A	N/A	NA	NA	3.30+	Y	
10/23/07	CALM	0	ND	N/A	N/A	NA	NA	3.30+	Y	
10/29/07	5-10	FROM 135	ND	N/A	N/A	NA	NA	3.30+	Y	
11/05/07	10-12	FROM 350	ND	N/A	N/A	NA	NA	3.30+	Y	
11/13/07	0-3	FROM 180	ND	N/A	N/A	NA	NA	3.30+	Y	
11/19/07	CALM	0	ND	N/A	N/A	NA	NA	3.30+	Y	
11/26/07	5-8	FROM 0	ND	N/A	N/A	NA	NA	3.30+	Y	Salt on entire surface with minor water from recent precipitation
12/03/07	CALM	0	ND	0.0	N/A	3.2	9.7	3.30	Y	
12/11/07	0-3	FROM 90	ND	0.0	N/A	4.6	9.7	3.20	Y	
12/17/07	5-10	FROM 60	ND	0.0	N/A	1.9	9.7	3.30	Y	
12/27/07	0-1	FROM 0	ND	0.0	N/A	1.6	9.7	3.20	Y	

**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 04, 2007 (KAG)

BLAGG ENGINEERING, INC.

INITIAL DATE	SW SUMP (Deep)				SE SUMP (Deep)			
	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH	DISSOLVED SULFIDE ppm	DISSOLVED OXYGEN ppm	TEMP. celcius	pH
01/02/07	0.0	0.44	3.6	9.2	0.0	0.61	3.4	9.1
02/06/07	0.0	1.17	3.9	9.2	0.0	2.11	4.5	9.1
03/06/07	0.0	1.10	8.4	9.2	0.0	2.70	8.8	9.1
04/02/07	0.0	0.80	12.6	9.2	0.0	1.80	13.0	9.1
05/04/07	0.0	0.60	14.8	9.2	0.0	0.20	15.0	9.2
06/01/07	0.0	0.15	15.1	9.4	0.1	0.40	15.6	9.5
07/02/07	0.0	0.33	20.4	9.4	0.0	0.21	21.6	9.4
08/03/07	0.0	0.14	23.2	9.2	0.0	0.18	23.9	9.2
09/05/07	0.0	0.19	25.1	9.4	0.0	0.07	24.4	9.3
10/01/07	0.0	0.10	21.1	9.5	0.0	0.06	20.3	9.5
11/05/07	0.0	0.11	11.3	9.7	0.0	0.20	12.1	9.7
12/03/07	0.0	0.12	9.6	9.5	0.0	0.08	9.4	9.4
Note: Primary (shallow) leak detection system dry for entire year - no indication of liner integrity failure.								