3R - 461

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2006 - 2015

3R-461

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

January 30, 2008

Mr. Glenn Von Gonten, Hydrologist
New Mexico Oil Conservation Division-NMOCD
Environmental Bureau
1220 St. Francis Drive
Santa Fe, New Mexico 87505

RE: REQUEST FOR PERMANENT CLOSURE
BP America Production Company (formerly Amoco Production Co. & BP Amoco)
Groundwater Monitoring Report
Caneple GC B # 1, Unit P, Sec. 13, T31N, R11W, NMPM 30-045-22454
San Juan County, New Mexico

NMOCD Administrative/Environmental Order #: NONE 3R-461

Dear Mr. Von Gonten:

BP America Production Company (**BP**) has retained Blagg Engineering, Inc. (**BEI**) to conduct environmental monitoring of groundwater at the Caneple GC B # 1.

BP has followed its NMOCD approved groundwater management plan and is requesting permanent closure for this site.

If you have any questions concerning the enclosed documentation, please contact either myself or Jeffrey C. Blagg at (505) 632-1199. Thank you for your cooperation and assistance.

Respectfully submitted:
Blagg Engineering, Inc.

Nelson J. Velez
Staff Geologist

Attachment: Groundwater Report (2 copies)

cc: Mr. Brandon Powell, Environmental Specialist, NMOCD District III Office, Aztec, NM
Mr. Larry Schlotterback, Environmental Coordinator, BP, Farmington, NM (without lab report)

NJV/njv

Caneple GC B 1 01-30-08 CVL.DOC

BP AMERICA PRODUCTION COMPANY
Caneple GC B #1 (30-045-22454
Se/4 Se/4, Sec. 13, T31N, R11W
RIDENOUR GC 1A (30-045-20953)

Historical Information:

Pit Closure Dates:	Feb / March 1996
Monitor Well Installation Dates:	Sept. / Oct. 2006
Reclamation Procedures:	Excavation (Feb. 1996)
Monitor Well Sampling Dates:	10/12/06; 12/21/06; 02/21/07; 05/16/07

Groundwater was encountered at a depth of approximately 8 feet below surface grade during excavation of impacted soils from a separator and an unknown type pit in February/March 1996 (documentation attached). The excavation perimeter was measured at approximately 50 X 100 X 10 feet depth. Approximately 1,850 cubic yards of soils were removed and transported to BP's (formerly called Amoco Production Company) Cahn GC #1S well site (Unit L, Sec. 33, T32N, R10W). Two (2) test holes adjacent to the excavation were sampled on February 19, 1996 and tested for benzene, toluene, ethylbenzene, and total xylenes (**BTEX**) per US EPA method 8020. The groundwater within the excavation perimeter was pumped via water hauling trucks and disposed at an approved facility. Afterwards, the exposed groundwater was sampled on February 23, 1996. A subsequent sampling of the groundwater was conducted on February 26, 1996. Upon receipt of the first laboratory results received, the New Mexico Oil Conservation Division (**NMOCD**) was notified with letter dated March 5, 1996 of the groundwater impact (attached). Resampling of the groundwater in three (3) additional events was conducted at later dates in February and March, 1996. The BTEX results of the groundwater sampling from the excavation and adjacent test holes are as follows;

Sample ID	Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)
Pit Water	02/23/96	**23.3**	14.0	61.1	600
Pit Water	02/26/96	**15.7**	5.8	24.0	463.1
Pit Water	02/29/96	**13.8**	5.11	6.93	**659.8**
Pit Water	03/06/96	**11.0**	13.3	11.7	**700.5**
Pit Water	03/11/96	9.6	7.9	17.7	448.5
TH2 @ 8'	02/19/96	ND	ND	ND	3.18
TH3 @ 8'	02/19/96	1.14	0.99	ND	ND
NMWQCC regulatory standards		**10**	**750**	**750**	**620**

Note: NMWQCC = New Mexico Water Quality Control Commission, ppb = parts per billion, ND = not detectable at reported limits.

Groundwater Investigation and Soil Lithology:

Groundwater monitor wells were installed in September/October 2006 to test groundwater quality. Boring logs for all three (3) monitor wells along with well completion information are contained within this report. There does not appear to be any known receptors ever impacted by the previous discovery of impacted soil and/or groundwater. In addition, there does not appear to be any physical evidence to indicate that a nearby irrigation ditch immediately down gradient of the excavation (see Figure 1) has ever been impacted as well.

Soil lithology at the site consists of primarily sand and gravel of varying color and size.

Groundwater Monitor Well Sampling Procedures:

Groundwater samples were collected from site monitor wells following US EPA: SW-846 protocol. After well development, samples were collected with new disposable bailers, placed into laboratory supplied containers with appropriate preservative and stored in an ice chest for express delivery to a qualified laboratory for testing. Analytical testing included BTEX by US EPA Method 8021B and general water chemistry.

Waste generated during monitor well sampling and development was disposed of utilizing the separator tank pit located on the well site.

Groundwater Quality & Flow Direction Information:

Quarterly groundwater monitor well sampling was initiated in October, 2006. Summary of laboratory BTEX analytical results are included in the table on the following pages. The data indicates all BTEX constituents tested below New Mexico Water Quality Control Commission (**NMWQCC**) standards for four (4) consecutive sampling events within the source area.

Groundwater contour maps of relative water table elevations for all sample events are included (Figures 2 and 5). The general groundwater flow direction has consistently been in a southwest direction.

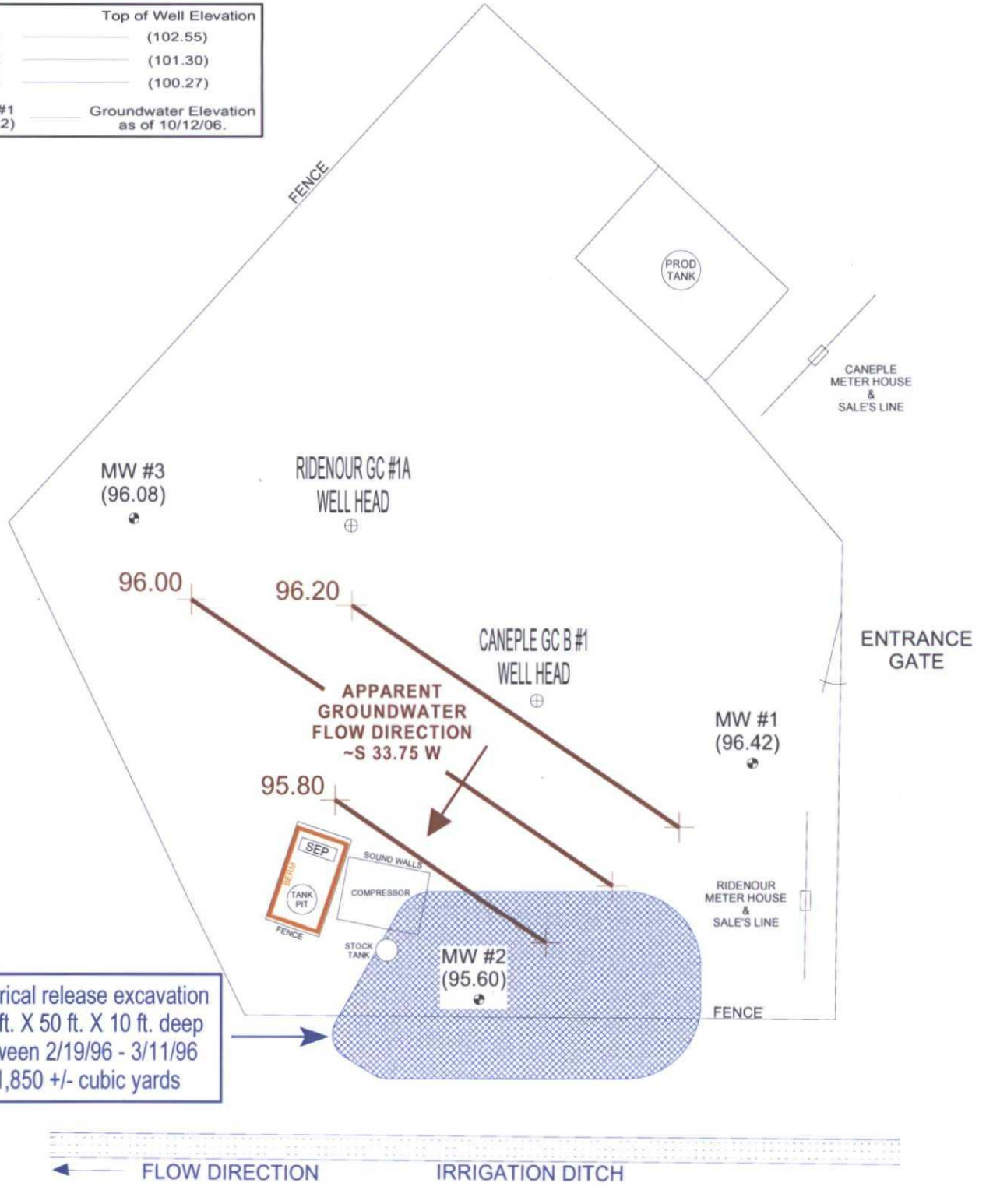
Summary and Recommendations:

Hydrocarbon impacted soil and groundwater at the site has been remediated via excavation of impacted soils. All site wells meet NMWQCC standards for groundwater. Permanent site closure is recommended. Following approval by the NMOCD, site monitor wells will be abandoned pursuant to the approved BP Ground Water Management Plan.

FIGURE 2
(4th 1/4, 2006)

MONITOR WELL LOCATIONS ARE ONLY AS ACCURATE AS THE INSTRUMENTS USED IN OBTAINING THE FOOTAGE AND BEARING FROM THE WELL HEAD (BRUNTON COMPASS AND LASER RANGE FINDER). ALL OTHER STRUCTURES DISPLAYED ON THE SITE MAP ARE SOLELY FOR REFERENCE AND MAY NOT BE TO SCALE.

	Top of Well Elevation
MW #1	(102.55)
MW #2	(101.30)
MW #3	(100.27)
MW #1 (96.42)	Groundwater Elevation as of 10/12/06.



BP AMERICA PRODUCTION COMPANY

CANEPLE GC B # 1

SE/4 SE/4 SEC. 13, T31N, R11W

SAN JUAN COUNTY, NEW MEXICO

BLAGG ENGINEERING, INC.

CONSULTING PETROLEUM / RECLAMATION SERVICES

P.O. BOX 87

BLOOMFIELD, NEW MEXICO 87413

PHONE: (505) 632-1199

PROJECT: MW SAMPLING

DRAWN BY: NJV

FILENAME: 10-12-06-GW.SKF

REVISED: 10/12/06 NJV

GROUNDWATER GRADIENT MAP

10/06

BP AMERICA PROD. CO. GROUNDWATER LAB RESULTS

SUBMITTED BY BLAGG ENGINEERING, INC.

CANEPLE GC B # 1
UNIT P, SEC. 13, T31N, R11W

REVISED DATE: August 3, 2007

FILENAME: (CAN-2Q07.WK4) NJV

								BTEX EPA METHOD 8021B (ppb)			
SAMPLE DATE	WELL NAME or No.	D.T.W. (ft)	T.D. (ft)	TDS (mg/L)	COND. umhos	pH	PRODUCT (ft)	Benzene	Toluene	Ethyl Benzene	Total Xylene
12-Oct-06	MW #1	6.13	16.50	744	1,000	7.15		ND	ND	ND	ND
12-Oct-06	MW #2	5.70	16.20	2,700	2,800	6.98		6.0	ND	20	97
21-Dec-06		8.20			1,500	7.27		8.5	ND	17	89
21-Feb-07		8.84			1,100	7.40		5.4	2.0	13	71
16-May-07		6.33			900	7.29		3.5	ND	4.4	36
12-Oct-06	MW #3	4.19	15.00	1,140	1,600	7.03		ND	ND	ND	ND
21-Dec-06		7.00			1,200	7.27		ND	ND	ND	ND
					NMWQCC GROUNDWATER STANDARDS			10	750	750	620