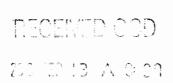
3R - 325

2009 AGWMR

09/03/2010





September 3, 2010

Mr. Glen Von Gonten Hydrologist Oil Conservation Division 1220 S. St. Francis Dr. Santa Fe, NM 87505

RE: 2009 GROUND WATER SUMMARY REPORT

Dear Mr. Von Gonten:

Enclosed for your review is the Williams 2009 Ground Water Summary Report. The report presents monitoring data for eight sites having petroleum hydrocarbon impacted ground water resulting from past use of unlined surface impoundments. The sites included in the report are identified in separate sections.

Four of the eight sites have known or suspected up-gradient contaminant sources which continue to influence conditions affecting the rate of natural attenuation. These conditions have been previously mentioned in project correspondence and suggest producer or third party responsibility. Until such time as the other responsible parties address these sources, efforts by Williams are invariably extended.

Two sites (Florence 47X and Davis #1) have regular accumulations of LNAPL in one monitoring well at each location. Since 2002, passive collection devices have been deployed in all wells containing measurable accumulations of LNAPL. Periodic emptying of the collection devices along with active bailing of LNAPL during the quarterly sampling events continues at the aforementioned sites and at times if observed at any other site.

One site previously monitored (Patterson A COM #1A) met closure criteria in 2008 and a closure request was submitted in 2009. Williams plans to close the Patterson A COM #1A and abandon the monitoring wells there unless the NMOCD objects to that action in the next 60 days. Williams will also abandon monitoring wells at five other sites where closure requests were made based on meeting closure criteria. The closure notices for these sites were submitted on two occasions with no response from the NMOCD. Again, closure is assumed to be approved unless there is documented objection.

September 3, 2010 Mr. Glen Von Gonten Page 2

As noted in the site summaries, laboratory reports have not been included in the annual report. Lab results reports are retained in project files until such time as a site closure report is developed, but are available anytime upon request.

Thank you for your time to review this submittal. If you have any questions regarding the content of the report, or about specific conditions at any site, you may call me at (801) 232-8985 or Aaron Dailey at (505) 634-4708.

Respectfully,

Mark B. Harvey Project Manager

Enclosure

Note: Report previously submitted electronically April 4, 2010

3R-325

JICARILLA CONTRACT 147-6

Site Summary Report

Site Name: Jicarilla Contract 147-6 Reporting Period: 2009

Location: Unit C, Sec 6, Twn 25N, Rng 5W

Canyon: Tapicito Operator: BP

Status Narrative

Forty-one quarters of water quality data have been collected from the ten monitoring wells located at this site. Three of the wells originally installed have been lost due to historical erosion of the arroyo banks. Concentrations of BTEX in MW-2, the source area well, are now non-detectable and have been below WQCC standards for several monitoring periods. Cross-gradient well MW-8 continues to show elevated benzene levels but measured values appear indicative of effective attenuation.

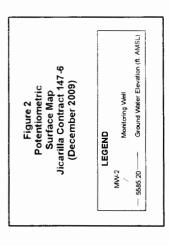
Concentrations of dissolved BTEX in downgradient well MW-3 spiked in the third and forth quarters of 2009 and may be related to a producer release event. Contaminant concentrations in MW-6 remain above the WQCC standards and are generally consistent with levels measured in 2008. This too may be related to the release event reported by the producer up gradient of the former dehydrator pit. Well MW-9 had a benzene spike in the third quarter which did not appear again in the fourth quarter. Again, this spike may be related to the release event from producer operations.

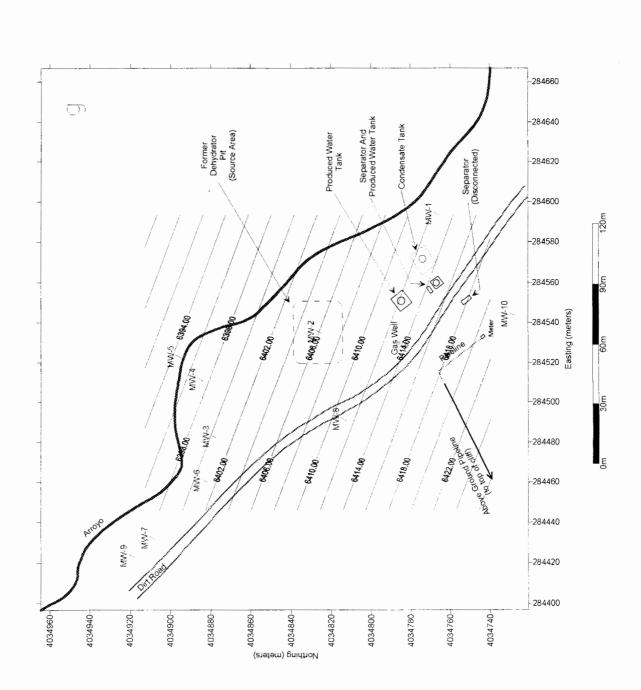
Potentiometric surface maps (Figure 2) depict a northwest by north to northwest ground water flow direction at an average hydraulic gradient of 0.025. Seasonal fluctuations in water-table elevation at the site are illustrated in the enclosed hydrograph.

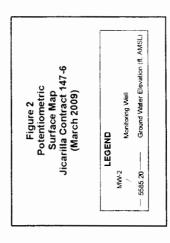
It should be noted that there are now several wells / piezometers in the area where the producer excavated soil as part of a spill cleanup effort up gradient of the former dehydrator pit. The nature and extent of the remedial effort performed by the producer is unknown.

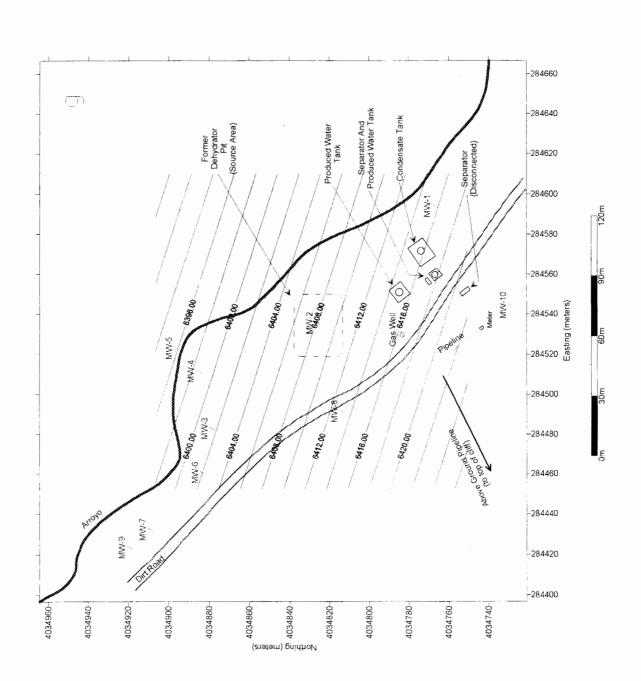
→ MW-1 OOO-ELE, 6002/6/6 Date Gauged × 1002/6/01 LOON OUR 6380 Elevation (ft AMSL) 6405 6390 6385 6420 6415 6410

JIC 147-6 2009 Hydrograph









Analytical Data Summary

Site Name:

Jicarilla Contract 147-6

Reporting Period:

1/1/2008 To 12/31/2009

Well ID	Sample Date	Sample ID	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene (Total) ug/l
MW-1						
	3/27/2008	145527MAR08	<1.0	<1.0	<1.0	<3.0
	6/5/2008	165405JUN08	<1.0	<1.0	<1.0	<3.0
	10/1/2008	145501OCT08	<1.0	<1.0	<1.0	<3.0
	12/5/2008	092405DEC08	<1.0	<1.0	<1.0	<3.0
	3/31/2009	140131MAR09	<1.0	<1.0	<1.0	<3.0
	7/9/2009	130609JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	124009SEP09	<1.0	<1.0	<1.0	<3.0
	12/19/2009	140619DEC09	<1.0	<1.0	<1.0	<3.0
MW-2						
***************************************	3/27/2008	152427MAR08	<1.0	<1.0	<1.0	<3.0
	6/5/2008	171905JUN08	<1.0	<1.0	<1.0	<3.0
	10/1/2008	152201OCT08	<1.0	<1.0	2.6	<3.0
	12/5/2008	095605DEC08	<1.0	<1.0	<1.0	<3.0
	3/31/2009	143131MAR09	<1.0	<1.0	<1.0	<3.0
	7/9/2009	132009JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	125109SEP09	<1.0	<1.0	<1.0	5.0
	12/19/2009	141919DEC09	<1.0	<1.0	<1.0	<3.0
MW-3						
110001000100000000000000000000000000000	3/27/2008	154027MAR08	<1.0	<1.0	<1.0	<3.0
-	6/5/2008	174005JUN08	10.1	<1.0	<1.0	<3.0
	10/1/2008	153501OCT08	82.6	10.5	4.0	24.5
	12/5 / 2008	101605DEC08	98.0	58.5	5.1	66.9
	3/31/2009	144731MAR09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	131509SEP09	2760	978	242	1380
	12/19/2009	144019DEC09	4150	2620	277	2360
MW-6						
	6/5/2008	175305JUN08	20700	7210	606	4170
	10/1/2008	155901OCT08	13600	7330	400	3080
	12/5/2008	103605DEC08	12300	1030	368	1390
	3/31/2009	150131MAR09	12900	4630	342	1550
	7/9/2009	135509JUL09	20600	7800	486	3580
	9/9/2009	133109SEP09	10800	2410	337	1620
	12/19/2009	145219DEC09	10500	<50.0	343	1290

Jicarilla Contract 147-6

Reporting Period:

1/1/2008 To 12/31/2009

Well ID	Sample Date	Sample ID	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene (Total) ug/l
MW-8						
	3/27/2008	151027MAR08	23.5	<1.0	1.4	<3.0
	6/5/2008	170905JUN08	8.9	<1.0	<1.0	<3.0
	10/1/2008	1511010CT08	9.5	<1.0	<1.0	<3.0
	12/5/2008	094005DEC08	25.7	<1.0	<1.0	<3.0
	3/31/2009	141931MAR09	8.1	<1.0	<1.0	<3.0
	7/9/2009	133209JUL09	6.5	<1.0	<1.0	<3.0
	9/9/2009	130309SEP09	19.8	<1.0	<1.0	<3.0
	12/19/2009	142919DEC09	4.5	<1.0	<1.0	<3.0
MW-9						
***************************************	3/27/2008	161527MAR08	<1.0	<1.0	<1.0	<3.0
	6/5/2008	182005JUN08	<1.0	<1.0	<1.0	<3.0
	10/1/2008	161301OCT08	46.6	<1.0	<1.0	<3.0
	12/5/2008	105105DEC08	<1.0	<1.0	<1.0	<3.0
	7/9/2009	140809JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	134309SEP09	16.0	<1.0	<1.0	<3.0
	12/19/2009	150519DEC09	<1.0	<1.0	<1.0	<3.0