3R – 308

2009 AGWMR

09 / 03 / 2010

3R-30B

CHAMBERLAIN #1

Williams
Environmental Services
188 CR 4900
Bloomfield, NM 87413

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.

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

Site Summary Report

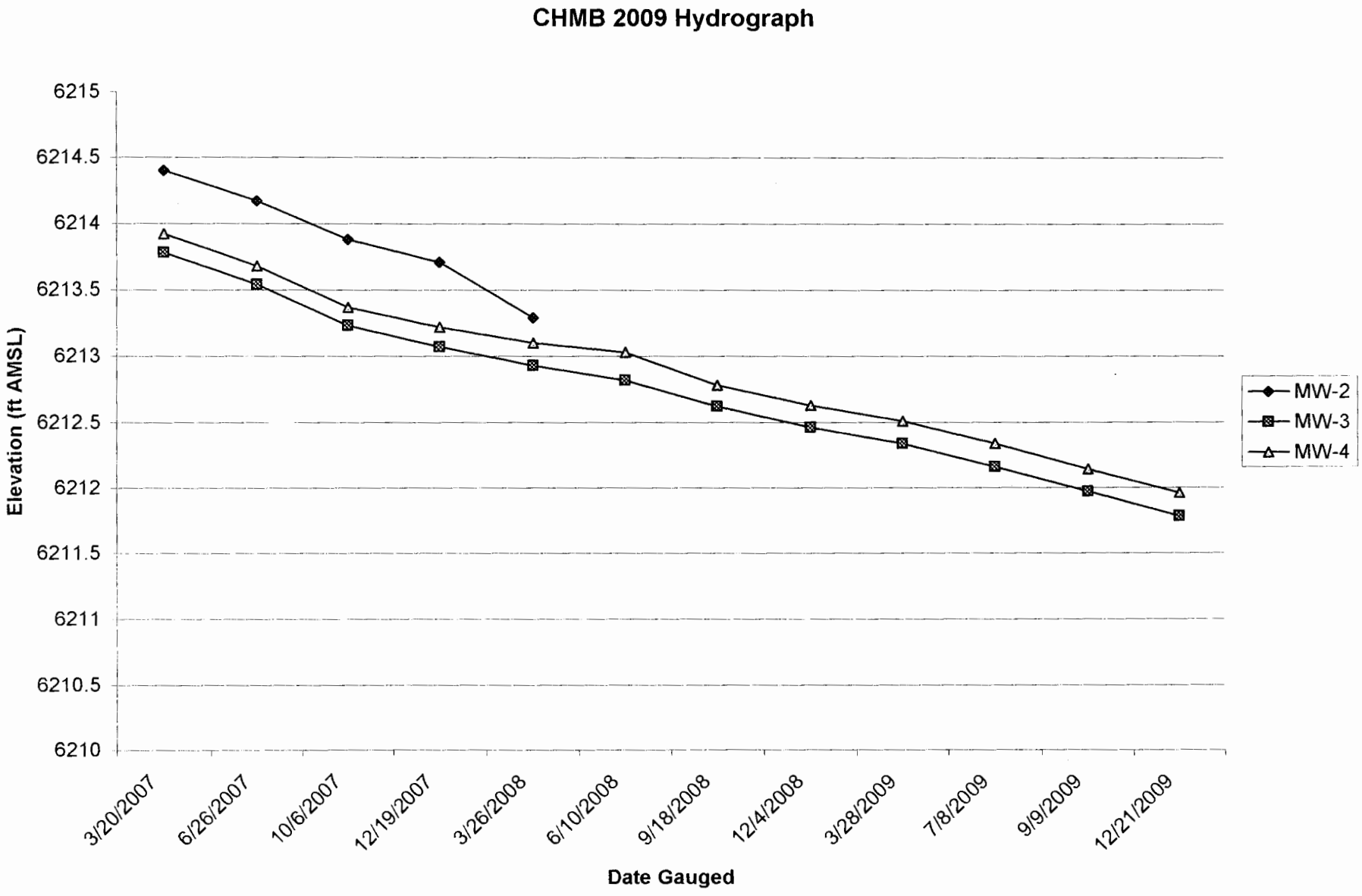
Site Name: Chamberlain 1 **Reporting Period: 2009**

Location: Unit F. Sec 14, Twn 32N. Rng 12W
Canyon: Jaquez Flat
Operator: Burlington

Status Narrative

Thirty nine quarters of water quality data have been collected from the four monitoring wells located at this site. Water levels throughout the monitoring period were insufficient to collect samples from MW-2, the only monitoring well (located in the source area) found to have contaminant concentrations in excess of NMWQCC standards. The last sample collected and analyzed revealed only Benzene in excess of WQCC standards. Monitoring well MW-1 was not sampled as it continues to be found dry at the time of monitoring. Laboratory results are provided in the attached table summarizing sample results for 2009. Copies of individual lab reports are retained in project files to be submitted upon site closure.

Ground water flows to the west-southwest with an average hydraulic gradient of 0.012. No significant seasonal variations in flow direction or gradient have been observed. Figure 2 shows the potentiometric surface for quarterly sampling events in quarters one and four. The monitoring period hydrograph does not indicate significant seasonal fluctuations in water table elevations. Nevertheless, water table elevations continue to decrease as they have over the past several years.


CHMB 2009 Hydrograph
6215
6214.5
6214
6213.5
6213
6212.5
6212
6211.5
6211
6210.5
6210
Elevation (ft AMSL)
3/20/2007
6/26/2007
10/6/2007
12/19/2007
3/26/2008
6/10/2008
9/18/2008
12/4/2008
3/28/2009
7/8/2009
9/9/2009
12/21/2009
Date Gauged
MW-2
MW-3
MW-4

761770
761760
761750
761740
761730
761720
761710
761700
761690
761680
761670
761660
761650
Easting (meters)
Tank
Gas Well
Tank
Separator
Former Dehydrator
Pit
(Source Area)
MW-1
6212.90
6212.70
6212.50
6212.30
6212.10
MW-2
MW-3
MW-4
Meter
Approximate Location
of Gas Pipeline

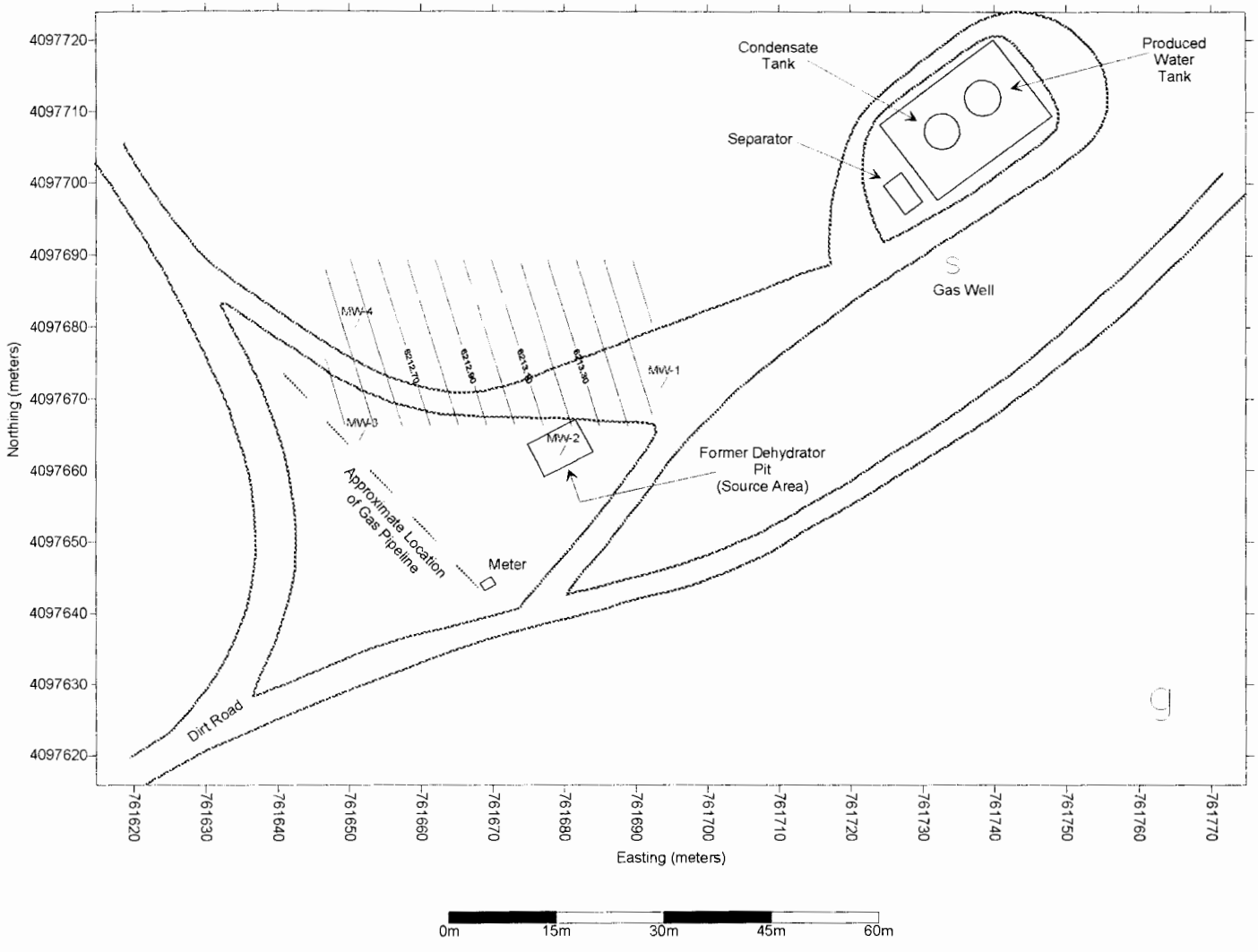


Figure 2
Potentiometric Surface Map
Chamberlain #1
(March 2009)

LEGEND

MW-2 — Monitoring Well

5585.20 — Ground Water Elevation (ft. AMSL)

Analytical Data Summary

Site Name:
Chamberlain 1

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-3						
	3/26/2008	144426MAR08	<1.0	<1.0	<1.0	<3.0
	6/10/2008	184810JUN08	<1.0	<1.0	<1.0	<3.0
	9/18/2008	180619SEP08	<1.0	<1.0	<1.0	<3.0
	12/4/2008	161604DEC08	<1.0	<1.0	<1.0	<3.0
	3/28/2009	164028MAR09	<1.0	<1.0	<1.0	<3.0
	7/8/2009	130708JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	180209SEP09	<1.0	<1.0	<1.0	<3.0
	12/21/2009	145921DEC09	<1.0	<1.0	<1.0	<3.0
MW-4						
	3/26/2008	145426MAR08	<1.0	<1.0	<1.0	<3.0
	6/10/2008	185610JUN08	<1.0	<1.0	<1.0	<3.0
	9/18/2008	181519SEP08	<1.0	<1.0	<1.0	<3.0
	12/4/2008	162504DEC08	<1.0	<1.0	<1.0	<3.0
	3/28/2009	164828MAR09	<1.0	<1.0	<1.0	<3.0
	7/8/2009	125908JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	175309SEP09	<1.0	<1.0	<1.0	<3.0
	12/21/2009	150821DEC09	<1.0	<1.0	<1.0	<3.0