3R – 311

2009 AGWMR

09 / 03 / 2010

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

3R-311

DAVIS #1

Site Summary Report

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

Location: Unit E, Sec 11, Twn 31N, Rng 12W
Canyon: Farmington Glade
Operator: Burlington

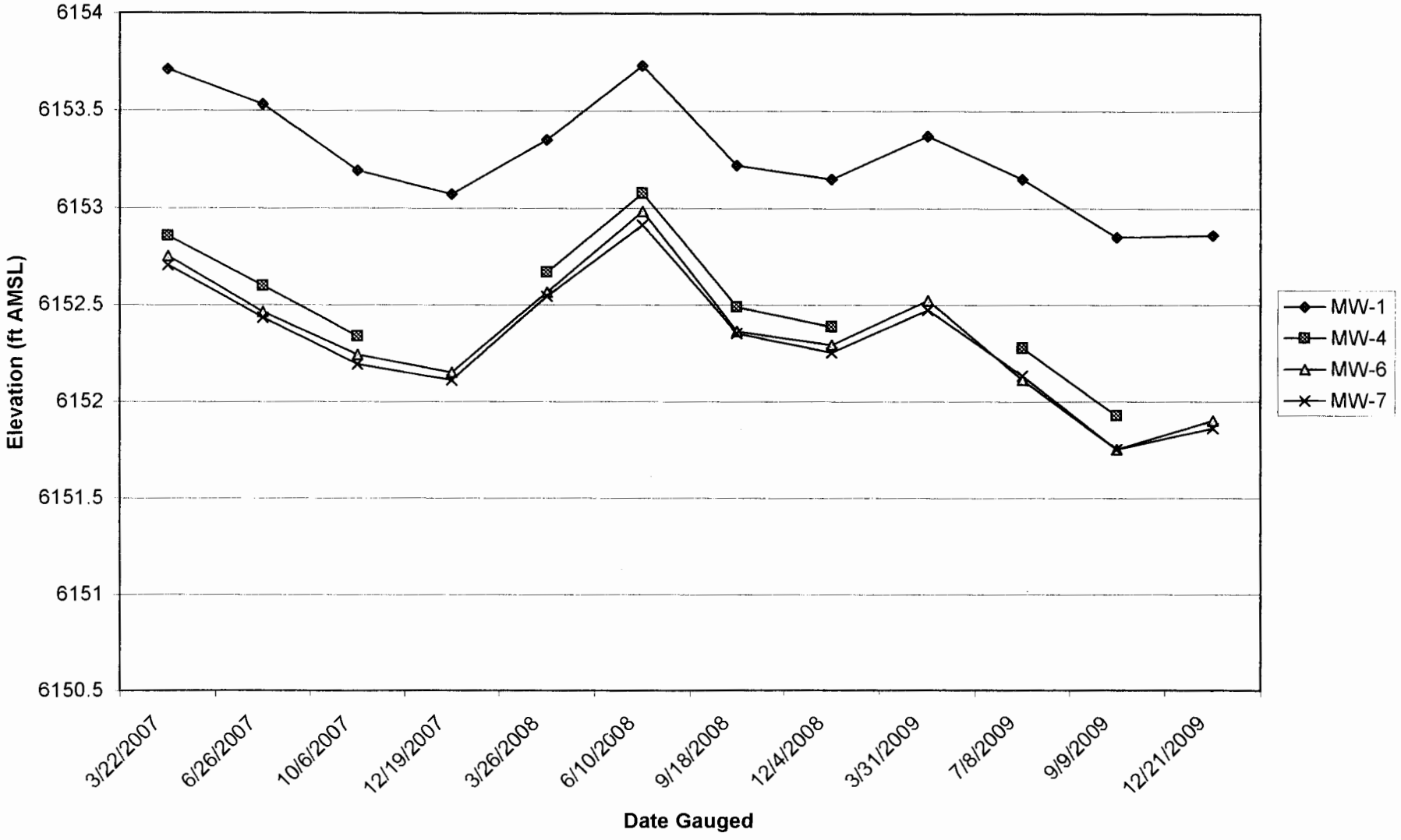
Status Narrative

All wells monitored down gradient of source area well MW-2 continue to show no detectable BTEX. LNAPL reappeared in MW-2 and free product removal resumed in 2008 and continued in 2009. MW-2 and MW-5 continue to be the only wells with detectable BTEX and every indication suggests a stable or possibly receding plume.

This site now has six monitoring wells and forty quarters of ground water monitoring to date. Monitoring of MW-5 was not performed in 2009 as there appears to be some damage preventing collection of samples. This well is not seen as essential so long as the source area well (MW-2) has measurable free product and the other down gradient wells have no BTEX contamination. Analytical results are provided in the attached summary table with lab reports retained in the project files to be submitted with the closure request.

Ground water flows west-northwest with an average hydraulic gradient of 0.006. A seasonal rise in water table elevation has been observed in the spring, but overall influence in flow direction and gradient appears consistent with historical observation. Figure 2 shows the potentiometric surface for two of the quarterly sampling events. The hydrograph illustrates an overall decrease in water table elevation over the last several years. Monitored natural attenuation appears effective for this site and clean closure is likely.

DAVIS 2009 Hydrograph



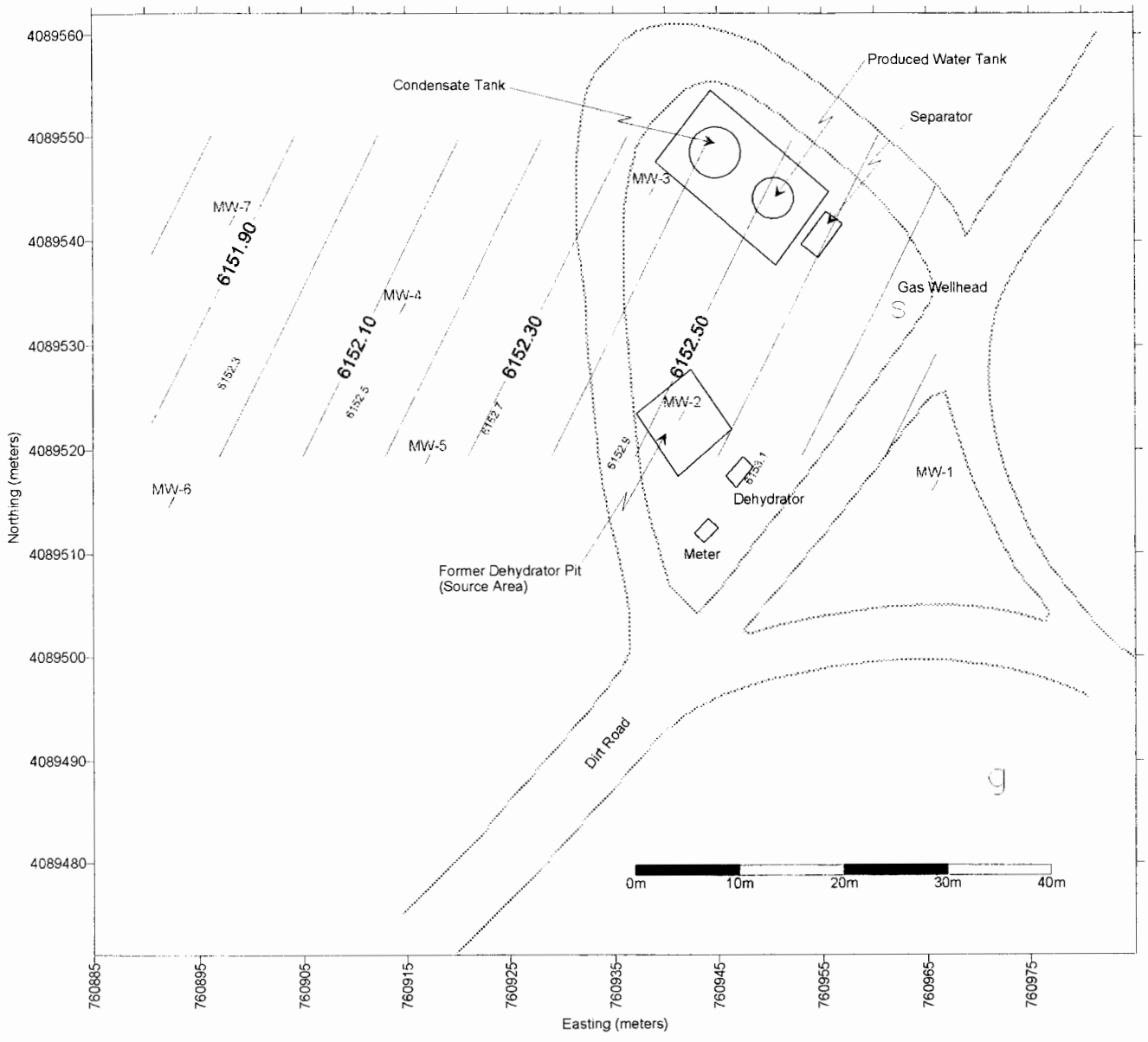


Figure 2
Potentiometric Surface Map
Davis #1
(December 2009)

LEGEND

MW-2 — Monitoring Well

5585.20 — Ground Water Elevation (ft. AMSL)

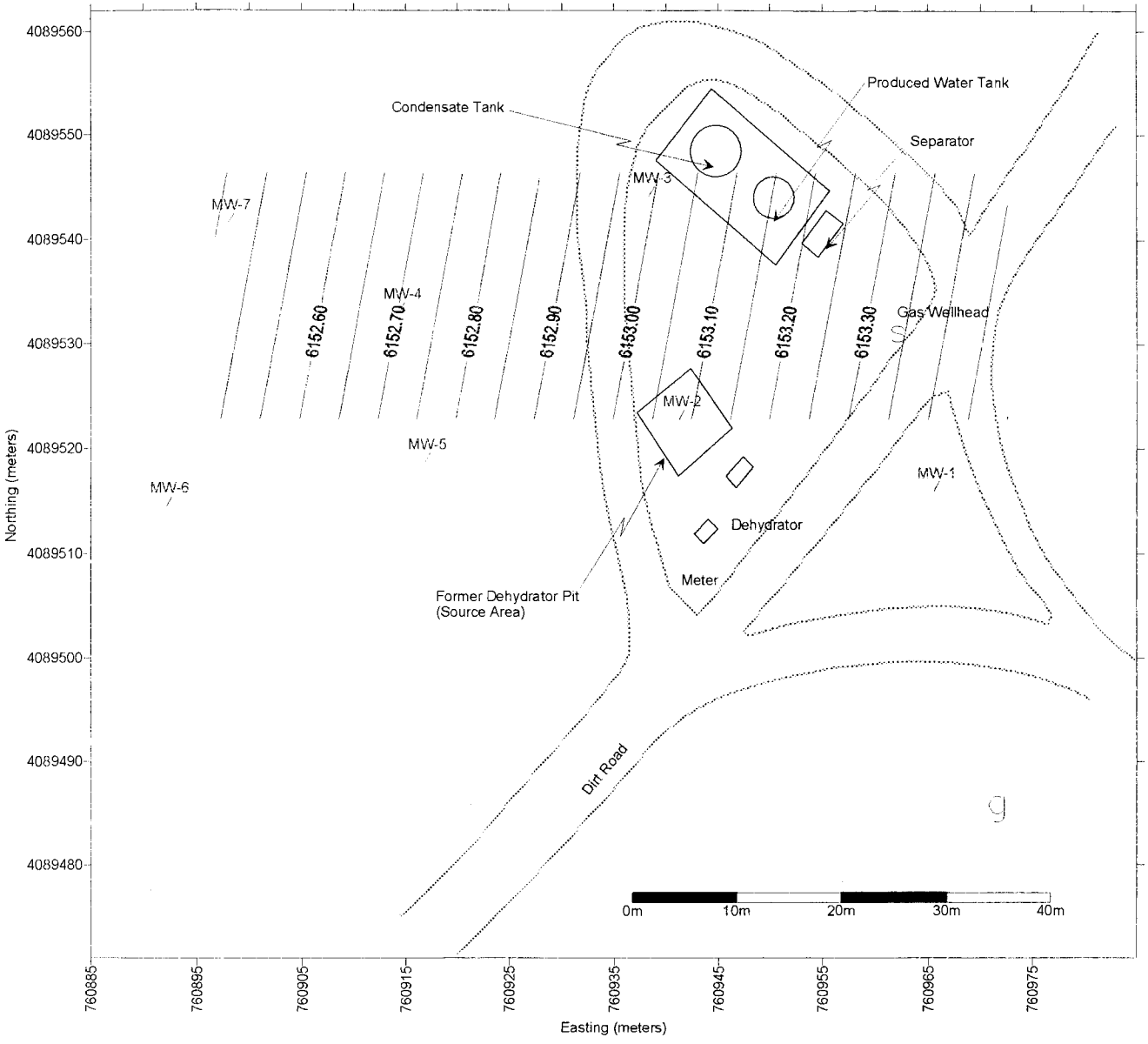


Figure 2
Potentiometric Surface Map
Davis #1
(March 2009)

LEGEND

MW-2 — Monitoring Well

5585.20 — Ground Water Elevation (ft. AMSL)

Analytical Data Summary

Site Name:
Davis 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-1						
	3/26/2008	130526MAR08	<1.0	<1.0	<1.0	<3.0
	6/10/2008	162010JUN08	<1.0	<1.0	<1.0	<3.0
	9/18/2008	162819SEP08	<1.0	<1.0	<1.0	<3.0
	12/4/2008	142904DEC08	<1.0	<1.0	<1.0	<3.0
	7/8/2009	105608JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	183009SEP09	<1.0	<1.0	<1.0	<3.0
	12/21/2009	134221DEC09	<1.0	<1.0	<1.0	3.0
MW-4						
	3/26/2008	132226MAR08	<1.0	<1.0	<1.0	<3.0
	6/10/2008	163310JUN08	<1.0	<1.0	<1.0	<3.0
	9/18/2008	164219SEP08	<1.0	<1.0	<1.0	<3.0
	12/4/2008	144704DEC08	<1.0	<1.0	<1.0	<3.0
	7/8/2009	115508JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	184309SEP09	<1.0	<1.0	<1.0	<3.0
MW-6						
	3/26/2008	134926MAR08	<1.0	<1.0	<1.0	<3.0
	6/10/2008	170410JUN08	<1.0	<1.0	<1.0	<3.0
	9/18/2008	171619SEP08	<1.0	<1.0	<1.0	<3.0
	12/4/2008	151804DEC08	<1.0	<1.0	<1.0	<3.0
	3/31/2009	191631MAR09	<1.0	<1.0	<1.0	<3.0
	7/8/2009	114008JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	185609SEP09	<1.0	<1.0	<1.0	<3.0
	12/21/2009	140721DEC09	<1.0	<1.0	<1.0	<3.0
MW-7						
	3/26/2008	133226MAR08	<1.0	<1.0	<1.0	<3.0
	6/10/2008	164610JUN08	<1.0	<1.0	<1.0	<3.0
	9/18/2008	165919SEP08	<1.0	<1.0	<1.0	<3.0
	12/4/2008	150204DEC08	<1.0	<1.0	<1.0	<3.0
	3/31/2009	185931MAR09	<1.0	<1.0	<1.0	<3.0
	7/8/2009	112908JUL09	<1.0	<1.0	<1.0	<3.0
	9/9/2009	190609SEP09	<1.0	<1.0	<1.0	<3.0
	12/21/2009	135421DEC09	<1.0	<1.0	<1.0	<3.0