

3R - 317

**GENERAL
CORRESPONDENCE**

YEAR(S):

2000 - 1997

Olson, William

From: m. harvey [SMTP:markh@ditell.com]
Sent: Tuesday, September 05, 2000 1:46 PM
To: Olson, William
Subject: Annual Groundwater Report (PNM)

As a follow-up to our telephone conversation last week, this serves to acknowledge the extension of time that NMOCD has granted Williams in order to submit the annual groundwater report for former PNM sites.

It is agreed that the report will be submitted by September 15, 2000 and include data from PNM efforts during 1999 and 2000. Williams appreciates the time extension and NMOCD's understanding of the complications associated with inheriting a project of this magnitude.

After submitting the report and allowing review time, Williams intends to schedule a meeting with you to discuss its' plan to effect mitigation of groundwater impacts. Your feedback will be helpful in finalizing a program strategy.

Thank you for your consideration.

From: Deklau, Ingrid [SMTP:Ingrid.Deklau@Williams.com]
Sent: Friday, July 07, 2000 1:35 PM
To: Olson, William
Cc: 'mark'; 'mgannon@pnm.com'
Subject: Groundwater Report Extension

Per our discussion today, this note is to confirm extension of the Annual Groundwater Report submittal from July 15, 2000 to August 31, 2000.

On March 4, 2000, Maureen Gannon of PNM emailed you and requested the April 1, 2000 deadline for the report submittal be postponed to July 15, 2000 so that PNM could incorporate all information gathered through June 30, 2000 into the report. Since then, PNM and Williams have entered into a Settlement Agreement transferring certain responsibilities to Williams. The responsibility of the preparation of this report is currently under discussion between PNM and Williams. Regardless of the responsibility, it is clear to me that this report will not be ready by the July 15, 2000 deadline.

Thank you for your assistance in this matter.

Ingrid Deklau

307-872-2880

Olson, William

From: Olson, William
Sent: Monday, March 06, 2000 8:13 AM
To: 'Gannon, Maureen'
Subject: RE: Request for Extension on Annual Groundwater Report

The below requested extension is approved.

From: Gannon, Maureen [[SMTP:MGannon@pnm.com](mailto:MGannon@pnm.com)]
Sent: Saturday, March 04, 2000 3:31 PM
To: Olson, William
Cc: Sikelianos, Mark; 'Ingrid Deklau'; Johnson, Ronald
Subject: Request for Extension on Annual Groundwater Report

As a follow-up to our phone conversation on Thursday, March 2, 2000, PNM herein requests an extension of the date for submittal of our San Juan Basin Annual Groundwater Report. The report is normally due on April 1st of each year. However, since PNM's environmental obligations associated with the purchase and sale of our former gas assets in the San Juan Basin will terminate on June 30, 2000 (with the exception of retained liabilities), we would like to file our annual report by July 15, 2000 so that the data and information contained in the annual report is current through the June 30th date.

Please let me know if this extension is acceptable to you. You may email me or call me at (505) 241-2974. Thank you for your time and consideration of this matter.

Maureen Gannon
Environmental Services
241-2974



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

July 15, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-235-437-313

Mr. B.D. Shaw
Amoco Production Company
200 Amoco Court
Farmington, New Mexico 87401

**RE: GROUND WATER CONTAMINATION
FLORANCE 44 AND FLORANCE 47X WELL SITES**

Dear Mr. Shaw:

The New Mexico Oil Conservation Division (OCD) has recently reviewed Public Service Company of New Mexico's (PNM) April 29, 1998 "FLORANCE 44 SITE, RECONTAMINATION OF CLEAN FILL AND GROUNDWATER CONTAMINATION" and April 29, 1998 "FLORANCE 47X SITE, FREE PRODUCT AND GROUND WATER CONTAMINATION". These documents contain the results of PNM's recent investigation of ground water contamination related to PNM dehydrator pits at Amoco's Florance 44 and Florance 47X well sites.

A review of the above referenced documents shows that ground water contamination upgradient of PNM's former dehydration pits appears to be a result of production disposal activities related to Amoco's former separator pits. Therefore, the OCD requires that Amoco investigate and remediate soil and ground water contamination at and downgradient of Amoco's separator pits at these sites pursuant to Amoco's previously approved ground water remediation plan. Ground water contamination originating from PNM's former dehy pits will be handled by PNM. The OCD requests that Amoco work together with PNM for overall remediation of site ground waters.

If you have any questions, please call me at (505) 827-7154.

Sincerely,

William C. Olson
Hydrogeologist
Environmental Bureau

xc: OCD Aztec District Office
Bill Liess, BLM Farmington District Office
Nelson Velez, Blagg Engineering, Inc.
Maureen Gannon, PNM

April 29, 1998

Certified Mail:



Bill Olson
Hydrogeologist, Environmental Bureau
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

RE: Florance 47 X Site
Free Product and Groundwater Contamination

Dear Bill:

PNM herein submits an update of ongoing activities at the Florance 47 X well site. We have documented groundwater contamination and wish to update you on the latest results since the 1997 Annual Groundwater report of Unlined Surface Impoundments in the San Juan Basin, dated April 15, 1997. Since that time, we have conducted further investigation and monitoring.

I. Well Locations, Groundwater Gradient and Analytical Results

The Florance 47X site lies in a remote location within Crow Canyon and is located along the trailing slope of sandstone bluffs to the north. Figure 1 provides a site map for the Florance 47X well site. The map includes the locations of the groundwater monitoring wells, wellheads, equipment, and pits found onsite. Equipment currently located upgradient of the former PNM drip pit includes the compressor and separator. Additional equipment noted upgradient from the former PNM drip pit during the 1995 site assessment performed by PNM included 55- and 200-gallon above ground storage tanks (not shown on Figure 1). Figure 1 also provides a summary of the groundwater analytical results collected to date from wells at the site; monitoring wells MW-2 and MW-3 show the presence of free phase hydrocarbons.

Figures 2-5 show the direction of groundwater flow beneath the site for the months of June, September, and December 1997, and February 1998. Depth to groundwater at this site is approximately 100 feet. Groundwater generally flows towards the southwest beneath the site. Based on flow directions, MW-1 and MW-3 are cross-gradient wells to MW-2 and the former PNM drip pit.

Figure 6 is a hydrograph of water levels; there has been little seasonal change in groundwater elevation and flow direction at this site. Attachment A provides graphs of concentration and groundwater elevation through time for those monitoring wells without measurable free product. Analytical results were provided to NMOCD in the PNM March 1998 Annual Groundwater Report for Unlined Surface Impoundments in the San Juan Basin.

II. Summary of Events

June 25-28, 1996

PNM excavated contaminated soil from the former pit area. The composite sample obtained from the pit excavation had 23.1 ppb Benzene and 97,483.7 ppb total BTEX. Approximately 399 cubic yards of soil were excavated from the former pit area; excavated soils were landfarmed at two onsite locations. The

excavation was backfilled with clean native soil from a BLM dry wash. No clean overburden was recovered.

December 31, 1996

Groundwater was encountered during determination of the vertical extent of contamination in the vicinity of the former PNM pit. A soil sample was obtained at 56 feet and analyzed for BTEX (EPA Method 8020) and TPH (EPA Method 8015). Groundwater was encountered at about 97 feet and a groundwater sample was obtained for analysis of BTEX using EPA Method 8020. The test hole (TH-1) was completed as MW-2 to serve as the source area well for the former PNM drip pit.

January 27, 1997

Analytical results from vertical profiling of groundwater and soils for MW-2 are summarized below.

	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)	TPH (ppm)
Soil - 56 feet	694	61,900	37,700	61,100	6,310
Groundwater - 97 feet	3,380	7,150	917	7,200	NA

Groundwater BTEX values exceed WQCC standards; PNM notified OCD of impact to groundwater at the Florance 47 X site.

February 6-11, 1997

PNM installed two additional monitoring wells at the site: MW-1 and MW-3.

June 26, 1997

PNM surveyed and sampled the three monitoring wells to determine the direction of groundwater flow and evaluate the lateral extent of groundwater contamination. PNM only sampled MW-1, as free product was detected in both MW-2 (sheen) and MW-3 (1 foot). Benzene at 367 ppb was the only constituent detected in MW-1 at concentrations in excess of WQCC standards.

September 24, 1997

PNM performed quarterly sampling of groundwater at the site. Free product was encountered in MW-2 (0.03 feet) and MW-3 (1.1 feet); only MW-1 was sampled for BTEX by EPA Method 8020. Benzene concentrations in MW-1 were 171 ppb; decreasing from June 1997, but still above WQCC standards.

December 23, 1997

PNM performed quarterly sampling of groundwater at the site. Again, free product was encountered in MW-2 (0.01 feet) and MW-3 (1.0 feet); only MW-1 was sampled for BTEX by EPA Method 8020. Benzene concentrations in MW-1 were 147 ppb; decreasing from June and September 1997, but still above WQCC standards.

March 9, 1998

PNM performed quarterly sampling of groundwater at the site. Free product was encountered in MW-2 (0.01 feet) and MW-3 (1.2 feet); only MW-1 was sampled for BTEX by EPA Method 8020. Benzene concentrations in MW-1 were 140 ppb, above the WQCC standard.

III. Free Product Occurrence

With regard to the presence and remediation of free product beneath the well pad, PNM, by contract with producers, is not responsible for the discharge of free product. Free product belongs to the producers, even when it is discharged under conditions of system upset. Therefore, free product contamination, regardless of where it occurs, is not the responsibility of PNM, but that of the producer.

The well with the greatest measurable free product (MW-3) is a monitoring well located cross-gradient to PNM equipment. The presence of significant free phase in the subsurface is also the most likely cause of significant dissolved phase groundwater contamination detected at this site in up/cross-gradient well MW-1. We believe the free phase hydrocarbons detected in MW-2 represent lateral migration from a free product release.

PNM will be placing Amoco and Williams Field Services on notice regarding the discovery of free product and groundwater contamination at this site. PNM will be seeking cost recovery from the responsible party for actions concerning free product and groundwater investigation and remediation activities performed to date at this site.

If you have any questions related to the Florance 47 X site or other project-related activities, please contact me at 505.241.2974.

Sincerely,



Maureen Gannon
Project Manager

cc: Roger Anderson, NMOCD
Colin Adams, PNM
Bill Von Drehle, Williams Field Services
Ingrid Deklau, Williams Field Services
Buddy Shaw, Amoco
Denny Foust, NMOCD-Aztec

Figure 1. Florance 47X Site Map

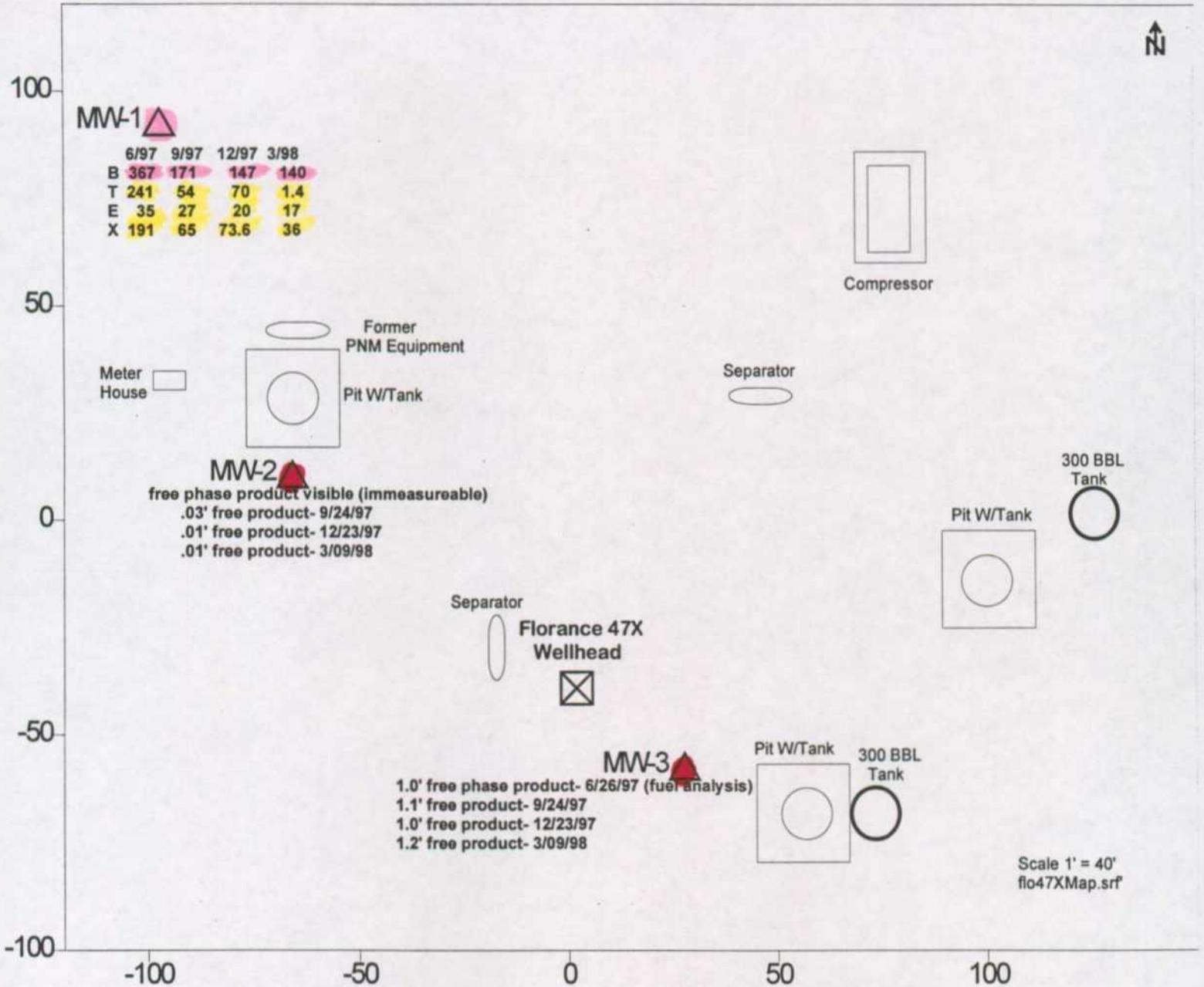


Figure 2. Florance 47X Groundwater Contour Map (June 26, 1997)

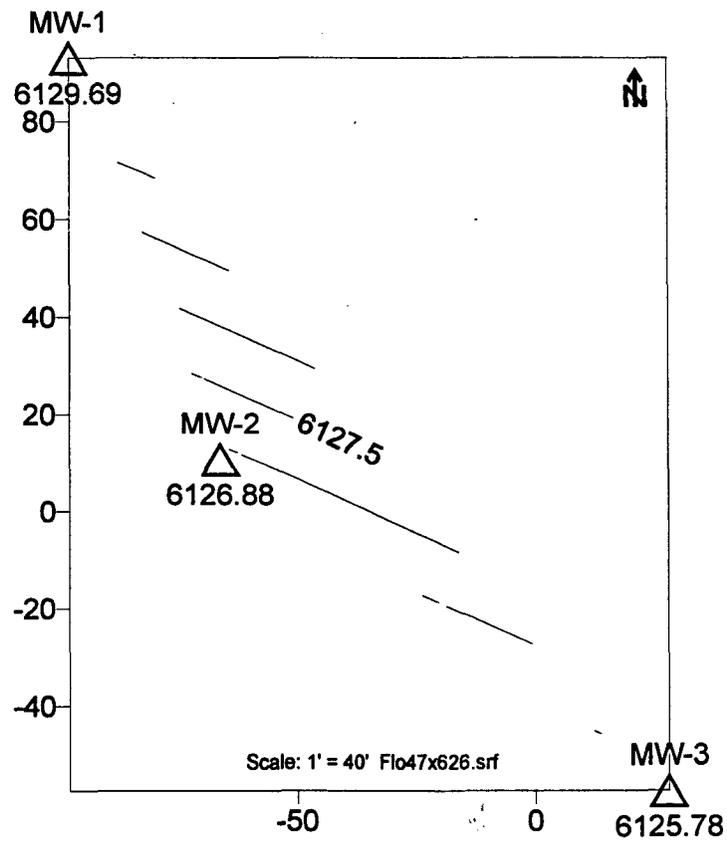


Figure 3. Florance 47X Groundwater Contour Map (September 24, 1997)

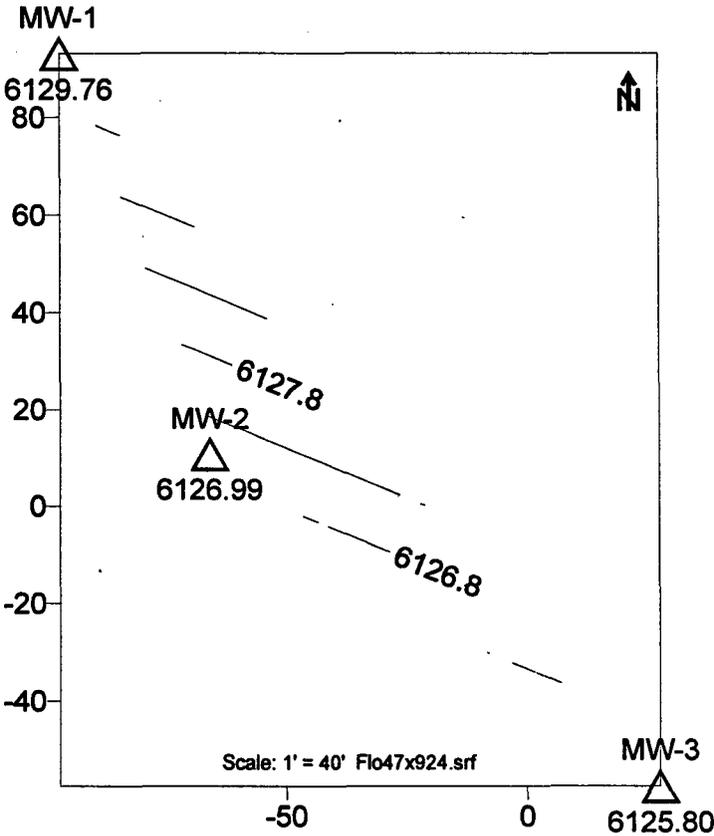


Figure 4. Florance 47X Groundwater Contour Map (December 23, 1997)

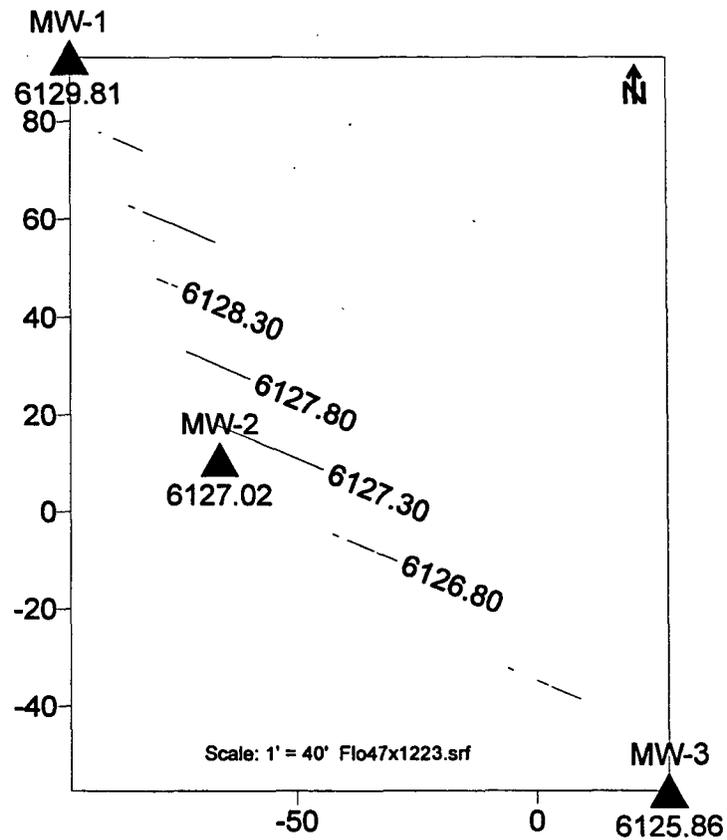


Figure 5. Florance 47X Groundwater Contour Map (March 9, 1998)

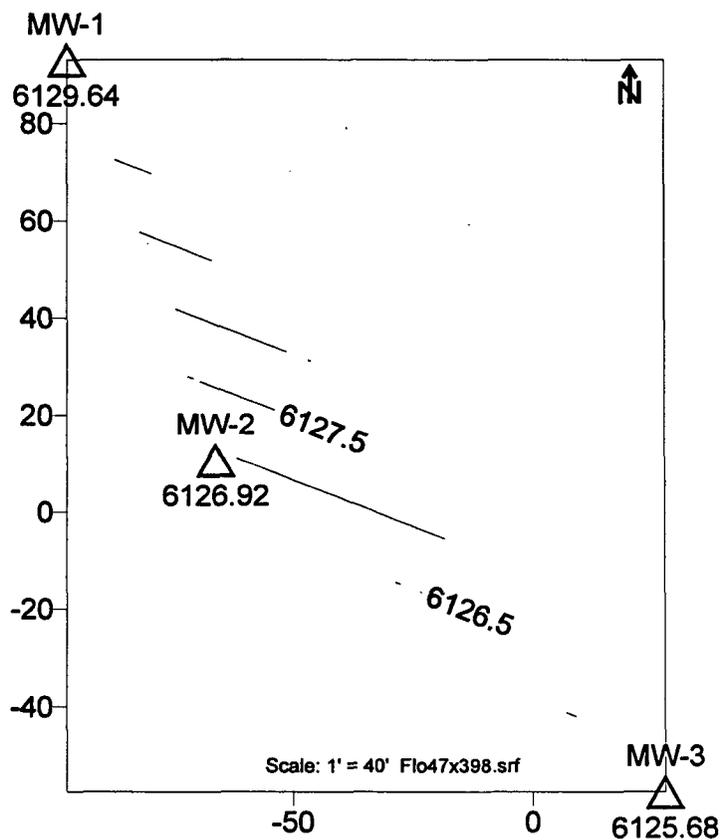
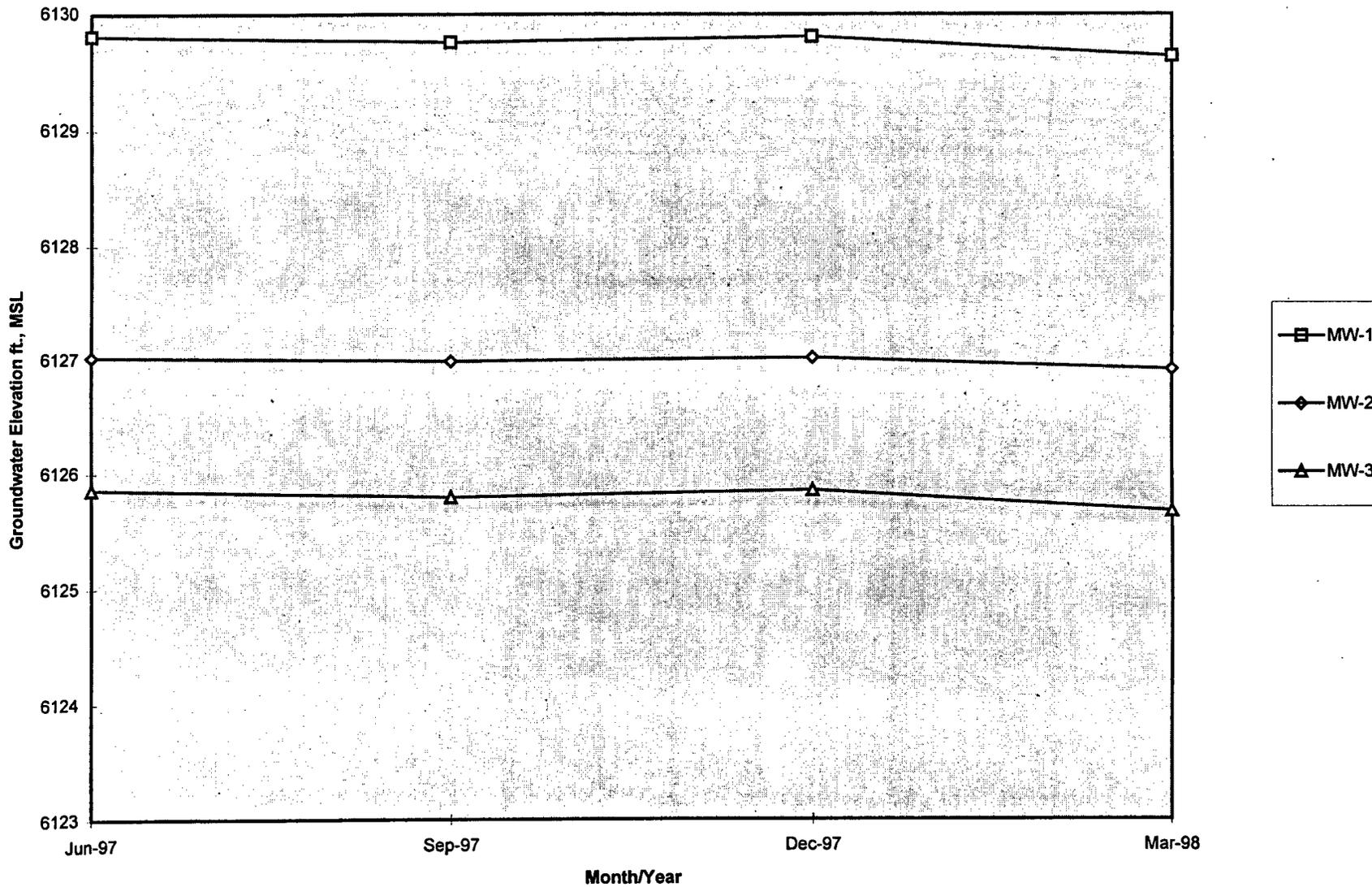


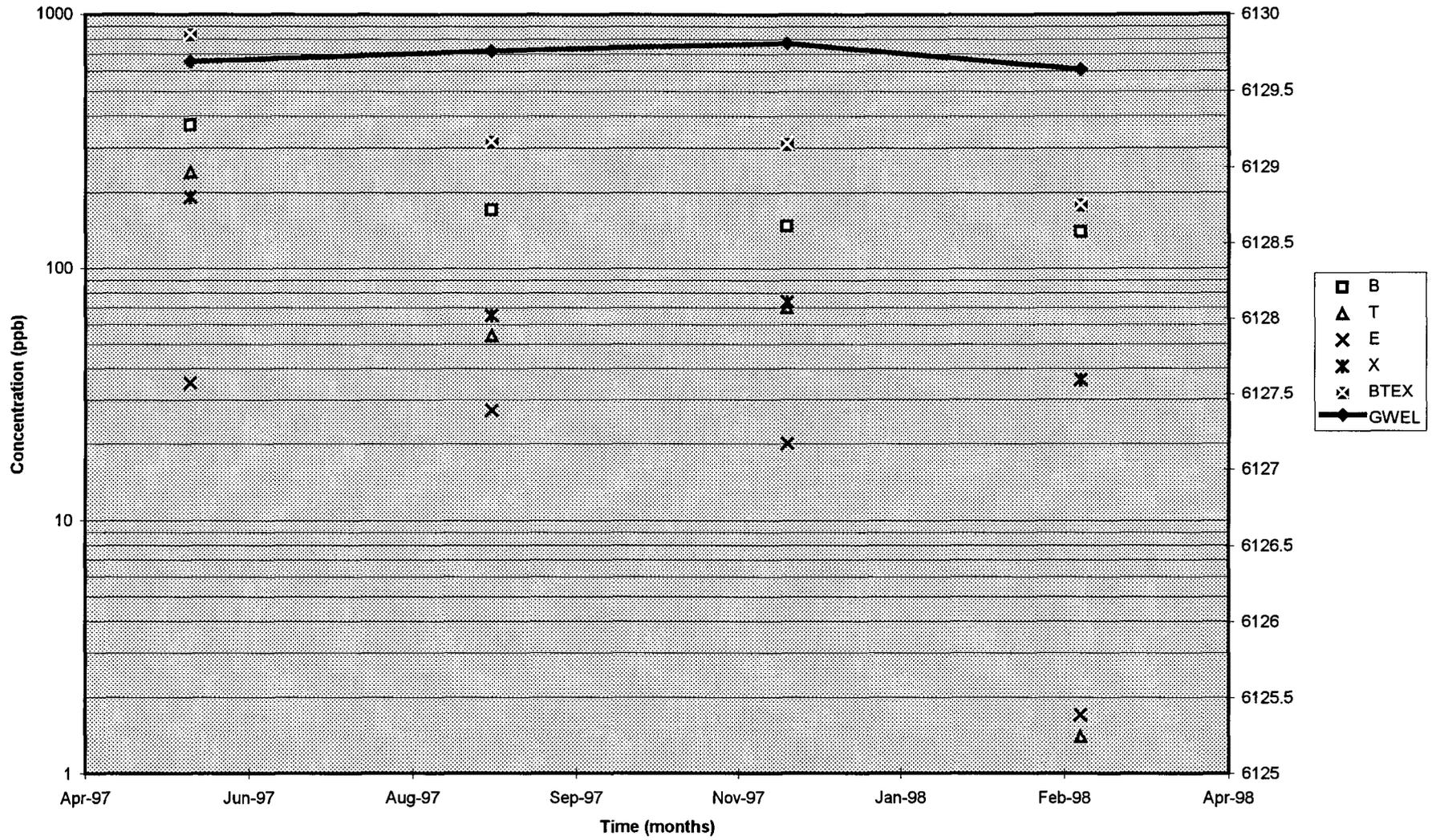
Figure 6. Florance 47X Hydrograph
(Water Level vs. Time)



Attachment A

Hydrographs and Concentrations versus Time

MW-1: Trends with Time





January 27, 1997

Mr. William Olson
Hydrogeologist
Oil Conservation Division
2040 So. Pacheco
Santa Fe, New Mexico 87505

RE: NOTIFICATION OF GROUNDWATER CONTAMINATION AT THE FLORANCE 47X WELL SITE

Dear Bill:

Pursuant to New Mexico Water Quality Control Commission (WQCC) Regulations, section 1-203, PNM hereby provides written notification of groundwater contamination at the Florance 47X well site, located in section 5, township 30 North, range 9 West, unit letter G. A topographic map showing the location of the site is provided as an attachment. The operator is Amoco. This letter follows verbal notification provided to you on Monday, January 27, 1997 (M. Gannon, PNM to B. Olson, OCD).

On December 31, 1996, PNM encountered groundwater at approximately 105 feet while conducting vertical extent soil boring. A 2-inch, schedule 40, PVC monitoring well with 15 feet of 0.01 inch screen was placed in the annulus 10 feet below and 5 feet above the soil/water interface. The annulus was backfilled with 10-12 silica sand 1 foot above the screened interval with a 1-foot bentonite seal. The annular space was then backfilled to surface using clean fill material. After purging three casing volumes, field personnel collected a groundwater sample for BTEX 8020 analysis. The groundwater sample was delivered to Envirotech Labs, in Farmington, New Mexico, for laboratory analysis. A hardcopy of the laboratory report is attached. A summary of the analytical results is provided below:

Component	Units	WQCC Stds.	Groundwater Sample
Benzene	ppb	10	3,380
Toluene	ppb	750	7,150
Ethylbenzene	ppb	750	917
Xylenes	ppb	620	7,200
Total BTEX	ppb		18,650

Bold type indicates a WQCC exceedance.

Florance 47X
1/27/97
Page 2

This letter serves as written notification of groundwater impact at the Florance 47X. PNM will conduct future activities at the site pursuant to PNM's Groundwater Management Plan. If you have any questions, please call me at (505) 241-2974. Thank you.

Sincerely,
PNM

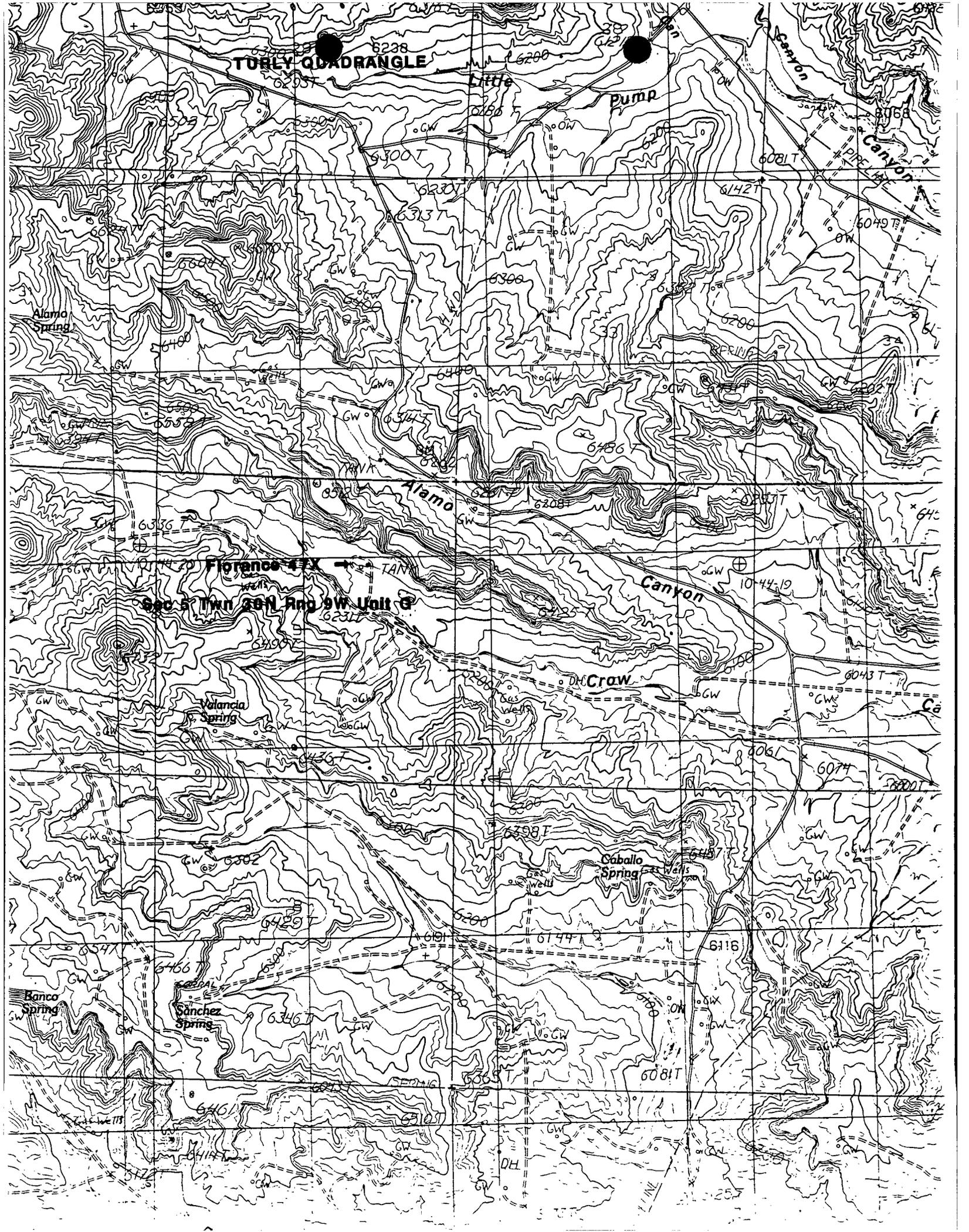


Maureen Gannon
Project Manager

s/gaspits/flo47X.doc

Attachment

cc: Colin Adams, PNM
Denver Bearden, PNMGS
Denny Foust, OCD-Aztec Office
Leigh Gooding, WFS
Toni Ristau, PNM
Buddy Shaw, Amoco



ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Public Service Co. of NM.	Project #:	93108-02
Sample ID:	MW - 1 @ 96'	Date Reported:	01-08-97
Chain of Custody:	5048	Date Sampled:	12-31-96
Laboratory Number:	A886	Date Received:	12-31-96
Sample Matrix:	Water	Date Analyzed:	01-07-97
Preservative:	HgCl ₂ & Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	3,380	10	1.8
Toluene	7,150	10	1.7
Ethylbenzene	917	10	1.5
p,m-Xylene	5,210	10	2.2
o-Xylene	1,990	10	1.0
Total BTEX	18,650		

ND - Parameter not detected at the stated detection limit.

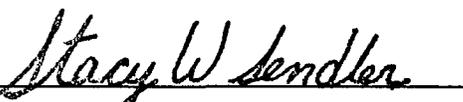
Surrogate Recoveries:	Parameter	Percent Recovery
	Trifluorotoluene	101 %
	Bromofluorobenzene	95 %

References: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1994.

Comments: **Florance M #47 X.**


Analyst


Review



State of New Mexico
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT
 Santa Fe, New Mexico 87505

STATE OF
 NEW MEXICO
 OIL
 CONSERVATION
 DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time <u>1500</u>	Date <u>1/27/97</u>
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<u>Originating Party</u>	<u>Other Parties</u>
<u>Maureen Cannon - PNM</u>	<u>Bill Olson - Envir. Bureau</u>

Subject
Notice of GW Contamination - Florence #47X
Unit G, sec 5, T30N, R9W

Discussion
Rehy of Amoco Florence #47X
GW at 105'
Benzene - 3300 ppb
BTEX - 18,000 "

Conclusions or Agreements

Distribution
 file
 Danny Faust - OCA Artee

Signed Bill Olson