

3R - 324

REPORTS

DATE:

Nov 1, 1999

Public Service Company
of New Mexico
603 W. Elm - P.O. Box 4750
Farmington, NM 87499
505 950-1997
Fax 505 325-7365

November 1, 1999

Oil Conservation Division
Attention: Bill Olson
2040 South Pacheco
Santa Fe, NM 87505



Subject: OCD Closure Reports – 3rd Reporting Quarter, 1999

Dear Mr. Olson:

PNM Environmental Services is submitting closure reports to the Oil Conservation Division for the groundwater sites listed below:

1. Florance #32A
2. Jacques #2A
3. Linda #1A
4. Mangum #1E
5. McClanahan #22
6. McCoy Gas Com A #1
7. Reid #16 Drip

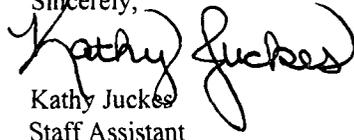
I have provided copies of the closures to Denny Foust for his information.

I have also enclosed copies of closures submitted to Denny Foust for his approval for the sites listed below:

- | | | | |
|----------------------------|---------------------------|-----------------------|-------------------------|
| 1. Angel Peak #23E | 20. Dusenberry #2A | 39. Grenier #12 | 58. Hanks #12E East |
| 2. Aztec SRC #8 Drip | 21. East #10M | 40. Grenier #13E | 59. Hanks #12Y |
| 3. C.M. Morris #3 | 22. East #12 | 41. Grenier #15 | 60. Hanks #17 |
| 4. Crouch Area Drip East | 23. East #15 | 42. Grenier #15E | 61. Hare #12 |
| 5. Crouch Area Drip West | 24. East #16 | 43. Grenier #2A | 62. Hare #13 |
| 6. Culpepper Martin #10A | 25. East #22 | 44. Grenier #3 | 63. Hare #15 |
| 7. Culpepper Martin #15A | 26. East #22A | 45. Grenier #4 Dehy | 64. Hare #16 |
| 8. Culpepper Martin #1A GC | 27. East #5 | 46. Grenier #4A Sep | 65. Hare #17 |
| 9. Culpepper Martin #1A RH | 28. East #8 | 47. Grenier #6A | 66. Hare #18 East |
| 10. Culpepper Martin #1E | 29. East #9A | 48. Grenier A #1A Sep | 67. Hare #22A |
| 11. Culpepper Martin #3A | 30. Eaton Federal #1 | 49. Grenier A #4 | 68. Holder A #1 |
| 12. Culpepper Martin #3M | 31. EH Pipken #5 | 50. Grenier A #4E | 69. Horton #1 |
| 13. Culpepper Martin #4A | 32. EH Pipken #5 Drip | 51. Grenier A #5 | 70. Horton #1A |
| 14. Culpepper Martin #4M | 33. Federal #1E | 52. Grenier A #6 | 71. Hubbard #1A |
| 15. Culpepper Martin #8A | 34. Florance #25 | 53. Grenier A #8 | 72. Jackson #2E |
| 16. Decker #4A Dehy | 35. Florance #27A | 54. Grenier B #3E | 73. Kutz Government #5J |
| 17. Decker A #3 Drip | 36. Fred Feasel G #1 | 55. Grenier B #4 | 74. Martinez #1 |
| 18. Decker A #3 Separator | 37. Fred Feasel G #1 Drip | 56. Gross #1 | |
| 19. Dusenberry #1A | 38. Fred Feasel G #1E | 57. Gross #1E | |

If you have any questions, please call me at 324-3764.

Sincerely,


Kathy Juckes
Staff Assistant

cc: Denny Foust

District I
P.O. Box 1980, Hobbs, NM

State of New Mexico
Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO
APPROPRIATE
DISTRICT OFFICE
AND 1 COPY TO
SANTA FE OFFICE

District II
P.O. Drawer DD, Artesia, NM 88221

OIL CONSERVATION DIVISION

District III
1000 Rio Brazos Rd, Aztec, NM 87410

2040 South Pacheco Street
Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Operator:	<u>PNM Gas Services (Amoco)</u>	Telephone:	<u>324-3764</u>
Address:	<u>603 W. Elm Street Farmington, NM 87401</u>		
Facility or Well Name:	<u>Jacques #2A</u>		
Location:	Unit <u>D</u>	Sec <u>25</u>	T <u>30N</u> R <u>9W</u> County <u>San Juan</u>
Pit Type:	Separator <input type="checkbox"/>	Dehydrator <input checked="" type="checkbox"/>	Other _____
Land Type:	BLM <input checked="" type="checkbox"/>	State <input type="checkbox"/>	Fee <input type="checkbox"/> Other _____
Pit Location:	Pit dimensions:	length <u>20</u> ' width <u>20</u> ' depth <u>4</u> ' _____	
(Attach diagram)	Reference:	wellhead <input checked="" type="checkbox"/> other _____	
	Footage from reference:	<u>76'</u> _____	
	Direction from reference:	<u>Due</u> Degrees <input type="checkbox"/> East North <input checked="" type="checkbox"/> _____ of <input type="checkbox"/> West South <input type="checkbox"/> _____	
Depth to Ground Water:	Less than 50 feet (20 points) 50 feet to 99 feet (10 points) Greater than 100 feet (0 points)		<u>10</u>
(Vertical distance from contaminants to seasonal high water elevation of ground water)			
Wellhead Protection Area:	Yes (20 points) No (0 points)		<u>0</u>
(Less than 200 feet from a private domestic water source, or; less than 1,000 feet from all other water sources)			
Distance to Surface Water:	Less than 200 feet (20 points) 200 feet to 1,000 feet (10 points) Greater than 1,000 feet (0 points)		<u>0</u>
(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)			
RANKING SCORE (TOTAL POINTS) :			<u>10</u>

Jacques #2A

Date Remediation Started: 10/06/1994

Date Completed: 11/16/1994

Remediation Method: Excavation X

Approx. Cubic Yard 767

(Check all appropriate sections)

Landfarmed X

Amount Landfarmed (cubic yds) 700

Other 67 cu yds clean overburden

Remediation Location: Onsite X

Offsite

(i.e., landfarmed onsite, name and location of offsite facility)

Backfill Material Location:

General Description of Remedial Action:

Excavated contaminated soil to pit size of 30' X 30' X 23' and landfarmed soil onsite within a bermed area at a depth of 6" to 12". Soil was aerated by disking/plowing until soil met regulatory levels.

Secondary source removal conducted on 12/10/97; approximately 3500 cu yds of contaminated soil removed.

Ground Water Encountered: No [] Yes [x] Depth 32'

Final Pit Closure Sampling:

Sample Location Center of pit bottom

(if multiple samples, attach sample result and diagram of sample locations and depths.)

Sample depth 23'

Sample date 11/15/1994 Sample time 1:30:00 PM

Sample Results

Benzene (ppm) < 0.2

Total BTEX (ppm) 61.81

Field headspace (ppm)

TPH (ppm) 526.00 Method 418.1

Vertical Extent (ft)

Risk Analysis form attached Yes [] No [x]

Ground Water Sample: Yes [x] No []

(If yes, see attached Groundwater Site Summary Report)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND MY BELIEF

DATE October 28, 1999

PRINTED NAME Maureen Gannon AND TITLE Project Manager

SIGNATURE Maureen Gannon

Groundwater Site Summary Report

Quarter/Year: 4th/98, 1st/99, 2nd/99 & 3rd/99

Operator: Amoco
Sec: 25 **Twn:** 30N **Rng:** 9W **Unit:** D
Canyon: Pump

Vulnerable Class: Original
OCD Ranking: 20
Lead Agency: NMOCD

Topo Map: Figure 1

Site Map with Analysis: Figure 2

Groundwater Contour Map: Figures 3a (April, 1998), 3b (July, 1998), 3c (October, 1998) and 3d (January, 1999)

Groundwater Hydrograph: Figure 4

Full-Suite Groundwater Sampling Results: previously submitted

Analytical Results: See 1999 Annual Groundwater Report. Results for temporary monitor well, TMW-1, are attached.

Well Completion Log/Diagram: TMW-1 only

Site Hydrology:

The Jacques 2A is located about one mile north of the San Juan River in a side drainage off Pump Canyon. An unnamed drainage runs from west to east, and the Jacques 2A site lies only about 100 feet from this drainage, which intersects Pump Canyon wash about 900 feet to the east. The site's elevation is about 5680 ft. amsl, and elevations drop eastward towards the valley floor of Pump Canyon along which elevations drop southward towards the San Juan River. The site receives roughly 8 to 10 inches of rainfall each year (based on data from Stone et al., 1983).

Pump Canyon is a major drainage, and covers a broad area. Alluvium on its valley floor spans more than 1,000 feet in width, and is probably from 50 to 100 feet thick (Stone et al., 1983). The northwestern-most well (MW-1; see Figure 2) reportedly encountered a "hard sandstone" at 42 feet, while deeper wells (MW-2 at 46.5 ft.) did not show any bedrock materials. Therefore, the general configuration of the bedrock-alluvium interface probably conforms to the surface topography (elevated in the northwest, and depressed towards the southeast).

Subsurface materials at the Jacques 2A site are described as clayey, silty sands. Well MW-2 reportedly encountered mostly clay and silt, with very little sand. Well MW-2 has been reinstalled after an additional source removal activity in December 1997, and now draws water from excavated and reworked material.

The depth to water ranges from 27 to 33 feet in monitor wells at the site. Maps showing the elevation of the water table over the last year appear in Figures 3a through 3d. In Figures 3b, 3c and 3d, the flow directions are towards the southeast, which agrees with the surface topography. Figure 3a, however, shows an anomalous mounding pattern centered on well MW-2. Figure 3a is based on the first set of water level data collected after site re-excavation and therefore is most likely unrepresentative of site conditions, but instead reflects the undeveloped state of well MW-2, collection of rainwater in the disturbed excavation materials, or other factors not related to the true groundwater surface.

Figure 4 shows water levels in the monitor wells over time. After irregularities in the earlier history of the site, water levels in the wells tend to track each other. The anomalously high water level in the newly installed MW-2 is clearly visible in Figure 4 (April, 1998 measurement). For the last three quarters, water levels in all four wells have shown consistent relationships, indicating a relatively constant flow direction, as is also reflected in the water table maps (Figures 3b through 3d).

Public Service Company of New Mexico - Gas Services

Environmental Services Division - Alvarado Square, MS-0408
Albuquerque, NM 87158

Contact: Maureen Gannon

Telephone: 505-241-2974

PNMGS Well Site: Jacques 2A (continued)

Activities for Previous Year:

Quarterly sampling of well MW-2 took place on April 29, July 9 and October 5, 1998, and again on January 18, 1999. Water level measurements were taken in the four monitoring wells. In the January, 1999 sampling event, PNM conducted groundwater sampling in each well for chemical analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX). All sampling was performed in strict compliance with EPA protocol. PNM delivered the samples to OnSite Technologies, Farmington, New Mexico. The samples were analyzed for BTEX using EPA Method 8021B.

The site was resurveyed in February, 1999 to more accurately measure the wellhead elevation in the re-installed MW-2. The new information was used to prepare the figures attached to this report.

On July 27, 1999, PNM installed a temporary monitor well southwest of our former pit. This well was installed as requested to alleviate any concerns regarding potential impacts to the southwest of PNM's former dehydrator pit. Figure 2 shows the exact location of this well. On August 5, 1999, this well was sampled and analyzed for BTEX by method 8021B and for polyaromatic hydrocarbons (PAHs) by method 8310.

Results:

Figure 2 presents a site map showing BTEX for each monitoring well since groundwater contamination was discovered. BTEX concentrations in the source well, MW-2, had been quite high since installation early in 1997; therefore, secondary source removal (about 5000 cubic yards) was conducted in December, 1997. After this additional work, concentrations rapidly fell below standards and have remained so for the last four quarters. No other samples from monitor wells, MW-1, -3 or -4, have contained BTEX constituents. Both BTEX and PAH concentrations in temporary monitor well, TMW-1, were below detection levels.

Future Actions:

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM requests closure of the Jacques 2A. This request is based upon the analytical data collected over the last two years at the site. The secondary excavation of additional source materials was successful in achieving clean-up at the Jacques 2A; the BTEX concentrations in MW-2 have been below standards for four consecutive quarters. Resampling of all monitor wells including the new temporary well, TMW-1, have shown BTEX compounds to be below detection limits.

Upon approval of the groundwater closure report, PNM will plug and abandon the four groundwater monitoring wells at the site. The concrete pad and metal vault surrounding each well will be removed. The well casing will be cut to ground surface and each well will be plugged on the surface with cement containing 5% bentonite.

Public Service Company of New Mexico - Gas Services

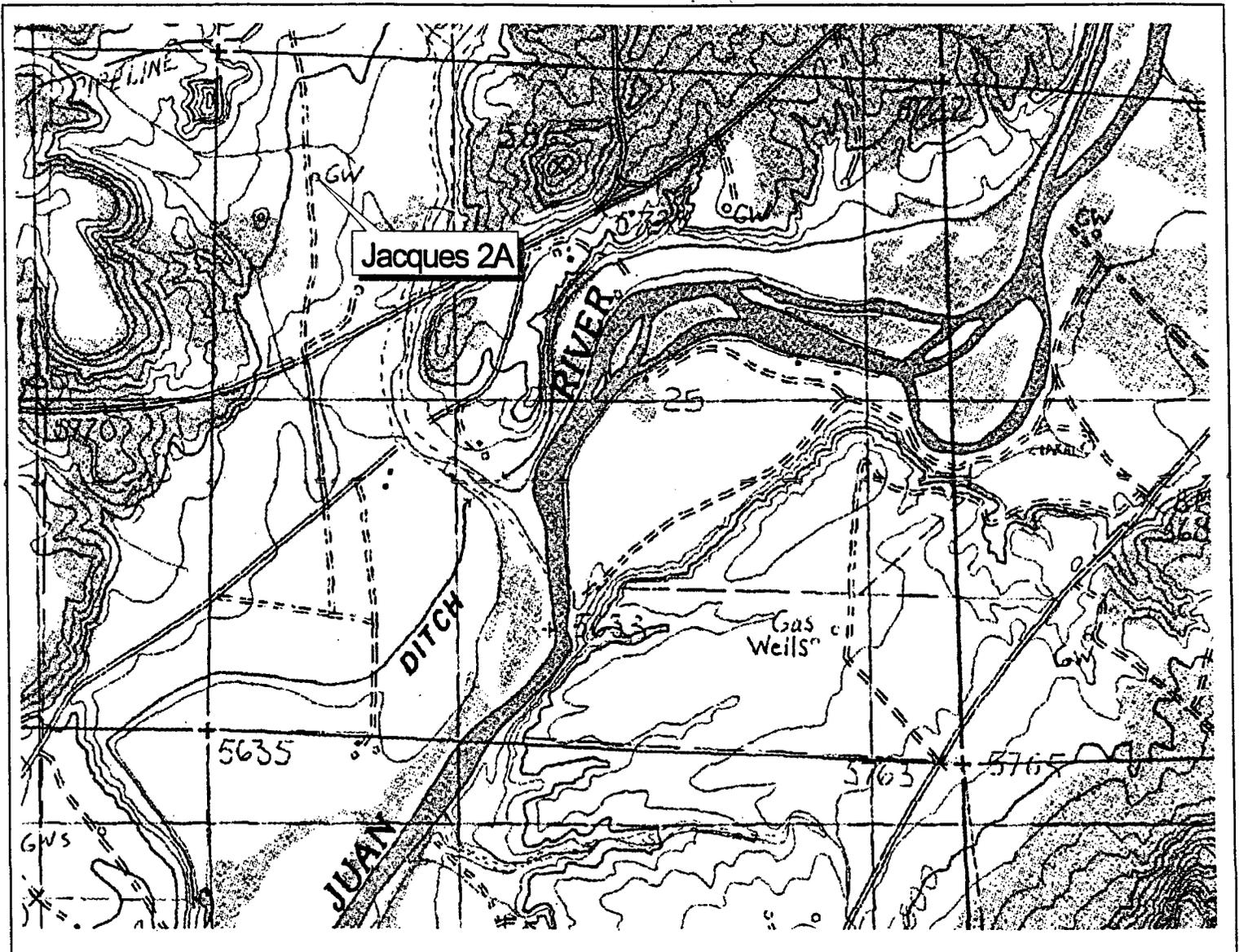
Environmental Services Division - Alvarado Square, MS-0408
Albuquerque, NM 87158

Contact: Maureen Gannon

Telephone: 505-241-2974



Figure 1.
Jacques 2A Groundwater Site
Twn. 30N Rng. 9W Sec. 25 Unit D



Archuleta, NM Quadrangle

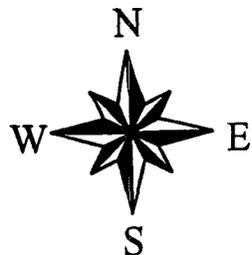


Figure 2.
Jacques 2A Site Map & Analytical Results
(Concentrations in ppb)

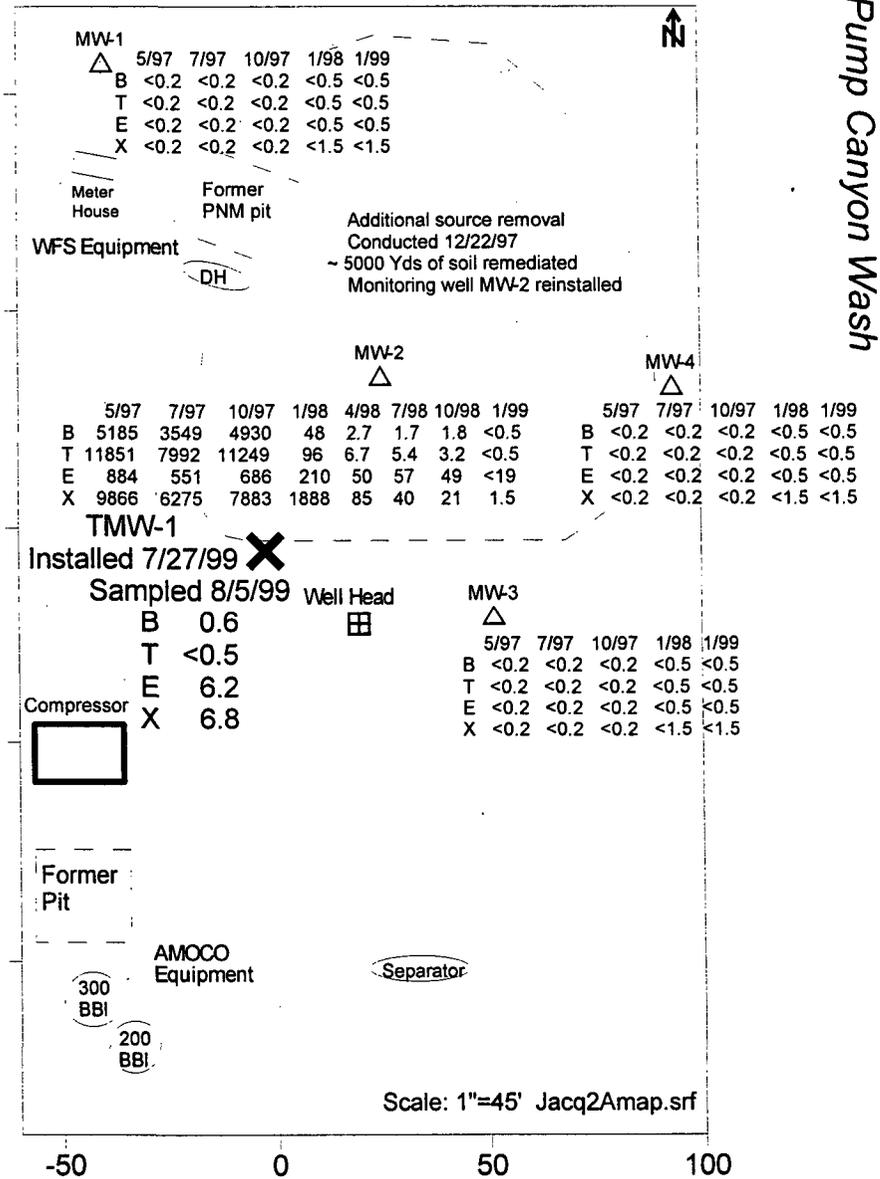
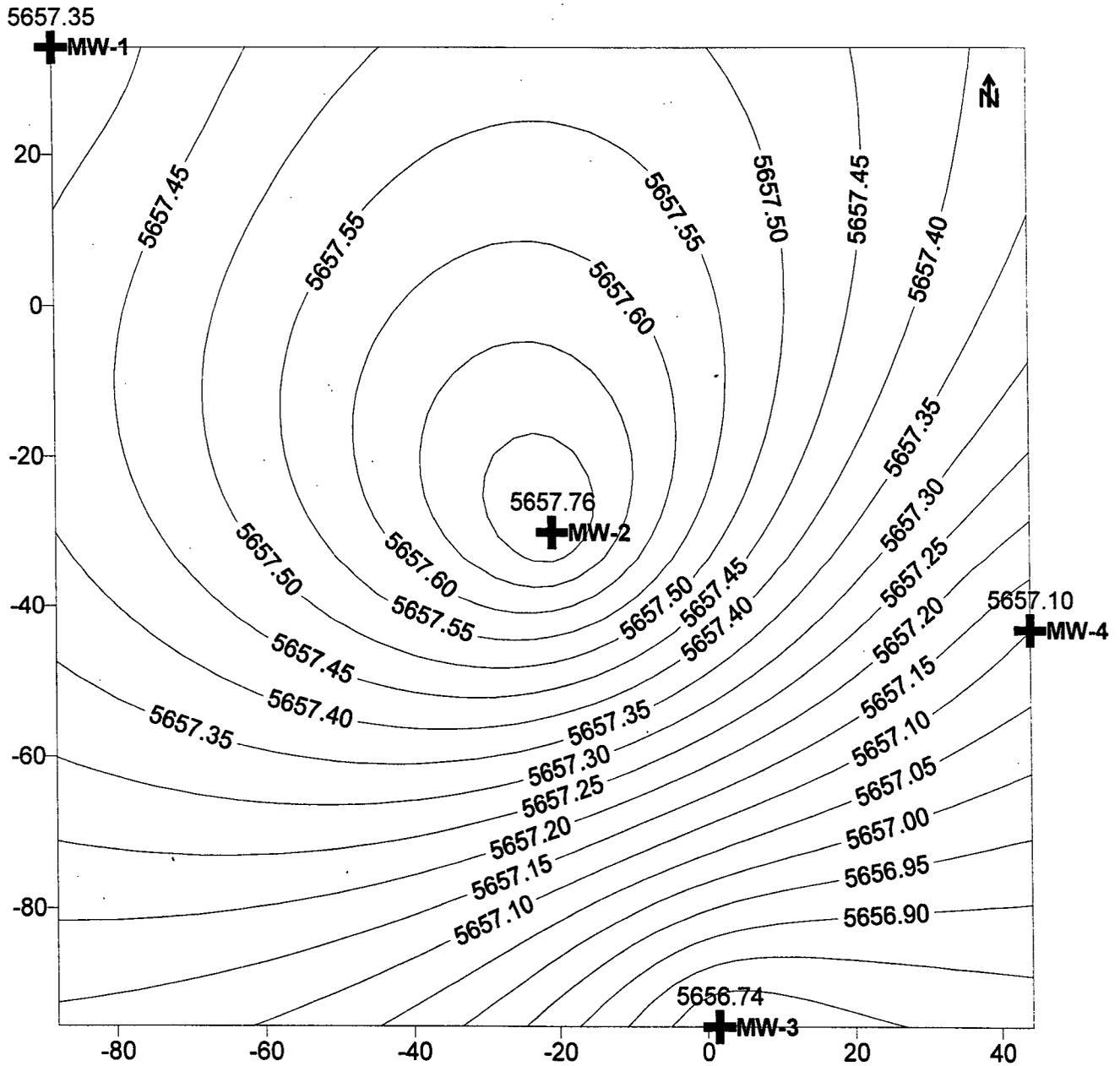
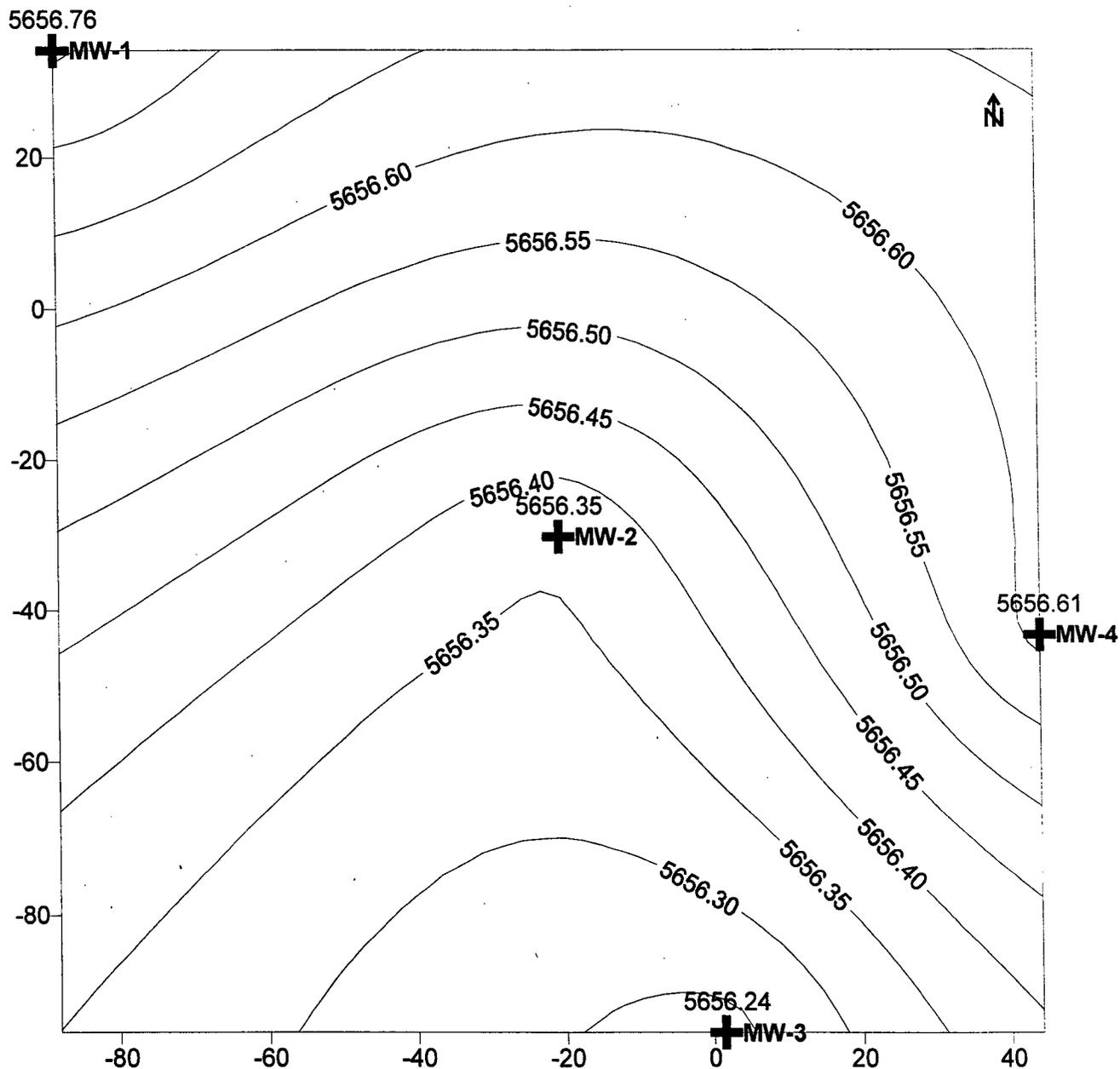


Figure 3a.
Jacques 2A Groundwater Contour Map
(April 29, 1998)



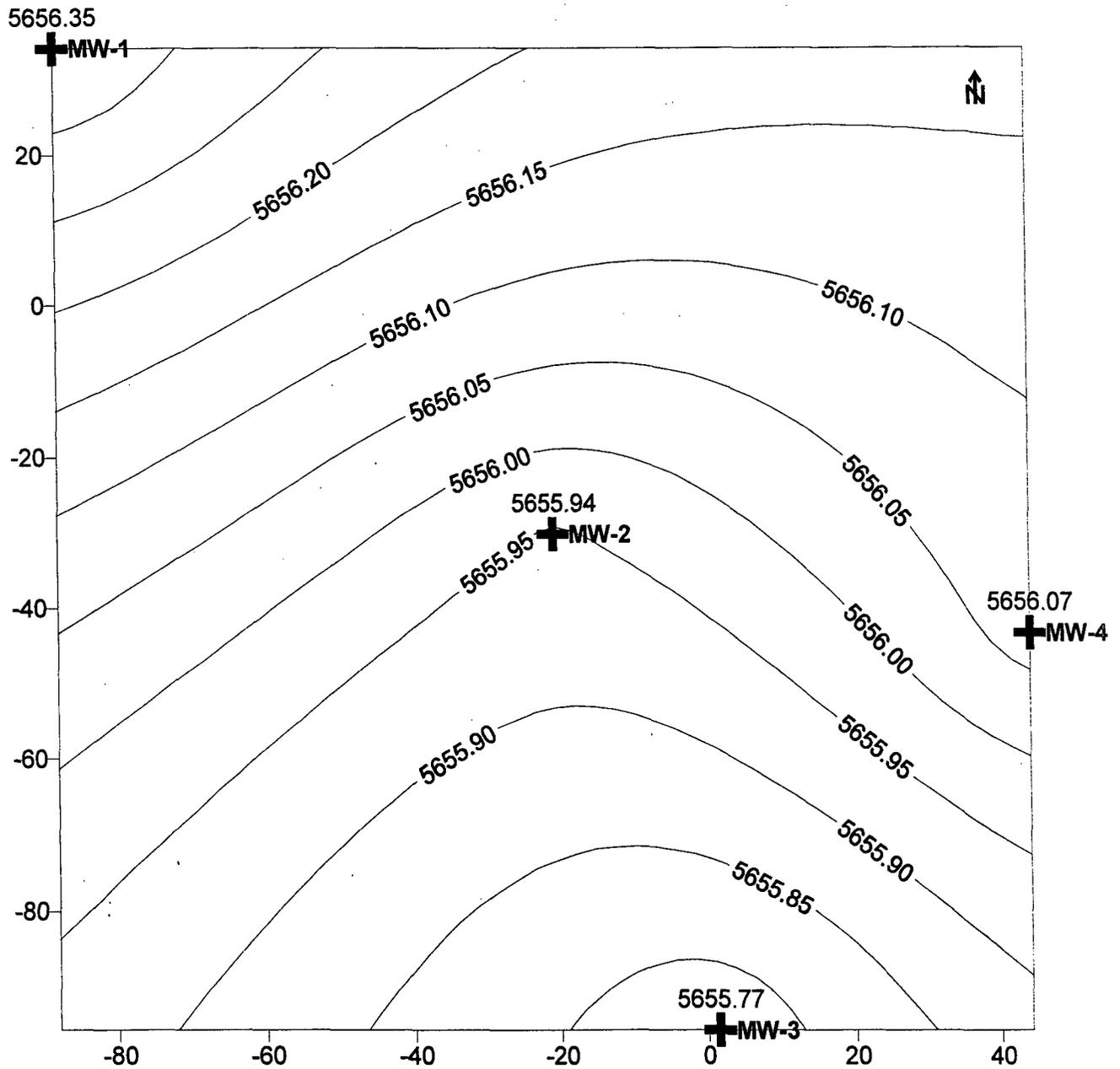
SCALE IN FEET
(X-axis = Easting, Y-axis = Northing)

Figure 3b.
Jacques 2A Groundwater Contour Map
(July 9, 1998)



SCALE IN FEET
(X-axis = Easting, Y-axis = Northing)

Figure 3c.
Jacques 2A Groundwater Contour Map
(October 5, 1998)



SCALE IN FEET
(X-axis = Easting, Y-axis = Northing)

Figure 3d.
Jacques 2A Groundwater Contour Map
(January 18, 1999)

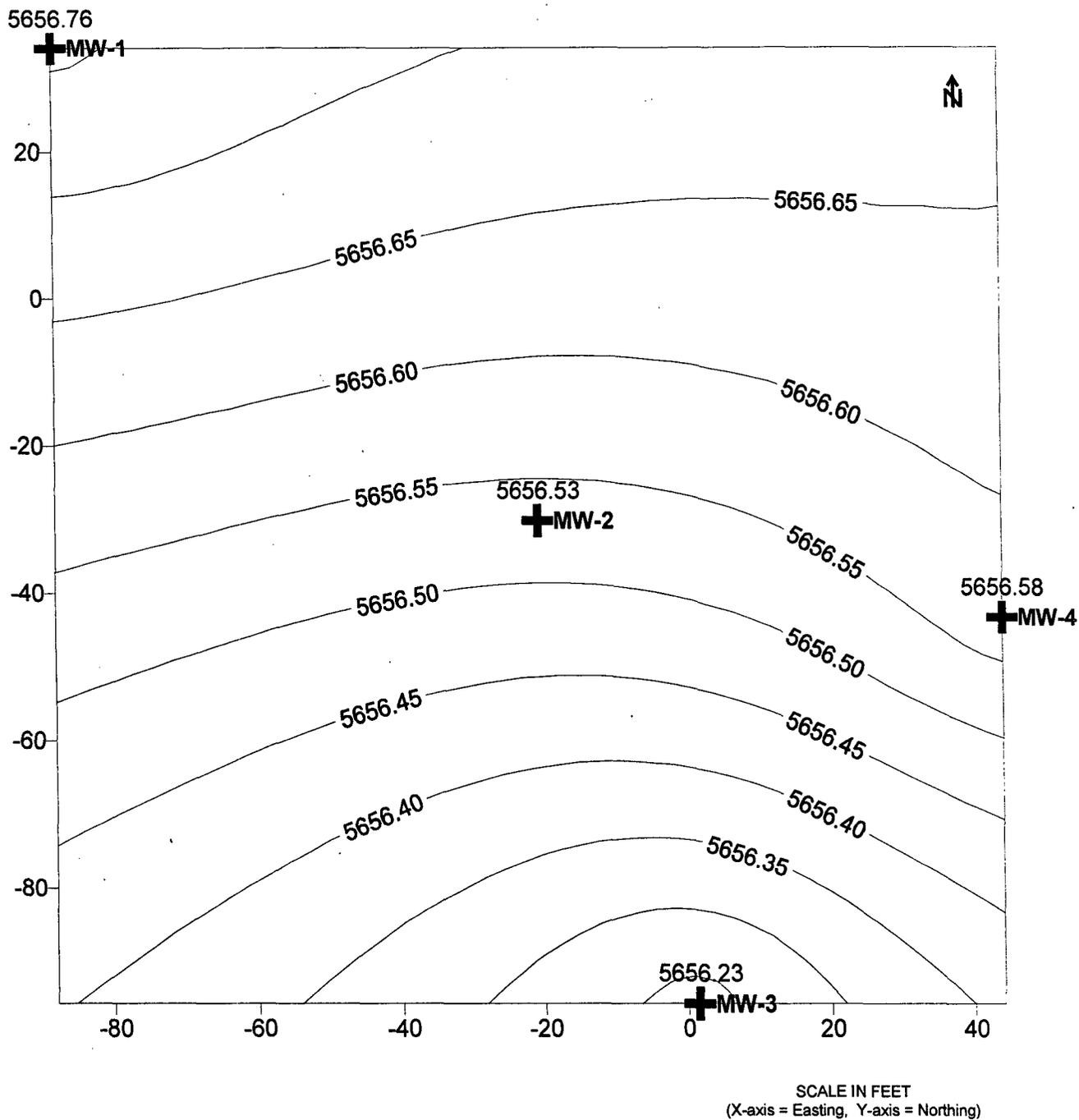
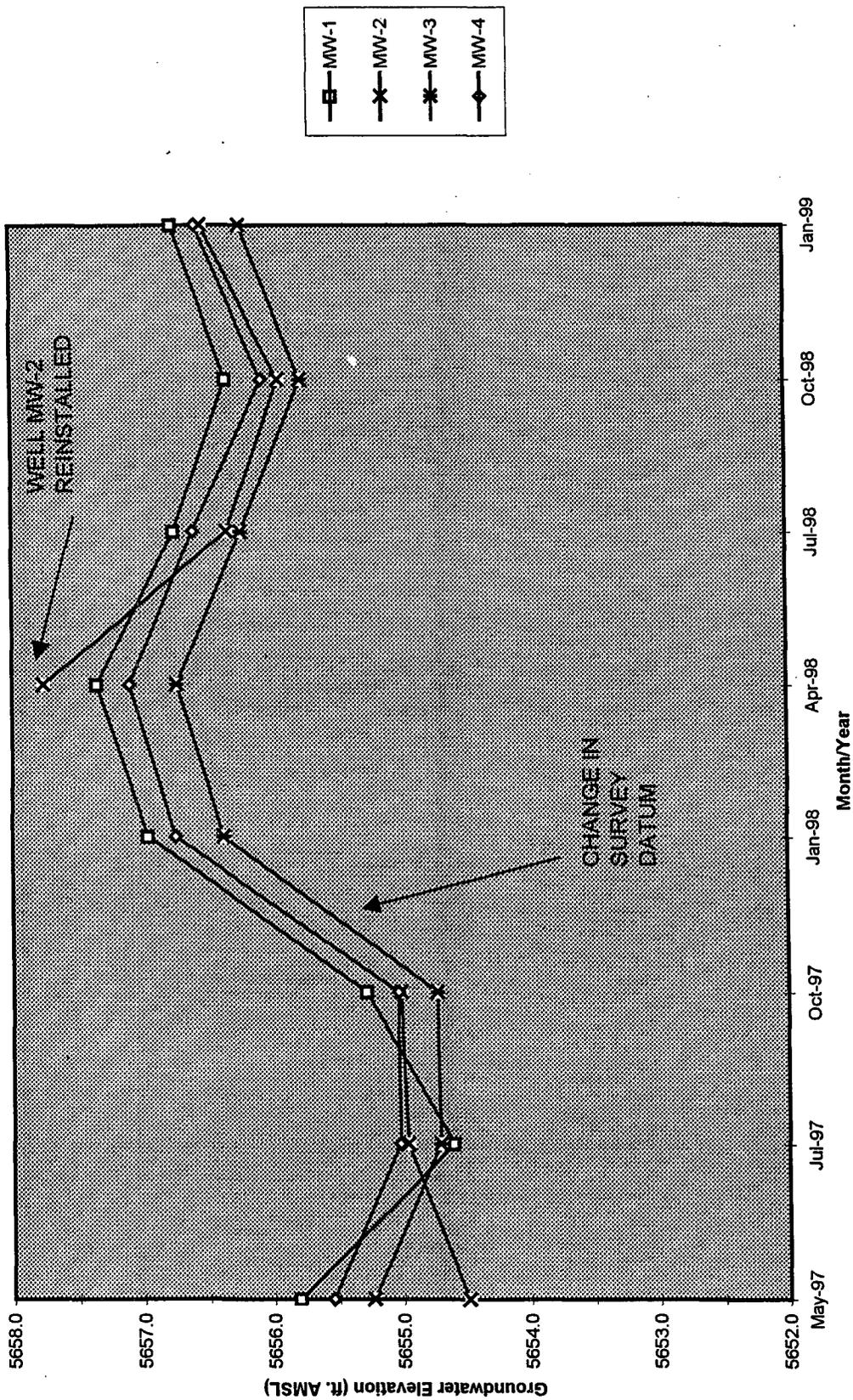


Figure 4. Jacques 2A Hydrograph
(Water Level vs. Time)



OFF: (505) 325-5667



LAB: (505) 325-1556

August 25, 1999

RECEIVED
SEP 01 1999

Maureen Gannon
PNM - Public Service Company of NM
Alvarado Square Mail Stop 0408
Albuquerque, NM 87158
TEL: (505) 241-2974
FAX (505) 241-2340

RE: Jacques 2A

Order No.: 9908013

Dear Maureen Gannon,

On Site Technologies, LTD. received 1 sample on 08/06/1999 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

- Aromatic Volatiles by GC/PID (SW8021B)
- Polynuclear Aromatic Hydrocarbons (SW8310)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

A handwritten signature in black ink, appearing to read 'David Cox', is written over the typed name.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 25-Aug-99

CLIENT: PNM - Public Service Company of NM

Project: Jacques 2A

Lab Order: 9908013

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 25-Aug-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Jacques 2A
Work Order:	9908013	Client Sample ID:	9908051630; TMW-1
Lab ID:	9908013-01A	Matrix:	AQUEOUS
Project:	Jacques 2A	Collection Date:	08/05/1999 4:30:00 PM
		COC Record:	7821

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	0.6	0.5		µg/L	1	08/16/1999
Toluene	ND	0.5		µg/L	1	08/16/1999
Ethylbenzene	6.2	0.5		µg/L	1	08/16/1999
m,p-Xylene	4.8	1		µg/L	1	08/16/1999
o-Xylene	2	0.5		µg/L	1	08/16/1999

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

August 17, 1999

Mr. David Cox
ON SITE TECHNOLOGIES
612 East Murray
Farmington, NM 87401

The following report contains analytical results for the sample(s) received at Southern Petroleum Laboratories (SPL) on August 10, 1999. The sample(s) was assigned to Certificate of Analysis No. (s) 9908283 and analyzed for all parameters as listed on the chain of custody.

Any data flags or quality control exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

If you have any questions or comments pertaining to this data report, please do not hesitate to contact me. Please reference the above Certificate of Analysis No. during any inquiries.

Again, SPL is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Southern Petroleum Laboratories

A handwritten signature in cursive script, appearing to read 'Scot Bramfitt', is written over a horizontal line.

Scot Bramfitt
Project Manager



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
PHONE (713) 660-0901

Southern Petroleum Laboratories, Inc.

Certificate of Analysis Number: 99-08-283

Approved for Release by:

A handwritten signature in black ink, appearing to read 'Scot Bramfitt', is written over a horizontal line.

Scot Bramfitt, Project Manager

8/17/99
Date

Joel Grice
Laboratory Director

Ted Yen
Corporate Quality Assurance Director

The attached analytical data package may not be reproduced except in full without the express written approval of this laboratory.
The results relate only to the samples tested.
Results reported on a Wet Weight Basis unless otherwise noted.



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TEXAS 77054
 PHONE (713) 660-0901

Certificate of Analysis No. H9-9908283-01

On Site Technologies
 612 East Murray
 Farmington, NM 87401
 ATTN: David Cox

Jacques 2A 9908051630; TMW-1

08/16/99

PROJECT: 8310 Analysis
 SITE:
 SAMPLED BY: On Site Technologies, LTD.
 SAMPLE ID: 9908013-01B

PROJECT NO: 9908013
 MATRIX: WATER
 DATE SAMPLED: 08/05/99 16:30:00
 DATE RECEIVED: 08/10/99

ANALYTICAL DATA

PARAMETER	RESULTS	PQL*	UNITS
Naphthalene	ND	0.1	ug/L
Acenaphthylene	ND	0.1	ug/L
Acenaphthene	ND	0.1	ug/L
Fluorene	ND	0.1	ug/L
Phenanthrene	ND	0.1	ug/L
Anthracene	ND	0.1	ug/L
Fluoranthene	ND	0.1	ug/L
Pyrene	ND	0.1	ug/L
Chrysene	ND	0.1	ug/L
Benzo (a) anthracene	ND	0.1	ug/L
Benzo (b) fluoranthene	ND	0.1	ug/L
Benzo (k) fluoranthene	ND	0.1	ug/L
Benzo (a) pyrene	ND	0.1	ug/L
Dibenzo (a,h) anthracene	ND	0.1	ug/L
Benzo (g,h,i) perylene	ND	0.1	ug/L
Indeno (1,2,3-cd) pyrene	ND	0.1	ug/L

SURROGATES	AMOUNT SPIKED	% RECOVERY	LOWER LIMIT	UPPER LIMIT
1-Fluoronaphthalene	0.50 ug/L	64	50	150
Phenanthrene d-10	0.50 ug/L	69	50	150

ANALYZED BY: KA DATE/TIME: 08/13/99 06:41:23
 EXTRACTED BY: KL DATE/TIME: 08/10/99 12:00:00
 METHOD: 8310 Polynuclear Aromatic Hydrocarbons
 NOTES: * - Practical Quantitation Limit ND - Not Detected
 NA - Not Analyzed

COMMENTS:

QUALITY ASSURANCE: These analyses are performed in accordance with EPA guidelines for quality assurance.

CHAIN OF CUSTODY RECORD



612 E. Murphy Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Date: 3/5/99

Purchase Order No.:		Job No.:		Name: Maureen Gannon		Title:	
Name: Denver Bearden		Company: PNM Gas Services		Company: PNM Gas Services			
Company: PNM Gas Services		Dept: 324-3763		Mailing Address: Alverado Square, Mail Stop 0408			
Address: 603 W. Elm Street		City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158			
Sampling Location: Jacques 2A		Sampler: Mark Sikelianos		Telephone No.: 505-848-2974		Telefax No.:	
SEND INVOICE TO		RESULTS TO		ANALYSIS REQUESTED			
Number of Containers		Number of Containers		LAB ID			
DATE		SAMPLE TIME		DATE/TIME		DATE/TIME	
MATRIX		PRES.		DATE/TIME		DATE/TIME	
9908051630		TMW-1		H2O		1440	
Date/Time		Date/Time		Date/Time		Date/Time	
Relinquished by: Mark Bearden		Date/Time: 3/5/99 1440		Received by: Maureen Gannon		Date/Time: 3/5/99 1100	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Method of Shipment:		Rush		24-48 Hours		10 Working Days	
Authorized by: <i>Mark Bearden</i>		Date: 3/5/99		Special Instructions:		Results to be sent to both parties.	

RECORD OF SUBSURFACE EXPLORATION

Philip Environmental Services Corp.
 4000 Marvoo Road
 Farmington, New Mexico 87401
 (505) 328-2282 FAX (505) 328-2388

Borehole # 1
 Well # TEMP #1
 Page 1 of 2

Project Name PNM WELL INSTALLATION
 Project Number 21300 Phase 6001
 Project Location JACQUES #2A AMCC

Elevation _____
 Borehole Location SEC 25, T30N, R9W, 0
 GWL Depth 31.91 - TOC 2.3' = 29.6'
 Logged By C. CULLICOTT
 Drilled By K. PADILLA, D. PADILLA
 Date/Time Started 7/27/99 10am
 Date/Time Completed 7/27/99 3:45pm

Well Logged By C. CULLICOTT
 Personnel On-Site K. PADILLA, D. PADILLA
 Contractors On-Site _____
 Client Personnel On-Site GARY COOF
 Drilling Method AUGER
 Air Monitoring Method PIO

Depth (Feet)	Sample Interval	Sample Type & Recovery (inches)	Sample Description Classification System: USCS	USCS Symbol	Depth Lithology Change (feet)	Air Monitoring Units: NDU			Drilling Conditions & Blow Counts
						BZ	BH	S	
0			SURFACE SAND						
10	1		① GRAY SANDY SILT, CONSOLIDATED, WITH TENDRILS OF CALICHE THROUGHOUT.			Ø	Ø	SS Ø	8 BLOWS
20	2		② TAN FINE SAND w/ CLAY FRACTION, MODERATE CONSOLIDATION. NO OBVIOUS HC STAIN OR ODR. NO CALICHE.			Ø	Ø	SS Ø	16 BLOWS
30	3		③ BROWN FINE SAND w/ CLAY, SLIGHTLY DAMP.			Ø	Ø	SS Ø	22 BLOWS
35	4		④ HYDROCARBON/WATER SATURATED SAND RIGHT AT 30'. SOLID BLACK PERVASIVE STAIN TO ~ 31.5'. 100% SAT.						18 BLOWS
40									

TD
40'

Comments: MONITOR WELL #2 27.5', 40' FROM TEMP #1
SUNNY, HOT

Geologist Signature Cathy Cullicott

JACQUES 2A

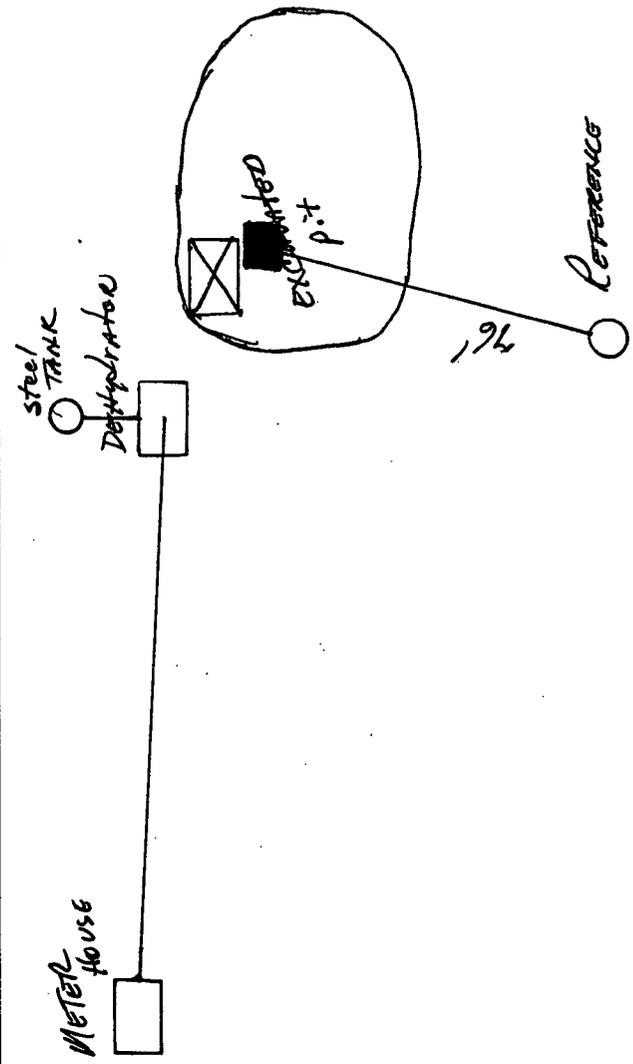
A

JACQUES 2A
Amoco production

NW 4
NW 4

SEC 25
T 30N
R 9W
GRAZING

ROAD

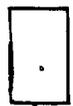


with h
1/4 mile

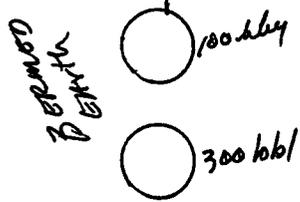
Remainig

LAND FARM

Amoco
separator



LAND FARM



W

S

Jacquez #2A

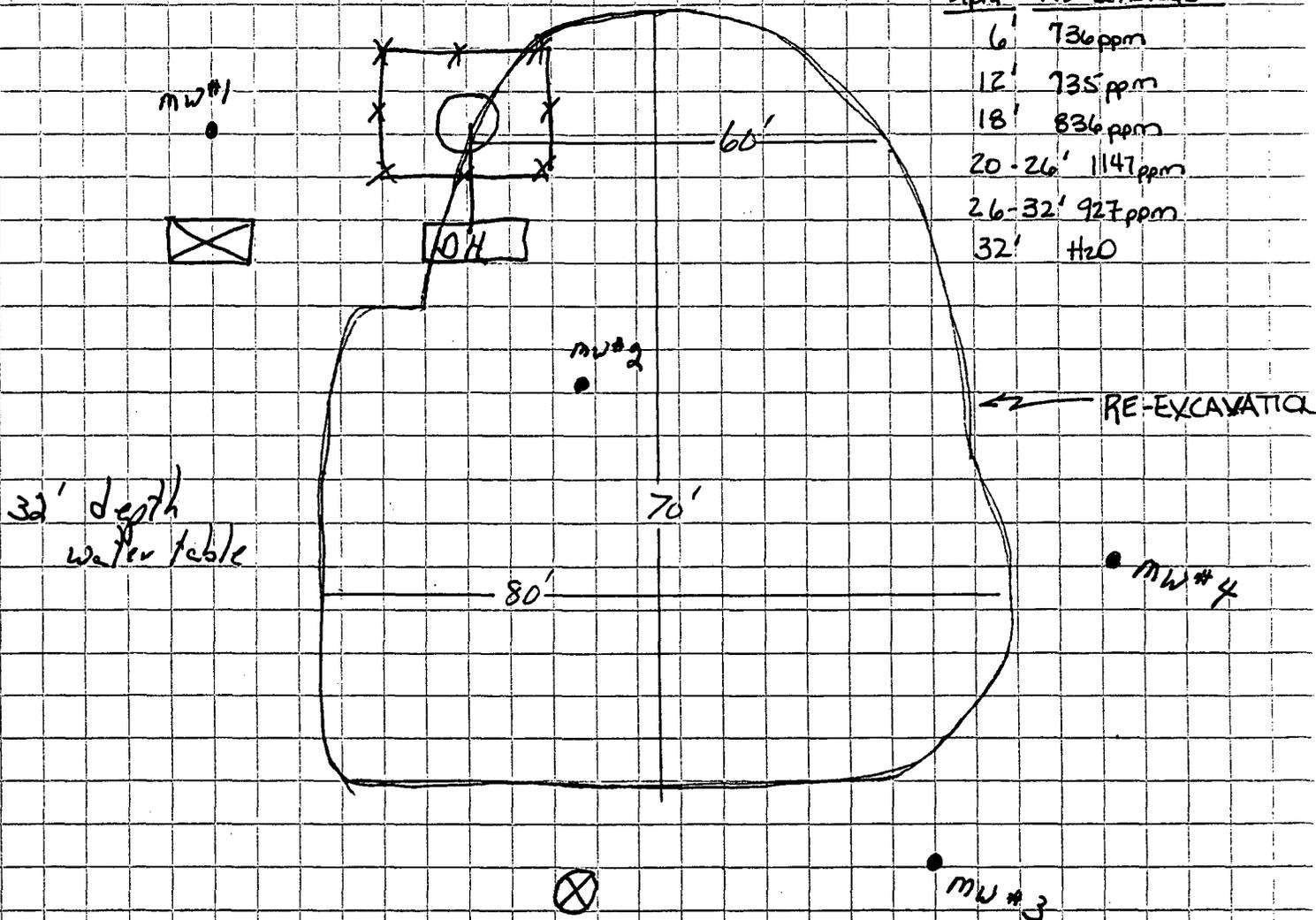
12-22-97

Amoco

Sec. 25, 30N, 9W, D

Depth PID READINGS

Depth	PID READINGS
6'	736 ppm
12'	735 ppm
18'	836 ppm
20-26'	1147 ppm
26-32'	927 ppm
32'	H ₂ O



5925 yds removed
 3500 contaminated soil
 2425 overburden

VOLATILE AROMATIC HYDROCARBONS

Gas Company of New Mexico

Project ID:	Pit Pilot Project	Report Date:	11/28/94
Sample ID:	JAQ 2A - 1 - EX	Date Sampled:	11/15/94
Lab ID:	0439	Date Received:	11/16/94
Sample Matrix:	Soil	Date Extracted:	11/22/94
Preservative:	Cool	Date Analyzed:	11/23/94
Condition:	Intact		

Target Analyte	Concentration (mg/kg)	Detection Limit (mg/kg)
Benzene	ND	0.20
Toluene	7.55	0.20
Ethylbenzene	3.46	0.20
m,p-Xylenes	40.6	0.40
o-Xylene	10.2	0.20

ND - Analyte not detected at the stated detection limit.

Quality Control:	<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Acceptance Limits</u>
	Trifluorotoluene	115	81 -117%
	Bromofluorobenzene	100	74 -121%

Reference: Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

Comments:


Analyst


Review

TOTAL PETROLEUM HYDROCARBONS

EPA Method 418.1

Gas Company of New Mexico

Project ID: Pit Pilot Project
Sample Matrix: Soil
Preservative: Cool
Condition: Intact

Report Date: 11/28/94
Date Sampled: 11/16/94
Date Received: 11/16/94
Date Extracted: 11/23/94
Date Analyzed: 11/23/94

Sample ID	Lab ID	Concentration (mg/kg)	Detection Limit (mg/kg)
Jaques 2A 1 - EX	0439	526	47.1
Jaques 2A 1 - EX LLF	0440	ND	25.0

ND- Analyte not detected at the stated detection limit.

Reference: Method 3550 - Sonication Extraction; Test Methods for Evaluating Solid Waste, SW-846, United States Environmental Protection Agency, September, 1986;
Method 418.1 - Petroleum Hydrocarbons, Total Recoverable; Chemical Analysis of Water and Waste, United States Environmental Protection Agency, 1978.

Comments:

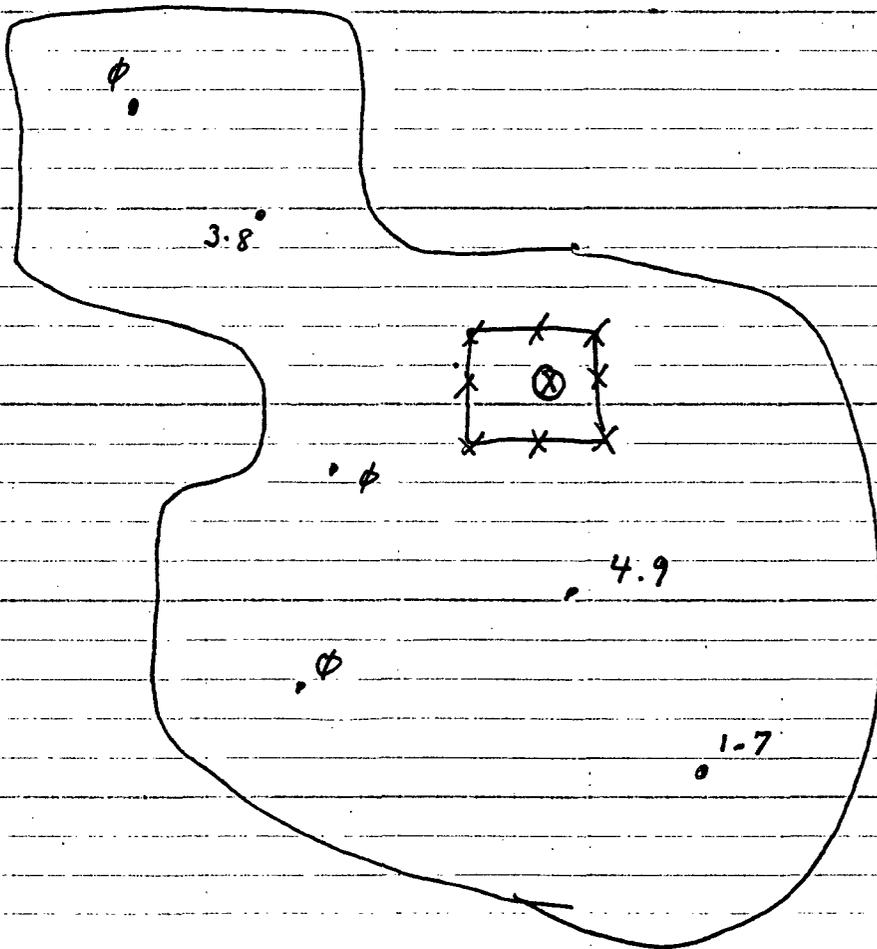

Analyst


Review

Jacques # 2A
Amuco

7/9/98

Landfarm: Sandoul Gas Com "8" #1



980709 1500
2"-12" depth

soil vapor headspace = 22.3 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 23-Jul-98

CLIENT: PNM - Public Service Company of NM
Project: Jacquez #2A LF
Lab Order: 9807029

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.



OFF: (505) 325-5667

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Jul-98

Client: PNM - Public Service Company of NM	Client Sample Info: Jacquez #2A LF
Work Order: 9807029	Client Sample ID: 9807091500; Sandoval GC B#1
Lab ID: 9807029-01A Matrix: SOIL	Collection Date: 7/9/98 3:00:00 PM
Project: Jacquez #2A LF	COC Record: 7312

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/20/98

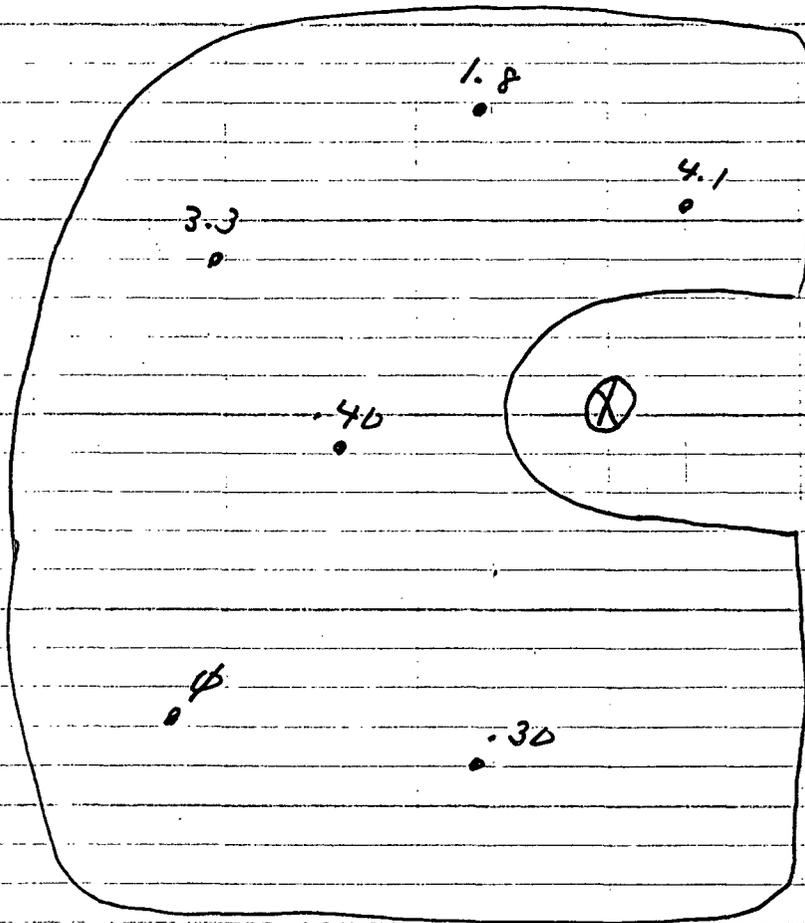
Qualifiers:

PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
B - Analyte detected in the associated Method Blank	Surr: - Surrogate

Jacques # 2A
Amoco

7/9/98

Land form: Sandoual Gas Com C#1E
Amoco
Sec. 35, 30N, 9W, E



9807091530

2"-12" depth

soil vapor head space = 43.8 ppm

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 03-Jun-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Sandoval G.C.C#1E
Work Order:	9805081	Client Sample ID:	9805261150; Jaques #2 LF
Lab ID:	9805081-01A	Matrix:	SOIL
Project:	Landfarm Composites	Collection Date:	5/26/98 11:50:00 AM
		COC Record:	5222

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/1/98

Qualifiers: PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate