

3R - 327

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

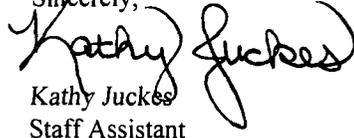
I have provided copies of the closures to Denny Foust for his information.

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:	PNM Gas Services (Greystone)			Telephone:	324-3764	
Address:	603 W. Elm Street Farmington, NM 87401					
Facility or Well Name:	Linda #1A					
Location:	Unit	D	Sec	31	T	27N R 8W County San Juan
Pit Type:	Separator	<input type="checkbox"/>	Dehydrator	<input type="checkbox"/>	Other	Abandoned.
Land Type:	BLM	<input type="checkbox"/>	State	<input type="checkbox"/>	Fee	<input type="checkbox"/> Other Navajo Reservation
Pit Location:	Pit dimensions:		length	15'	width	15' depth 3'
(Attach diagram)	Reference:		wellhead	<input checked="" type="checkbox"/>	other	
	Footage from reference:		225'			
	Direction from reference:		15	Degrees	<input checked="" type="checkbox"/> East	North <input type="checkbox"/>
					<input type="checkbox"/> West	South <input checked="" type="checkbox"/>
Depth to Ground Water:						
<small>(Vertical distance from contaminants to seasonal high water elevation of ground water)</small>			Less than 50 feet	(20 points)		
			50 feet to 99 feet	(10 points)		
			Greater than 100 feet	(0 points)	20	
Wellhead Protection Area:						
<small>(Less than 200 feet from a private domestic water source, or, less than 1,000 feet from all other water sources)</small>			Yes	(20 points)		
			No	(0 points)	0	
Distance to Surface Water:						
<small>(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)</small>			Less than 200 feet	(20 points)		
			200 feet to 1,000 feet	(10 points)		
			Greater than 1,000 feet	(0 points)	10	
RANKING SCORE (TOTAL POINTS) :						30

Linda #1A

Date Remediation Started: 06/29/1998

Date Completed: 06/30/1998

Remediation Method: Excavation X

Approx. Cubic Yard 1037

(Check all appropriate sections)

Landfarmed X

Amount Landfarmed (cubic yds) 957

Other 80 cu yds overburden.

Remediation Location: Onsite X - 800 cu yds.

Offsite 237 cu yds - Navajo C #1

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

Backfill Material Location: _____

General Description of Remedial Action:

Excavated contaminated soil to a pit size of 35' X 50' X 16' 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.

Ground Water Encountered: No Yes Depth 16'

Final Pit Closure Sampling:

Sample Location Walls

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

Sample depth 15' & 16'

Sample date 06/30/1998 Sample time 9:30:00 AM

Sample Results

Benzene (ppm) < 0.001

Total BTEX (ppm) 0.003200

Field headspace (ppm) _____

TPH (ppm) < 25.00 Method 8015B

Vertical Extent (ft) _____ Risk Analysis form attached Yes No

Ground Water Sample: Yes 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: Chateau
Sec: 31 Twn: 27N Rng: 8W Unit: D
Canyon: Blanco

Vulnerable Class: Original
OCD Ranking: 40
Lead Agency: NEPA/USEPA

Topo Map: Figure 1

Well Completion Diagrams: Previously submitted

Site Map with Analytical Results: Figure 2

Groundwater Contour Map: Figure 3 (October 1998), Figure 4 (February 1999), Figure 5 (April 1999) and Figure 6 (September 1999)

Hydrograph: Figure 7

Full suite-Groundwater Sampling Results: Previously submitted

Analytical Results: attached 2nd/99 & 3rd/99 only

Site Hydrology:

The Linda 1A site lies on the western side of Blanco Canyon, a north-draining wash with a fairly broad alluvial plain (about one-quarter mile wide). Blanco Canyon joins Largo Canyon about seven miles from its mouth with the San Juan River. The site's elevation is about 6063 ft. amsl.

Fine to medium grained sands were found in shallow soils beneath the site. Some clayey materials were encountered at depths greater than 5 feet.

Depth to water has ranged from about 16 to 18 feet beneath the site. Groundwater flow direction is towards the north and northeast, towards the wash in Blanco Canyon (east) and parallel with the drainage direction of Blanco Canyon (north) (Figure(s) 3a & 3b). The site hydrograph shows that water levels have risen about 1 foot over the last two quarters.

Activities for Previous Year:

Quarterly sampling took place on October 22, 1998, February 11, 1999, April 28, 1999 and again on September 28, 1999. Water level measurements were taken in the four monitoring wells. 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. Monitor well, MW-2, was resampled during September 1999 quarterly monitoring for chlorides, sulfates and total dissolved solids (TDS).

Results:

Figure 2 presents a site map showing BTEX for each monitoring well since groundwater contamination was discovered. Results of the first four quarters of monitoring have shown BTEX concentrations to be below laboratory detection limits in all four wells. Water quality results from monitor well MW-2 revealed chlorides at concentrations equal to the WQCC standard at 250 ppm. Sulfates were slightly elevated at 750 ppm and TDS at 2130 ppm, both above the WQCC standards of 600 ppm and 1000 ppm, respectively. Through literature research and discussions with the OCD, these concentrations are not uncommon to the San Juan Basin and are most likely naturally occurring since the chloride values are relatively low.

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: Linda 1A (continued)

Further Action:

Consistent with PNM's San Juan Basin Groundwater Management Plan, PNM requests closure of the Linda 1A. This request is based upon the analytical data collected over the last two years at the site. The excavation of source materials was successful in achieving clean-up at the Linda 1A. BTEX concentrations in all wells have been below laboratory detection limits for four consecutive quarters.

Upon approval of the groundwater closure report, PNM will plug and abandon the five 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 to 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

Linda 1A Groundwater Site

Twn. 27N Rng. 8W Sec. 31 Unit D

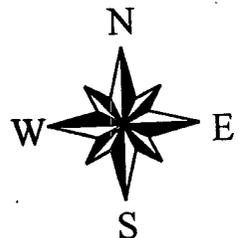
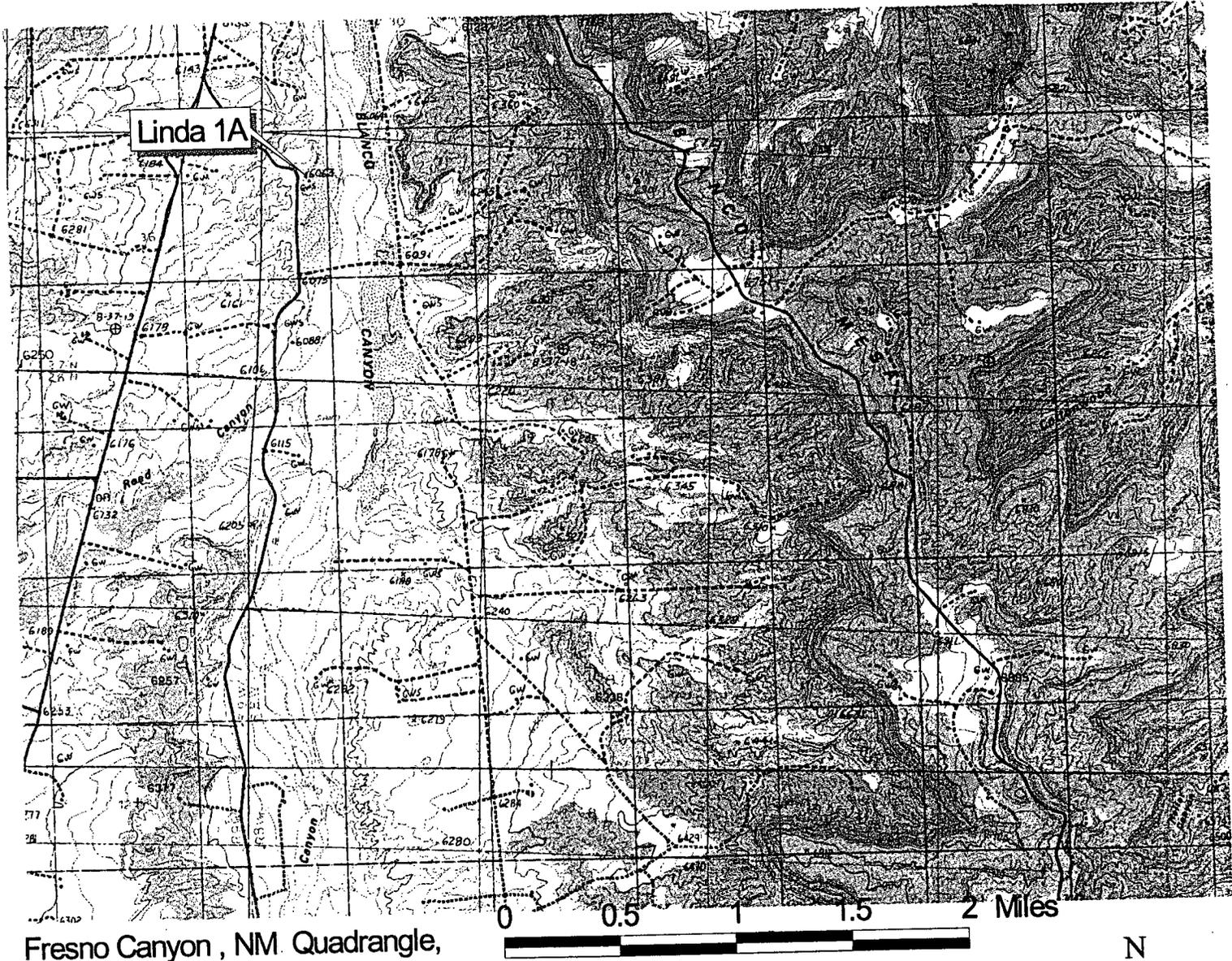


Figure 2.
Linda 1A Site Map with Analytical Results
(Concentrations in ppb)

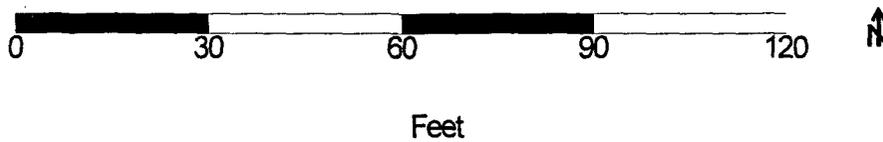
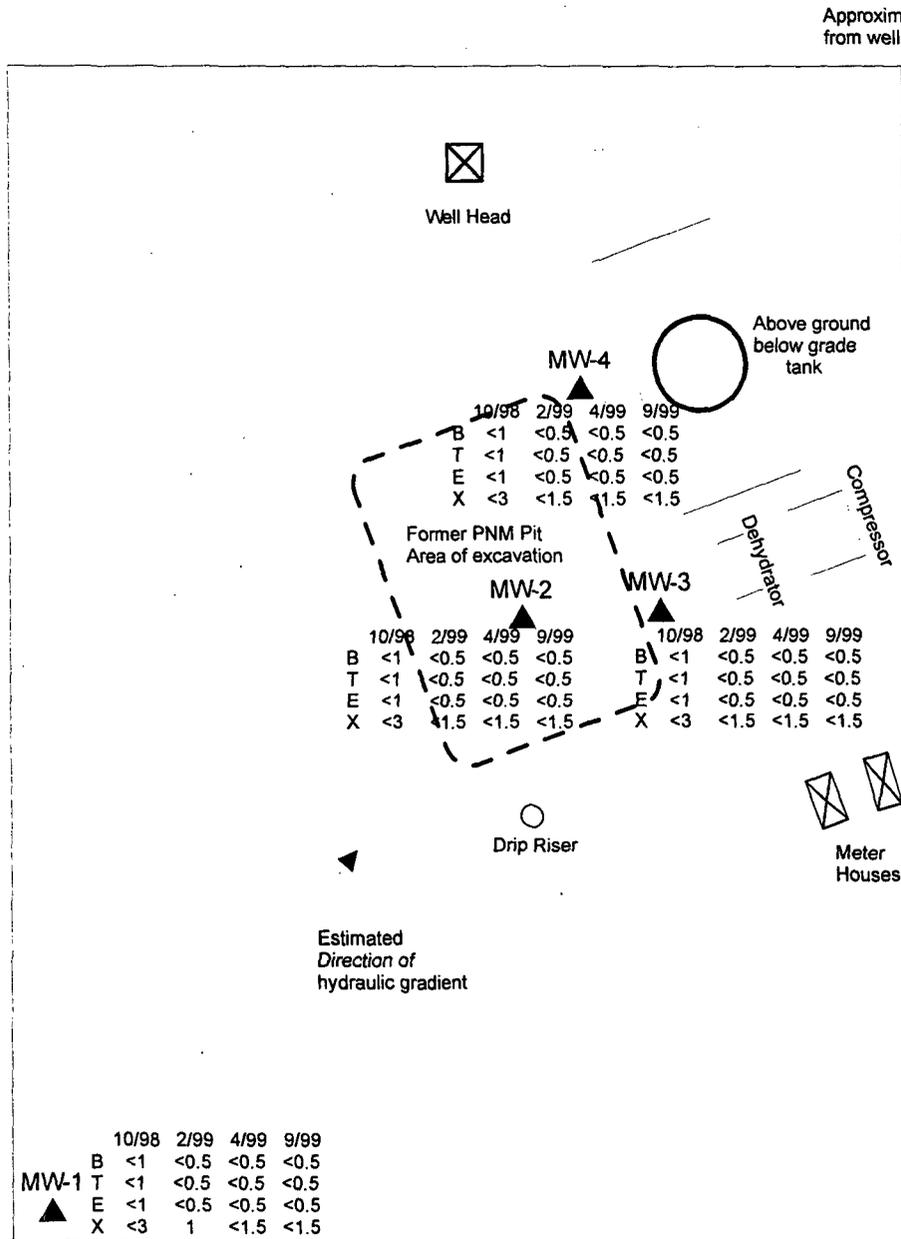


Figure 3.
Linda 1A Groundwater Contour Map
(October 1998)

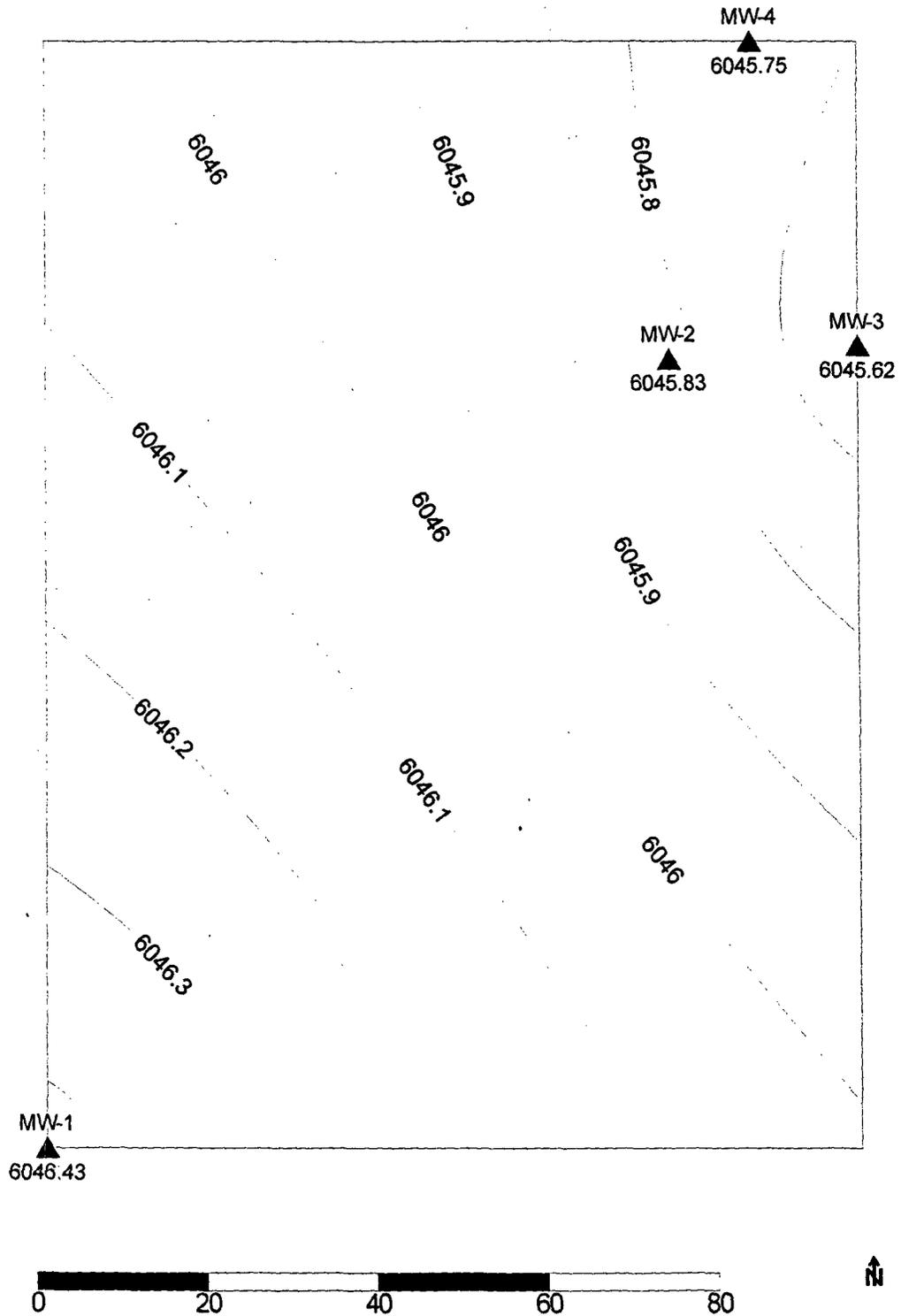


Figure 4.
Linda 1A Groundwater Contour Map
(February 1999)

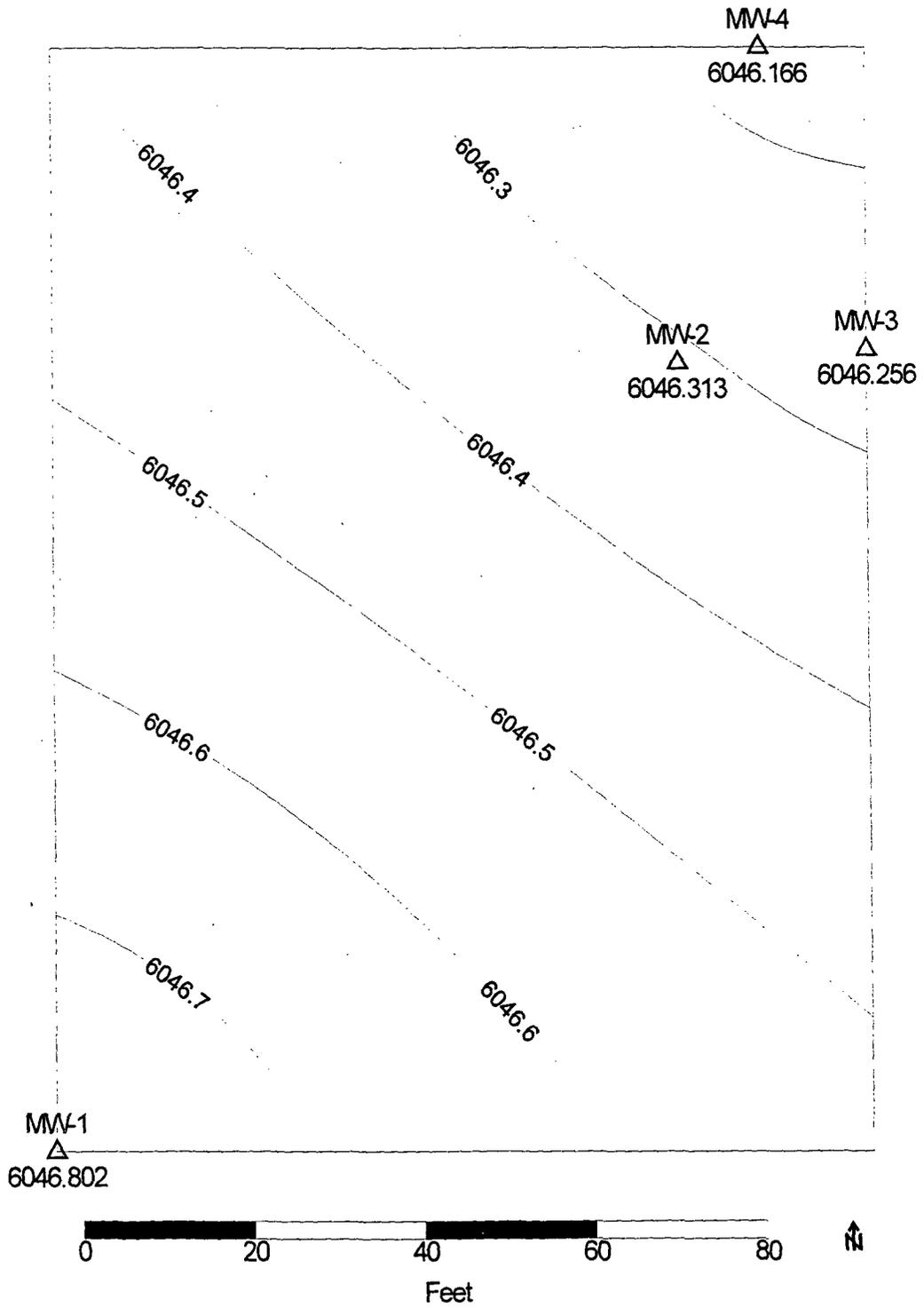


Figure 5.
Linda 1A Groundwater Contour Map
(April 1999)

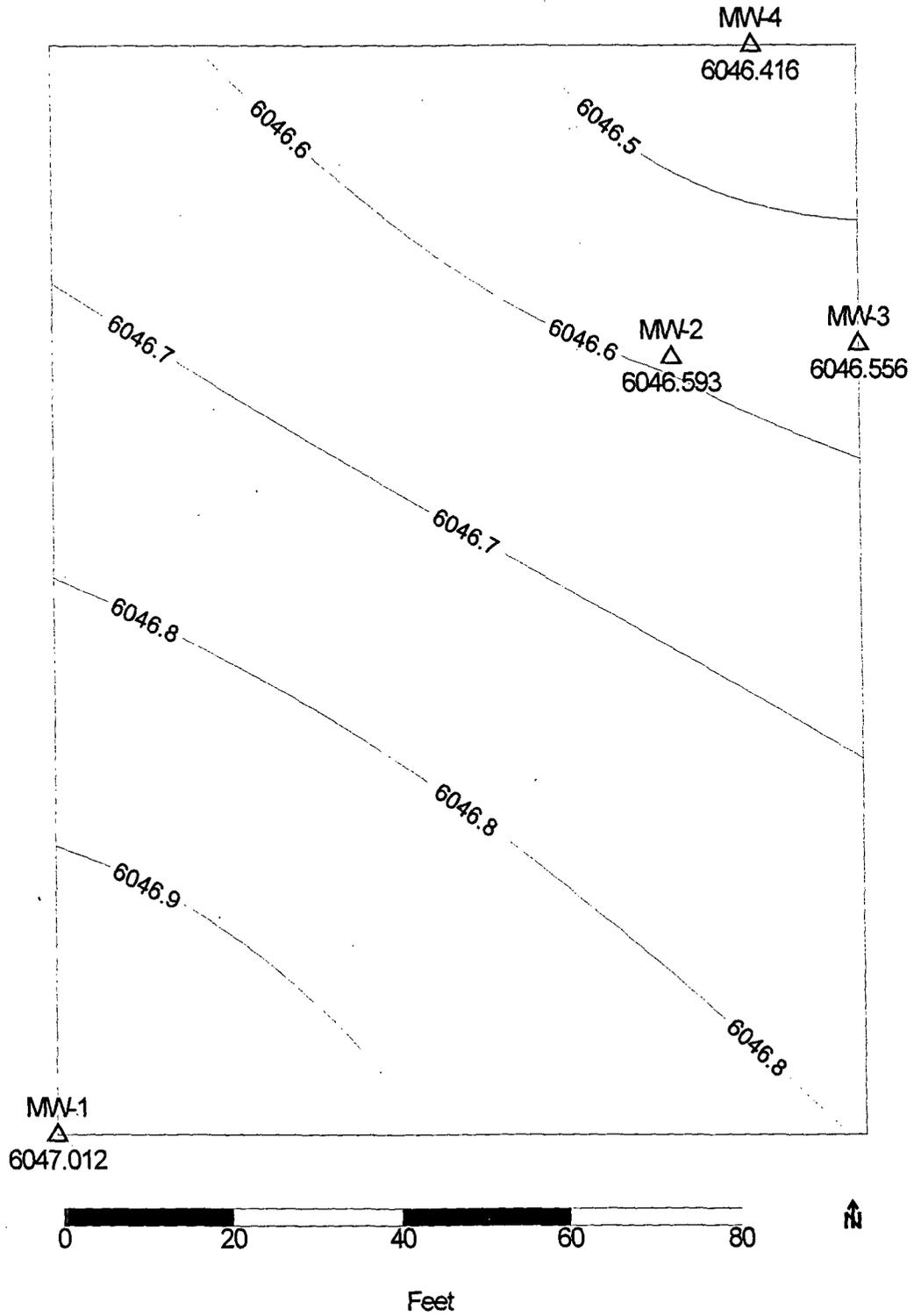


Figure 6.
Linda 1A Groundwater Contour Map
(September 1999)

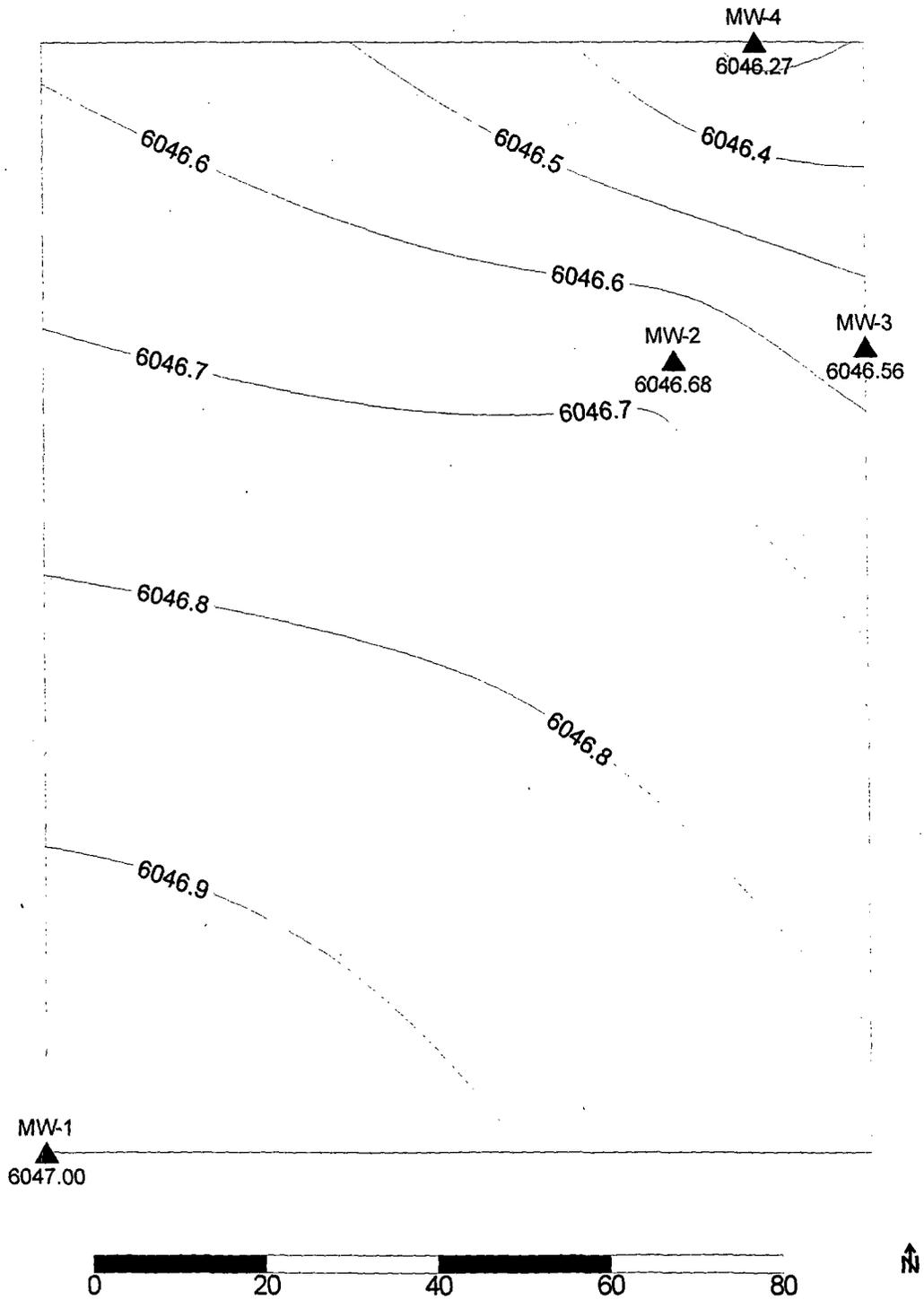
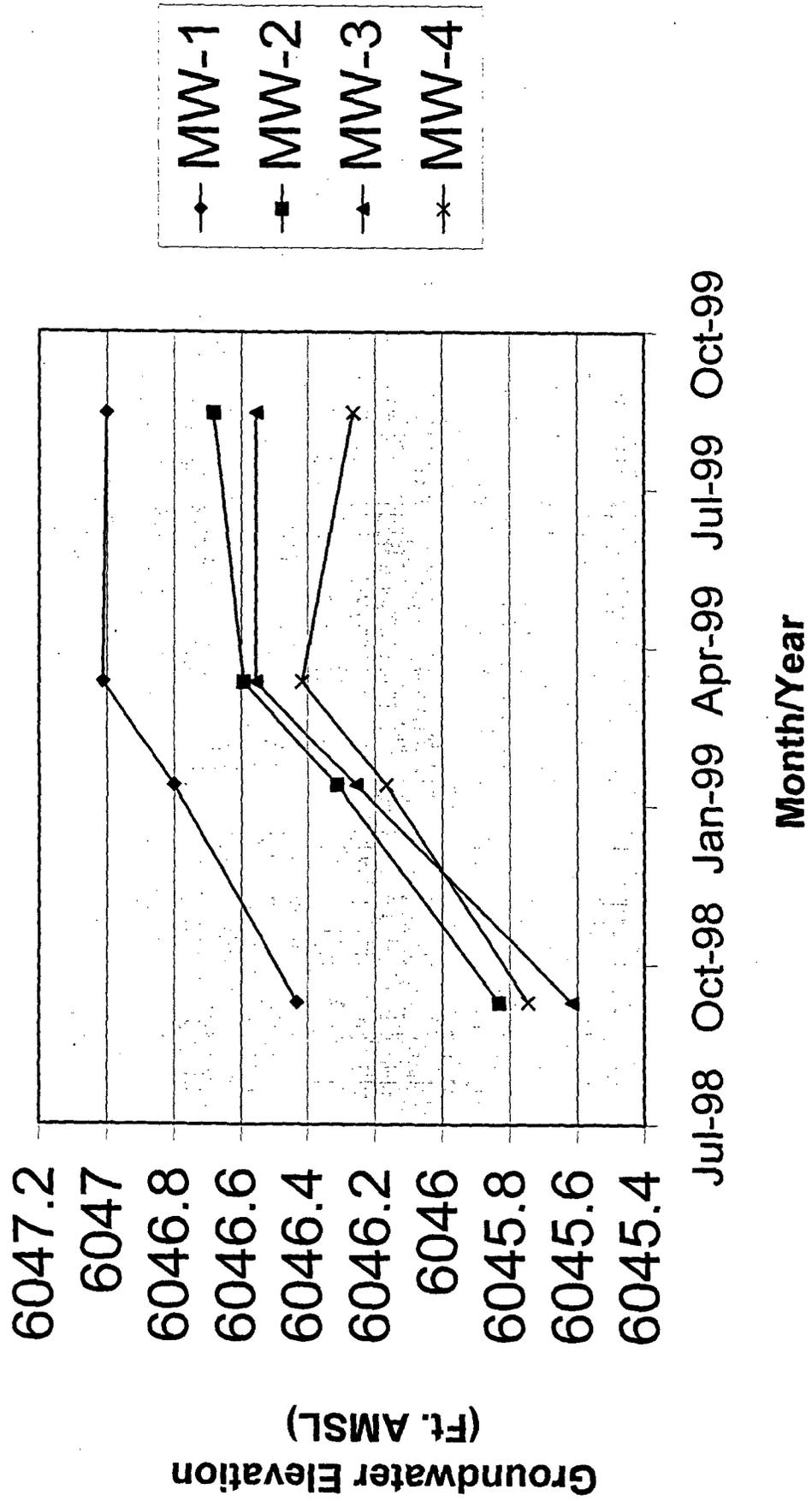


Figure 7. Linda 1A Hydrograph



OFF: (505) 325-5667



LAB: (505) 325-1556
RECEIVED
MAY 21 1999

May 14, 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

6661 1 2 AM
RECEIVED

RE: Linda 1A

Order No.: 9905001

Dear Maureen Gannon,

On Site Technologies, LTD. received 5 samples on 5/3/99 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Aromatic Volatiles by GC/PID (SW8021B)

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 a horizontal line.

David Cox

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 14-May-99

CLIENT: PNM - Public Service Company of NM
Project: Linda 1A
Lab Order: 9905001

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.



ANALYTICAL REPORT

Date: 14-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9905001	Client Sample ID:	9904281000; MW-1
Lab ID:	9905001-01A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	4/28/99 10:00:00 AM
		COC Record:	7535

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	ND	0.5		µg/L	1	5/7/99
Toluene	ND	0.5		µg/L	1	5/7/99
Ethylbenzene	ND	0.5		µg/L	1	5/7/99
m,p-Xylene	ND	1		µg/L	1	5/7/99
o-Xylene	ND	0.5		µg/L	1	5/7/99

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

P.O. BOX 2606 • FARMINGTON, NM 87499



OFF: (505) 325-5667

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9905001	Client Sample ID:	9904281100; MW-3
Lab ID:	9905001-03A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	4/28/99 11:00:00 AM
		COC Record:	7535

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DC		
Benzene	ND	0.5		µg/L	1	5/7/99
Toluene	ND	0.5		µg/L	1	5/7/99
Ethylbenzene	ND	0.5		µg/L	1	5/7/99
m,p-Xylene	ND	1		µg/L	1	5/7/99
o-Xylene	ND	0.5		µg/L	1	5/7/99

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9905001	Client Sample ID:	9904281130; MW-4
Lab ID:	9905001-04A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	4/28/99 11:30:00 AM
		COC Record:	7535

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC
Benzene	ND	0.5		µg/L	1	5/7/99
Toluene	ND	0.5		µg/L	1	5/7/99
Ethylbenzene	ND	0.5		µg/L	1	5/7/99
m,p-Xylene	ND	1		µg/L	1	5/7/99
o-Xylene	ND	0.5		µg/L	1	5/7/99

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 14-May-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9905001	Client Sample ID:	9904281015; Open Excav. Strmwr
Lab ID:	9905001-05A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	4/28/99 10:15:00 AM
		COC Record:	7535

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed	
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DC	
Benzene	ND	0.5		µg/L	1	5/3/99	
Toluene	ND	0.5		µg/L	1	5/3/99	
Ethylbenzene	ND	0.5		µg/L	1	5/3/99	
m,p-Xylene	ND	1		µg/L	1	5/3/99	
o-Xylene	ND	0.5		µg/L	1	5/3/99	

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

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

CHAIN OF CUSTODY RECORD



Page: 1 of 1

Date: 4/23/99

612 E. Murphy Dr. • P.O. Box 2606 • Farmington, NM 87489
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No.:	
Name: Denver Bearden		Title: Maureen Gannon	
Company: PNM Gas Services		Company: PNM Gas Services	
Address: 603 W. Elm Street		Mailing Address: Alverado Square, Mail Stop 0408	
City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158	
Sampling Location: Linda 1A		Telephone No.: 505-848-2974	
Sampler: Mark S. Killion		Telefax No.:	
SEND INVOICE TO		RESULTS TO	
Name: Denver Bearden		Name: Maureen Gannon	
Company: PNM Gas Services		Company: PNM Gas Services	
Address: 603 W. Elm Street		Mailing Address: Alverado Square, Mail Stop 0408	
City, State, Zip: Farmington, NM 87401		City, State, Zip: Albuquerque, NM 87158	
Telephone No.:		Telephone No.: 505-848-2974	
Telefax No.:		Telefax No.:	
Number of Containers		ANALYSIS REQUESTED	
REPORT		LAB ID	
DATE		DATE/TIME	
TIME		DATE/TIME	
MATRIX		DATE/TIME	
PRES.		DATE/TIME	
SAMPLE IDENTIFICATION		Date/Time	
MW-1 9904231000		Date/Time	
MW-2 9904231030		Date/Time	
MW-3 9904231100		Date/Time	
MW-4 9904231130		Date/Time	
MW-5 9904231160		Date/Time	
MW-6 9904231190		Date/Time	
MW-7 9904231220		Date/Time	
MW-8 9904231250		Date/Time	
MW-9 9904231280		Date/Time	
MW-10 9904231310		Date/Time	
MW-11 9904231340		Date/Time	
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MW-104 9904234130		Date/Time	
MW-105 9904234160		Date/Time	
MW-106 9904234190		Date/Time	
MW-107 9904234220		Date/Time	
MW-108 9904234250		Date/Time	
MW-109 9904234280		Date/Time	
MW-110 9904234310		Date/Time	
MW-111 9904234340		Date/Time	
MW-112 9904234370		Date/Time	
MW-113 9904234400		Date/Time	
MW-114 9904234430		Date/Time	
MW-115 9904234460		Date/Time	
MW-116 9904234490		Date/Time	
MW-117 9904234520		Date/Time	
MW-118 9904234550		Date/Time	
MW-119 9904234580		Date/Time	
MW-120 9904234610		Date/Time	
MW-121 9904234640		Date/Time	
MW-122 9904234670		Date/Time	
MW-123 9904234700		Date/Time	
MW-124 9904234730		Date/Time	
MW-125 9904234760		Date/Time	
MW-126 9904234790		Date/Time	
MW-127 9904234820		Date/Time	
MW-128 9904234850		Date/Time	
MW-129 9904234880		Date/Time	
MW-130 9904234910		Date/Time	
MW-131 9904234940		Date/Time	
MW-132 9904234970		Date/Time	
MW-133 9904235000		Date/Time	
MW-134 9904235030		Date/Time	
MW-135 9904235060		Date/Time	
MW-136 9904235090		Date/Time	
MW-137 9904235120		Date/Time	
MW-138 9904235150		Date/Time	
MW-139 9904235180		Date/Time	
MW-140 9904235210		Date/Time	
MW-141 9904235240		Date/Time	
MW-142 9904235270		Date/Time	
MW-143 9904235300		Date/Time	
MW-144 9904235330		Date/Time	
MW-145 9904235360		Date/Time	
MW-146 9904235390		Date/Time	
MW-147 9904235420		Date/Time	
MW-148 9904235450		Date/Time	
MW-149 9904235480		Date/Time	
MW-150 9904235510		Date/Time	
MW-151 9904235540		Date/Time	
MW-152 9904235570		Date/Time	
MW-153 9904235600		Date/Time	
MW-154 9904235630		Date/Time	
MW-155 9904235660		Date/Time	
MW-156 9904235690		Date/Time	
MW-157 9904235720		Date/Time	
MW-158 9904235750		Date/Time	
MW-159 9904235780		Date/Time	
MW-160 9904235810		Date/Time	
MW-161 9904235840		Date/Time	
MW-162 9904235870		Date/Time	
MW-163 9904235900		Date/Time	
MW-164 9904235930		Date/Time	
MW-165 9904235960		Date/Time	
MW-166 9904235990		Date/Time	
MW-167 9904236020		Date/Time	
MW-168 9904236050		Date/Time	
MW-169 9904236080		Date/Time	
MW-170 9904236110		Date/Time	
MW-171 9904236140		Date/Time	
MW-172 9904236170		Date/Time	
MW-173 9904236200		Date/Time	
MW-174 9904236230		Date/Time	
MW-175 9904236260		Date/Time	
MW-176 9904236290		Date/Time	
MW-177 9904236320		Date/Time	
MW-178 9904236350		Date/Time	
MW-179 9904236380		Date/Time	
MW-180 9904236410		Date/Time	
MW-181 9904236440		Date/Time	
MW-182 9904236470		Date/Time	
MW-183 9904236500		Date/Time	
MW-184 9904236530		Date/Time	
MW-185 9904236560		Date/Time	
MW-186 9904236590		Date/Time	
MW-187 9904236620		Date/Time	
MW-188 9904236650		Date/Time	
MW-189 9904236680		Date/Time	
MW-190 9904236710		Date/Time	
MW-191 9904236740		Date/Time	
MW-192 9904236770		Date/Time	
MW-193 9904236800		Date/Time	
MW-194 9904236830		Date/Time	
MW-195 9904236860		Date/Time	
MW-196 9904236890		Date/Time	
MW-197 9904236920		Date/Time	
MW-198 9904236950		Date/Time	
MW-199 9904236980		Date/Time	
MW-200 9904237010		Date/Time	
MW-201 9904237040		Date/Time	
MW-202 9904237070		Date/Time	
MW-203 9904237100		Date/Time	
MW-204 9904237130		Date/Time	
MW-205 9904237160		Date/Time	
MW-206 9904237190		Date/Time	
MW-207 9904237220		Date/Time	
MW-208 9904237250		Date/Time	
MW-209 9904237280		Date/Time	
MW-210 9904237310		Date/Time	
MW-211 9904237340		Date/Time	
MW-212 9904237370		Date/Time	
MW-213 9904237400		Date/Time	
MW-214 9904237430		Date/Time	
MW-215 9904237460		Date/Time	
MW-216 9904237490		Date/Time	
MW-217 9904237520		Date/Time	
MW-218 9904237550		Date/Time	
MW-219 9904237580		Date/Time	
MW-220 9904237610		Date/Time	
MW-221 9904237640		Date/Time	
MW-222 9904237670		Date/Time	
MW-223 9904237700		Date/Time	
MW-224 9904237730		Date/Time	
MW-225 9904237760		Date/Time	
MW-226 9904237790		Date/Time	
MW-227 9904237820		Date/Time	
MW-228 9904237850		Date/Time	
MW-229 9904237880		Date/Time	
MW-230 9904237910		Date/Time	
MW-231 9904237940		Date/Time	
MW-232 9904237970		Date/Time	
MW-233 9904238000		Date/Time	
MW-234 9904238030		Date/Time	
MW-235 9904238060		Date/Time	
MW-236 9904238090		Date/Time	
MW-237 9904238120		Date/Time	
MW-238 9904238150		Date/Time	
MW-239 9904238180		Date/Time	
MW-240 9904238210		Date/Time	
MW-241 9904238240		Date/Time	
MW-242 9904238270		Date/Time	
MW-243 9904238300		Date/Time	
MW-244 9904238330		Date/Time	
MW-245 9904238360		Date/Time	
MW-246 9904238390		Date/Time	
MW-247 9904238420		Date/Time	
MW-248 9904238450		Date/Time	
MW-249 9904238480		Date/Time	
MW-250 9904238510		Date/Time	
MW-251 9904238540		Date/Time	
MW-252 9904238570		Date/Time	
MW-253 9904238600		Date/Time	
MW-254 9904238630		Date/Time	
MW-255 9904238660		Date/Time	
MW-256 9904238690		Date/Time	
MW-257 9904238720		Date/Time	
MW-258 9904238750		Date/Time	

OFF: (505) 325-5667



LAB: (505) 325-1556

October 13, 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

RECEIVED
OCT 18 1999

RE: Linda 1A

Order No.: 9909081

Dear Maureen Gannon,

On Site Technologies, LTD. received 4 samples on 09/28/1999 for the analyses presented in the following report.

The Samples were analyzed for the following tests:

- Aromatic Volatiles by GC/PID (SW8021B)
- Chloride (E325.3)
- Sulfate (M4500-SO4 D)
- Total Dissolved Solids (E160.1)

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", written over a horizontal line.

David Cox



On Site Technologies, LTD.

Date: 13-Oct-99

CLIENT: PNM - Public Service Company of NM
Project: Linda 1A
Lab Order: 9909081

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.

Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.

Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992.

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Oct-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9909081	Client Sample ID:	9909281025; MW-1
Lab ID:	9909081-01A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	09/28/1999 10:25:00 AM
		COC Record:	7827

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B		Analyst: DM		
Benzene	ND	0.5		µg/L	1	09/30/1999
Toluene	ND	0.5		µg/L	1	09/30/1999
Ethylbenzene	ND	0.5		µg/L	1	09/30/1999
m,p-Xylene	ND	1		µg/L	1	09/30/1999
o-Xylene	ND	0.5		µg/L	1	09/30/1999

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

P.O. BOX 2606 • FARMINGTON, NM 87499

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Oct-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9909081	Client Sample ID:	9909281100; MW-2
Lab ID:	9909081-02A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	09/28/1999 11:00:00 AM
		COC Record:	7827

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B			Analyst: DM	
Benzene	ND	0.5		µg/L	1	09/30/1999
Toluene	ND	0.5		µg/L	1	09/30/1999
Ethylbenzene	ND	0.5		µg/L	1	09/30/1999
m,p-Xylene	ND	1		µg/L	1	09/30/1999
o-Xylene	ND	0.5		µg/L	1	09/30/1999

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

P.O. BOX 2606 • FARMINGTON, NM 87499



ANALYTICAL REPORT

Date: 13-Oct-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9909081	Client Sample ID:	9909281100; MW-2
Lab ID:	9909081-02B	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	09/28/1999 11:00:00 AM
		COC Record:	7827

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
CHLORIDE		E325.3				Analyst: HR
Chloride	250		1	mg/L	1	10/04/1999
SULFATE		M4500-SO4 D				Analyst: HR
Sulfate	750		8	mg/L	1	10/04/1999
TOTAL DISSOLVED SOLIDS		E160.1				Analyst: HR
Total Dissolved Solids (Residue, Filterable)	2130		40	mg/L	1	10/01/1999

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

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Oct-99

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9909081	Client Sample ID:	9909281200; MW-3
Lab ID:	9909081-03A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	09/28/1999 12:00:00 PM
		COC Record:	7827

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	0.5		µg/L	1	09/30/1999
Toluene	ND	0.5		µg/L	1	09/30/1999
Ethylbenzene	ND	0.5		µg/L	1	09/30/1999
m,p-Xylene	ND	1		µg/L	1	09/30/1999
o-Xylene	ND	0.5		µg/L	1	09/30/1999

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

P.O. BOX 2606 • FARMINGTON, NM 87499



ANALYTICAL REPORT

Date: 13-Oct-99

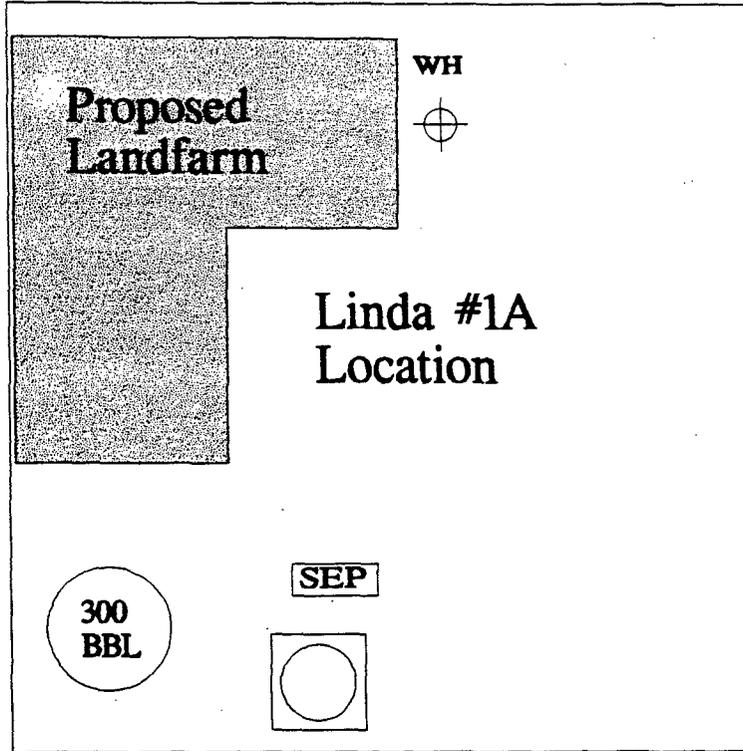
Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9909081	Client Sample ID:	9909281145; MW-4
Lab ID:	9909081-04A	Matrix:	AQUEOUS
Project:	Linda 1A	Collection Date:	09/28/1999 11:45:00 AM
		COC Record:	7827

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID		SW8021B				Analyst: DM
Benzene	ND	0.5		µg/L	1	09/30/1999
Toluene	ND	0.5		µg/L	1	09/30/1999
Ethylbenzene	ND	0.5		µg/L	1	09/30/1999
m,p-Xylene	ND	1		µg/L	1	09/30/1999
o-Xylene	ND	0.5		µg/L	1	09/30/1999

Qualifiers:

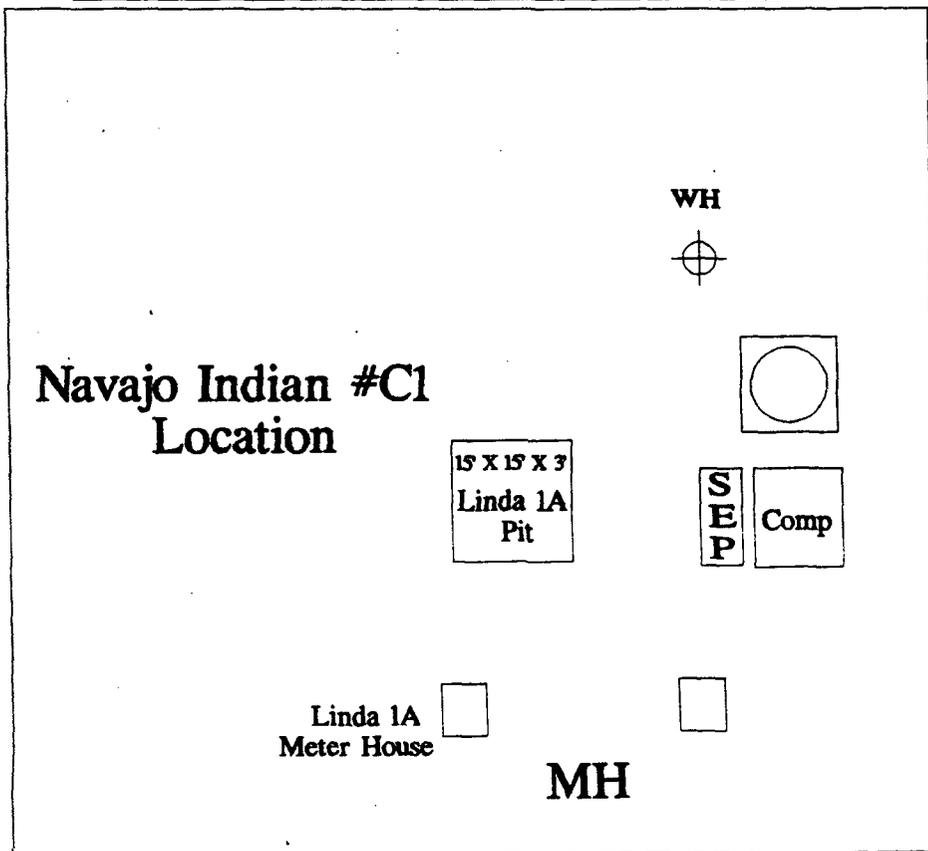
PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range
B - Analyte detected in the associated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

Linda #1A
Chateau
Lease # NOG-06511133
(D)-31-27N-8W
San Juan County



200' X 200'

Field headspace: 76 (walls)



250' X 250'

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 10-Jul-98

CLIENT: PNM - Public Service Company of NM
Project: Linda 1A
Lab Order: 9806118

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.



ANALYTICAL REPORT

Date: 10-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda 1A
Work Order:	9806118	Client Sample ID:	9806300930; Walls
Lab ID:	9806118-01A	Matrix:	SOIL
Project:	Linda 1A	Collection Date:	6/30/98 9:30:00 AM
		COC Record:	5240

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/7/98
BTEX		SW8020A				Analyst: DC
Benzene	ND	1		µg/Kg	1	7/5/98
Toluene	ND	2		µg/Kg	1	7/5/98
Ethylbenzene	ND	1		µg/Kg	1	7/5/98
m,p-Xylene	3.1	2		µg/Kg	1	7/5/98
o-Xylene	1	1		µg/Kg	1	7/5/98

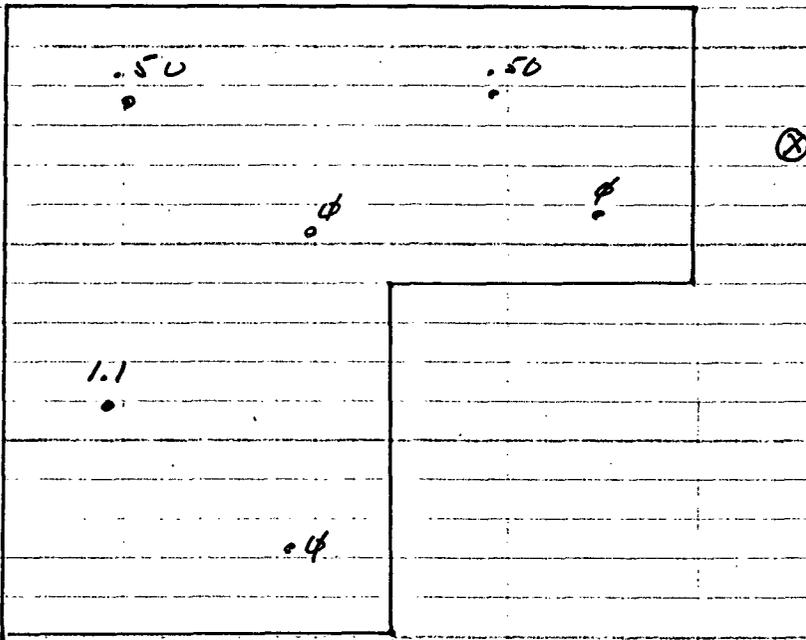
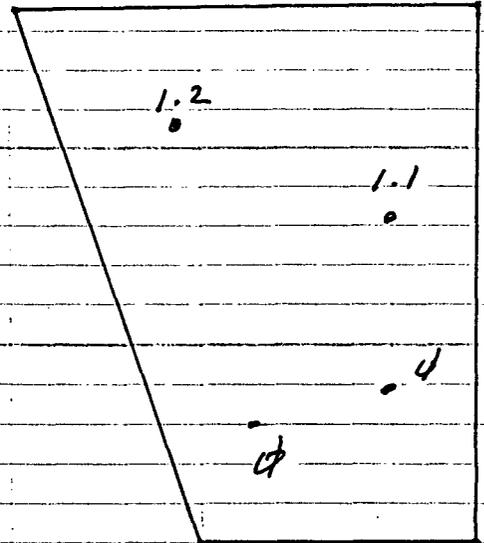
.2032 ppm

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

Linda # 1A
Chateau Oil
Sec. 31, 27N, 8W, 0

7/28/98

Land Farm: CW location



800 yards
2"-12" depth

soil vapor head space = 3.1 ppm

980728 1530

OFF: (505) 325-5667



LAB: (505) 325-1556

On Site Technologies, LTD.

Date: 30-Jul-98

CLIENT: PNM - Public Service Company of NM
Project: PNM Pit Remediation
Lab Order: 9807079

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: 30-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda #1A LF
Work Order:	9807079	Client Sample ID:	9807281530; On Location
Lab ID:	9807079-01A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	7/28/98 3:30:00 PM
		COC Record:	7329

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/29/98

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

Linda #1A
Chuteau Oil
Sec. 31, 27N, 8W, D

7-28-98

Landform : Navajo C#1
same legal

φ	φ
1.2	1.1
1.9	.50

⊗

237 yards

2"-12" depth

soil vapor head spec = 6.1

9807281545

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 30-Jul-98

Client:	PNM - Public Service Company of NM	Client Sample Info:	Linda #1A LF
Work Order:	9807079	Client Sample ID:	9807281545; Navajo C#1
Lab ID:	9807079-02A	Matrix:	SOIL
Project:	PNM Pit Remediation	Collection Date:	7/28/98 3:45:00 PM
		COC Record:	7329

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	7/29/98

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

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