

1R - 299

**ANNUAL
MONITORING
REPORT**

03/27/2008

RECEIVED

2008 MAR 27 PM 1:08

25 March 2008

Mr. Glen Von Gonten, Senior Hydrologist
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**Re: 2007 Annual Groundwater Monitoring Report
Shell Oil Products US - Penrose 'A' (Winnie Kennan Ranch)
Case Number: 1R299**

Dear Mr. Von Gonten:

The attached report documents the annual groundwater monitoring activities conducted at the above-referenced site. Analytical and field results indicate the light non-aqueous phase liquids (LNAPL) plume appears to have reduced in size during the past year, with analytical reports indicating no detections of benzene, toluene, ethylbenzene and/or total xylenes (BTEX constituents) in samples collected from groundwater monitoring wells MW-2, MW-3, MW-4 and MW-5.

Should analytical results for samples collected during 2008 continue to indicate non-detectable concentrations of constituents of concern at or above the New Mexico Water Quality Control Commission (NMWQCC) standards, it is recommended that groundwater monitoring wells MW-2 through MW-5 be plugged and abandoned. If the wells can not be plugged and abandoned, it is recommended that the sampling schedule be terminated until such time that free-phase liquid hydrocarbons are no longer present in groundwater monitoring well MW-1.

Should you have any questions or concerns, please feel free to contact me at (602) 648-2402 or via e-mail at iain_olness@urscorp.com. All official correspondence should be submitted to Mr. Ken Springer with Shell Oil Products US at the following address:

Mr. Ken Springer, Staff Project Manager
Shell Oil Products US
P. O. Box 1087
Huffman, TX 77336
(281) 324-5921
Kenneth.Springer@shell.com

Sincerely,

URS Corporation

Iain Olness, P.G.
Senior Geologist

Attachments: *2007 Annual Groundwater Monitoring Report*

cc: Ken Springer, SOPUS – Houston
Larry Johnson, NMOCD – Hobbs

URS Corporation
7720 North 16th Street, Suite 100
Phoenix, AZ 85020
Tel: 602.371.1100
Fax: 602.371.1615



1R299

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**2007 ANNUAL GROUNDWATER
MONITORING REPORT**

**PENROSE 'A' LEASE
(WINNIE KENNAN RANCH)**

**CASE NUMBER: 1R299
INCIDENT NUMBER: 300108**

**SW¼ SE¼, SEC. 3, T23S, R37E
LEA COUNTY, NEW MEXICO**

**Prepared for:
SHELL OIL PRODUCTS US**

**URS Job No. 49194413
14 March 2008**

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1.0 INTRODUCTION

This *Annual Report* has been prepared to document the results of groundwater monitoring, sampling and remediation activities conducted during 2007 at the Penrose 'A' Lease (Winnie Kennan Ranch) located approximately seven (7) miles southeast of Eunice, New Mexico, off New Mexico State Highway 18, in Lea County, New Mexico (reference Figures 1 and 2). A review of the New Mexico Office of the State Engineer website and the United States Geological Survey (USGS) database revealed the presence of ten (10) water supply wells within a one-mile radius of the point of release (reference Figure 2 and Table 1). No wells were found to be located within a 1,000-foot radius of the point of release, with the nearest wells being located approximately 1,800 feet northeast (i.e., upgradient) of the point of release.

This report complies with the New Mexico Oil Conservation Division (NMOCD) requirements and addresses all activities performed during the annual period of 2007. Semi-annual groundwater monitoring and sampling events were performed to further evaluate the nature and extent of petroleum hydrocarbon constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX) and polynuclear aromatic hydrocarbons (PAH) in groundwater. The sampling events were performed on March 28, and November 2, 2007 by H₂A Environmental, Ltd., under the direction of URS Corporation. In addition, maintenance of the onsite remediation and light non-aqueous phase liquid (LNAPL) abatement activities were performed monthly throughout 2007.

2.0 CHRONOLOGY OF EVENTS

A summary of significant events and activities performed at the site is presented below.

March 2000	Shell and Enercon perform a site walk of the property in an area of historic crude oil releases of an unknown amount.
October to November 2000	Enercon was onsite to excavate approximately 10,800 cubic yards of soil, which were transported and landfarmed offsite. The site was excavated to a depth of 40 feet below ground surface (bgs) with TPH exceeding NMOCD standards at that depth. The NMOCD agreed with Shell that for safety purposes further excavation should be halted.
May 2001	Enercon submits the excavation report to the NMOCD.
November 2001	NMOCD requests installation of a soil boring/monitor well in center of excavation to determine amount of remaining hydrocarbon impacts to the soils/groundwater.
January 2002	Enercon is onsite to advance one soil boring within the excavation from a depth of 40 feet bgs to groundwater located at approximately 75 feet bgs. The soil boring was converted to temporary monitor well TMW-1. Soils exceeded NMOCD standards of 1,000 milligrams per kilogram (mg/Kg) TPH. LNAPL in the form of crude oil was measured in TMW-1.
April 2002	Enercon submits <i>Workplan for Soil Remediation and Monitor Well Installation</i> to NMOCD. Workplan includes installation of clay liner over remaining hydrocarbon impacted soils.
May 2002	Enercon submits <i>Report Detailing the Installation of Temporary Monitor Well TMW-1</i> to NMOCD.
April 2004	NMOCD agrees to work plan design and installation of additional monitor wells to delineate site groundwater impacts.
June 2004	Enercon places a 4-foot clay liner above remaining hydrocarbon impacted soils and backfills excavation with soils from surrounding sand dunes. Temporary monitor well TMW-1 is converted to monitor well MW-1.
July 2004	Enercon advances four soil borings to approximately 80-feet bgs and converts soil borings to monitor wells (MW-2 through MW-5). Monthly LNAPL recovery from MW-1 initiated.
November 2004	Enercon submits <i>Phase II Backfilling Activities with Site Groundwater/Soil Characterization</i> to NMOCD.
January 2005	Continued monthly LNAPL recovery from MW-1.
March 2005	Enercon submits <i>2004 Annual Groundwater Monitoring Report</i> to the NMOCD.
September 2005	Enercon installs one Clean Environments CEE [®] Product Only Pump in monitor well MW-1.

January 2006 Site maintenance and environmental management of property transitioned from Enercon to Conestoga-Rovers and Associates (CRA). Continued monthly LNAPL recovery from MW-1.

April 2006 CRA submits *2005 Annual Groundwater Monitoring Report* to Shell Oil Products US (SOPUS) and the NMOCD.

October 10, 2006 Site maintenance and environmental management of property transitioned from CRA to URS Corporation.

January 2007 Continued monthly LNAPL recovery from MW-1.

March 2007 URS Corporation submits *2006 Annual Groundwater Monitoring Report* to SOPUS and the NMOCD, recommending the sampling schedule be reduced from quarterly to semi-annual.

March 23, 2007 H₂A conducts semi-annual sampling activities.

November 2, 2007 H₂A conducts semi-annual sampling activities.

January 2008 Continued monthly LNAPL recovery from MW-1.

March 2008 URS submits *2007 Annual Groundwater Monitoring Report* to SOPUS and the NMOCD.

3.0 2007 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

3.1 FIELD PROCEDURES

Groundwater sampling events were performed on March 28 and November 2, 2007. Monitor well locations and site details are illustrated in Figure 3. Prior to sampling, fluid levels were measured in each well. Wells that did not contain measurable light non-aqueous phase liquids (LNAPL) (less than 0.01 feet) were purged of approximately three (3) well volumes of groundwater or to dryness. After purging, samples were collected from each well with a new disposable Teflon® bailer. The samples were transferred directly from the bailer into laboratory supplied containers. The samples were then placed into coolers and chilled with ice. Purged water collected during each event was stored in several 55-gallon drums located on site.

3.2 GROUNDWATER GAUGING DATA

During 2007, depth to groundwater across the site ranged from 70.3 feet to 73.15 feet below the top of the casing, with an average groundwater gradient of approximately 0.0051 ft/ft to the southwest. Groundwater gauging data are summarized in Table 2 and illustrated in Figure 4. These observations are consistent with historical data collected at the site. Average groundwater elevations at the site, adjusted for LNAPL, during the March and November 2007 sampling events were 3,226.55 feet, and 3,226.53 feet above mean sea level, respectively. This data indicates the average depth to groundwater at the site decreased approximately 0.01 feet between December 28, 2006 and November 2, 2007. Groundwater gradient maps for the March and November 2007 sampling events are illustrated on Figures 5 and 6, respectively.

3.3 ANALYTICAL RESULTS

Groundwater samples were submitted to TestAmerica Analytical Testing Corporation (TestAmerica), of Phoenix, Arizona for quantification of benzene, toluene, ethylbenzene and total xylenes (BTEX) concentrations via Environmental Protection Agency (EPA) Method SW846-8260B. Groundwater samples were not collected from groundwater monitoring well MW-1 due to the presence of LNAPL on the water column.

During the 2007 reporting period, dissolved-phase concentrations of BTEX were reported as non-detectable (ND) at or above the laboratory SQLs and/or reporting limits (RLs) in all samples.

BTEX analytical results are summarized in Tables 3 and on Figures 9 through 12. Copies of the certified laboratory reports and chain-of-custody documentation are included as Appendix A.

4.0 LNAPL RECOVERY ACTIVITIES

During the 2007 monitoring period, measurable LNAPL in the form of crude oil was present in monitor well MW-1 with an average thickness of 0.27 feet (reference Table 2). Historically, from July 2004 through October 2005, the LNAPL thickness has averaged 1.45 feet in MW-1. This is a decrease of 0.72 feet for 2007. During 2007, LNAPL abatement activities were performed by utilizing a Clean Environments CEE[®] Product Only Pump installed in groundwater monitoring well MW-1 in September 2005 and operated through early November 2007. The product only pump, which is operated by a carbon dioxide cylinder, was shut down in early October 2006 and remained off the rest of 2006 due to transference of the site from CRA to URS Corporation. LNAPL recovery from the onsite remediation system is summarized on Table 2. As of December 31, 2007, an approximate total of 32.3 gallons of LNAPL have been recovered at the site. Of this, approximately 11.5 gallons of LNAPL have been recovered by hand bailing, and 20.8 gallons by the onsite remediation system. Recovered LNAPL is stored in a 55-gallon steel drum within a fiberglass secondary containment adjacent to monitor well MW-1, situated within a poly lined earthen berm.

5.0 SUMMARY OF FINDINGS

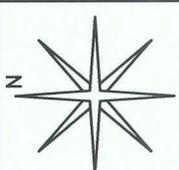
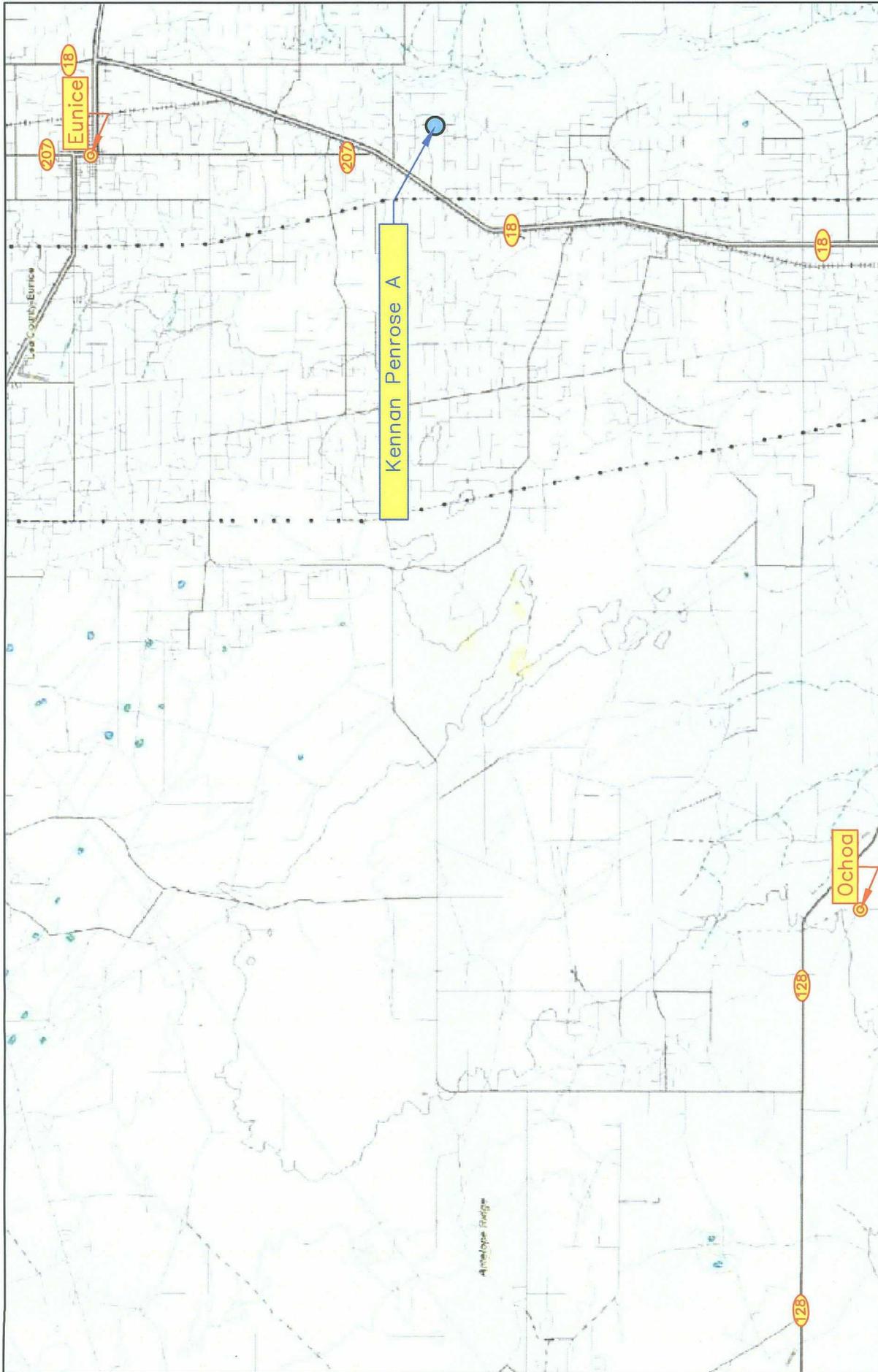
Key findings based on the assessment/remediation activities conducted during 2007 are presented below:

- The groundwater gradient remains relatively constant at approximately 0.0051 ft/ft to the southwest.
- LNAPL was present throughout the year in monitor well MW-1 with an average thickness of 0.27 feet.
- A CEE[®] Product Only Pump was installed in monitor well MW-1 in September 2005 to enhance recovery of LNAPL and has recovered approximately 7.8 gallons since installation.
- BTEX constituents were reported as non-detectable in samples collected from all groundwater monitoring wells during 2007.

6.0 RECOMMENDATIONS

Based on field and analytical data for samples collected during the past year and analytical results for samples collected previously from the groundwater monitoring well network the following recommendations are made:

- 1) Maintain the current sampling frequency for groundwater monitoring wells MW-2 through MW-5. Should analytical results indicate contaminant concentrations in groundwater samples collected from groundwater monitoring wells MW-2 through MW-5 remain below NMWQCC standards during the 2008 sampling period, it is recommended that the wells be plugged and abandoned. If the wells can not be plugged and abandoned, it is recommended that the sampling schedule be terminated until such time that free-phase liquid hydrocarbons are no longer present in groundwater monitoring well MW-1.
- 2) Submit the collected samples for quantification of BTEX via EPA Method SW846-8260B.
- 3) Continue semi-monthly monitoring (i.e., twice per month) of the free-product recovery system to ensure the system is operating efficiently and effectively.
- 4) Submit the results of the Annual Sampling Program to the New Mexico Oil Conservation Division by April 1, 2008.



DWG By: Daniel Dominguez
 October 2006

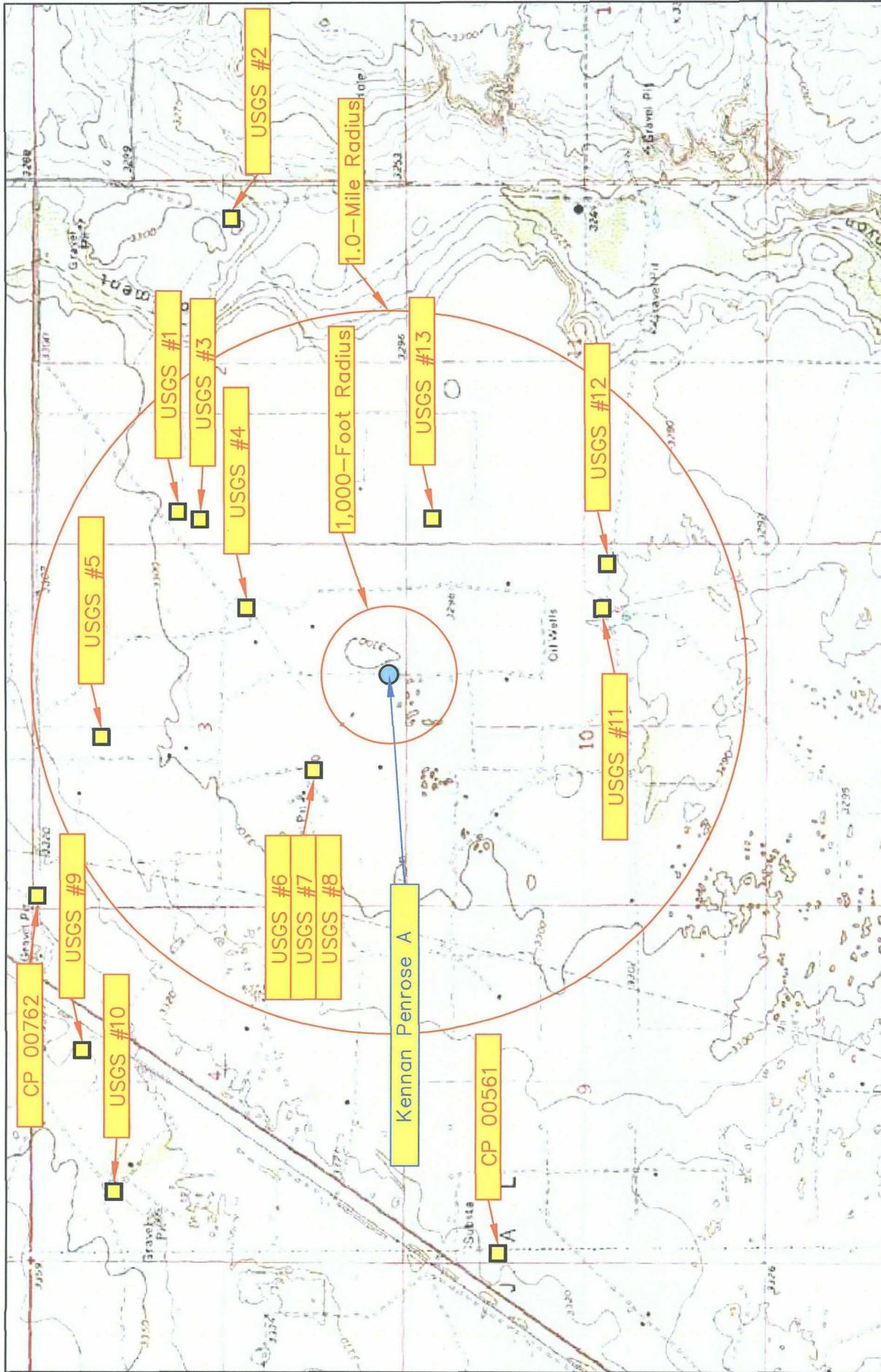
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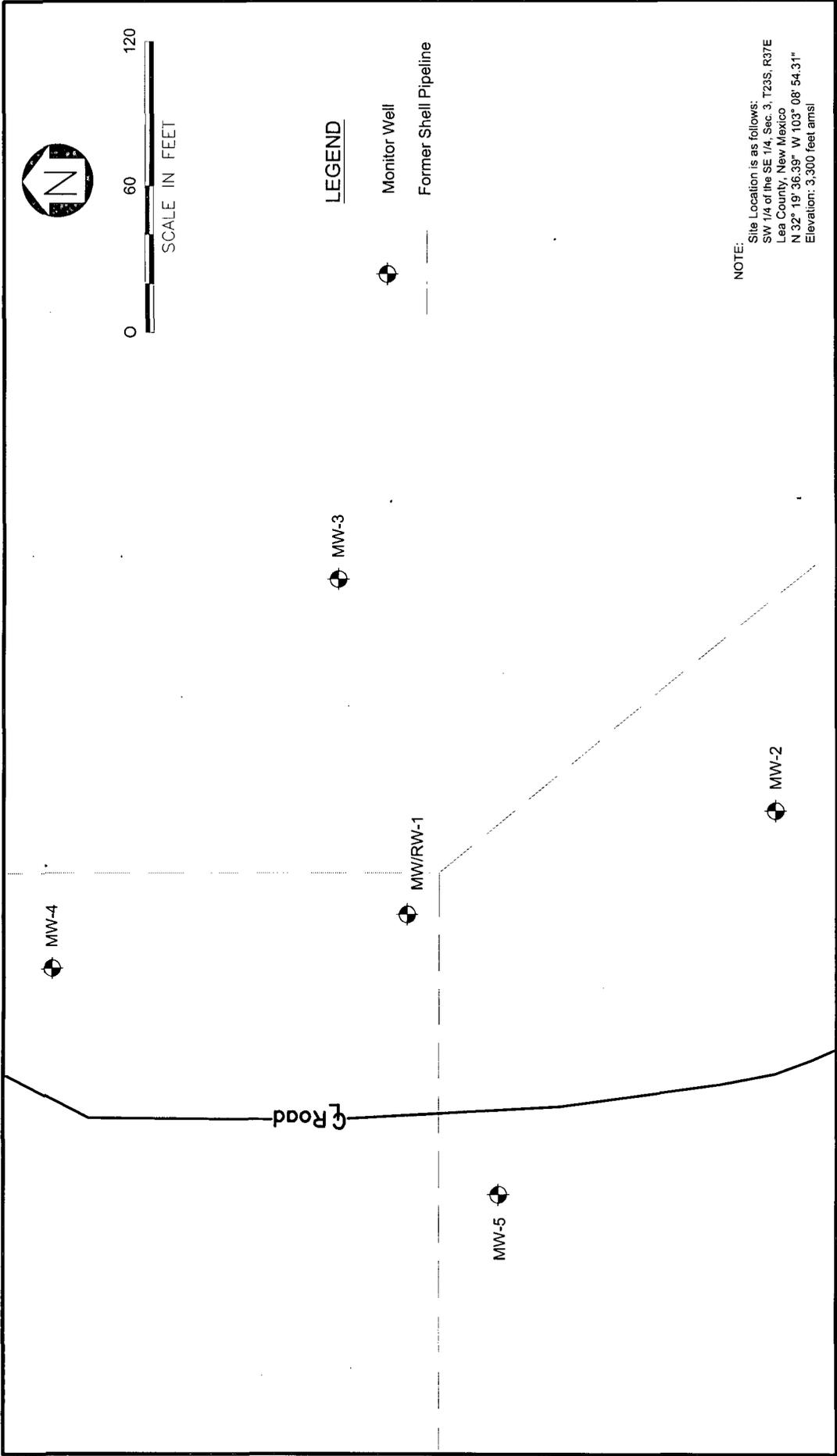
SHEET
 1 of 1

Lea County, New Mexico
 SW 1/4 of the SE 1/4, Sec. 3, T23S, R37E
 N 32° 19' 36.39" W 103° 08' 54.31"
 Elevation: 3,300 feet amsl

Figure 1
 Area Map
 URS
 Kennan Penrose A



<p>Figure 2 Site Location Map URS Kennan Penrose A</p>	<p>Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 3, T23S, R37E N 32° 19' 36.39" W 103° 08' 54.31" Elevation: 3,300 feet amsl</p>		<p>REVISIONS:</p> <p>DWG By: Daniel Dominguez October 2006</p>	<p>0 2,000 4,000 Feet</p> <p>SHEET 1 of 1</p>
	<p>CP 00762</p> <p>USGS #9</p> <p>USGS #10</p> <p>USGS #6</p> <p>USGS #7</p> <p>USGS #8</p> <p>Kennan Penrose A</p> <p>CP 00561</p> <p>USGS #1</p> <p>USGS #3</p> <p>USGS #4</p> <p>USGS #5</p> <p>USGS #11</p> <p>USGS #12</p> <p>USGS #13</p> <p>1,000-Foot Radius</p> <p>1.0-Mile Radius</p>			



SITE MAP
KENNAN PENROSE "A"
28 FEBRUARY 2006

Figure 3



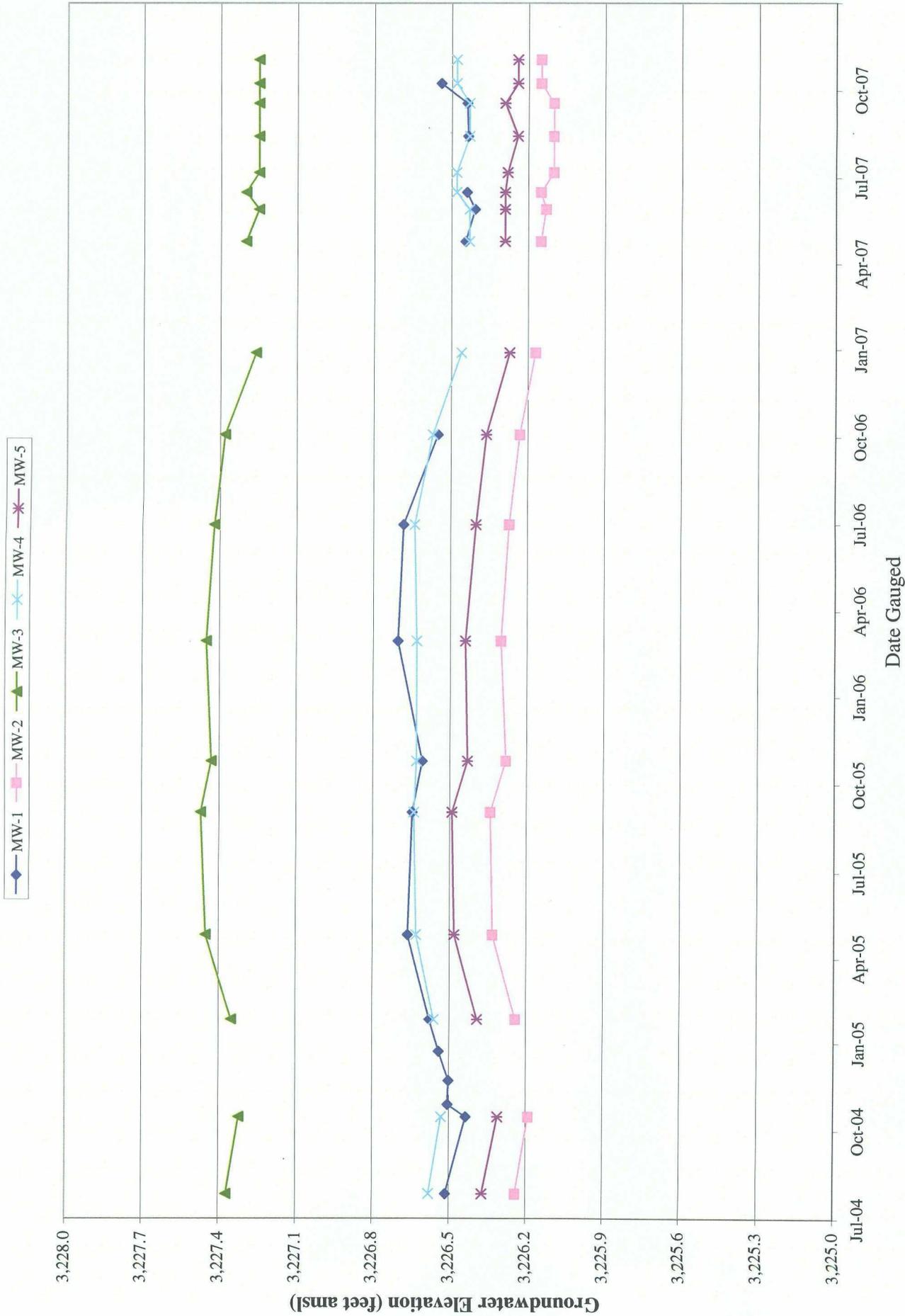
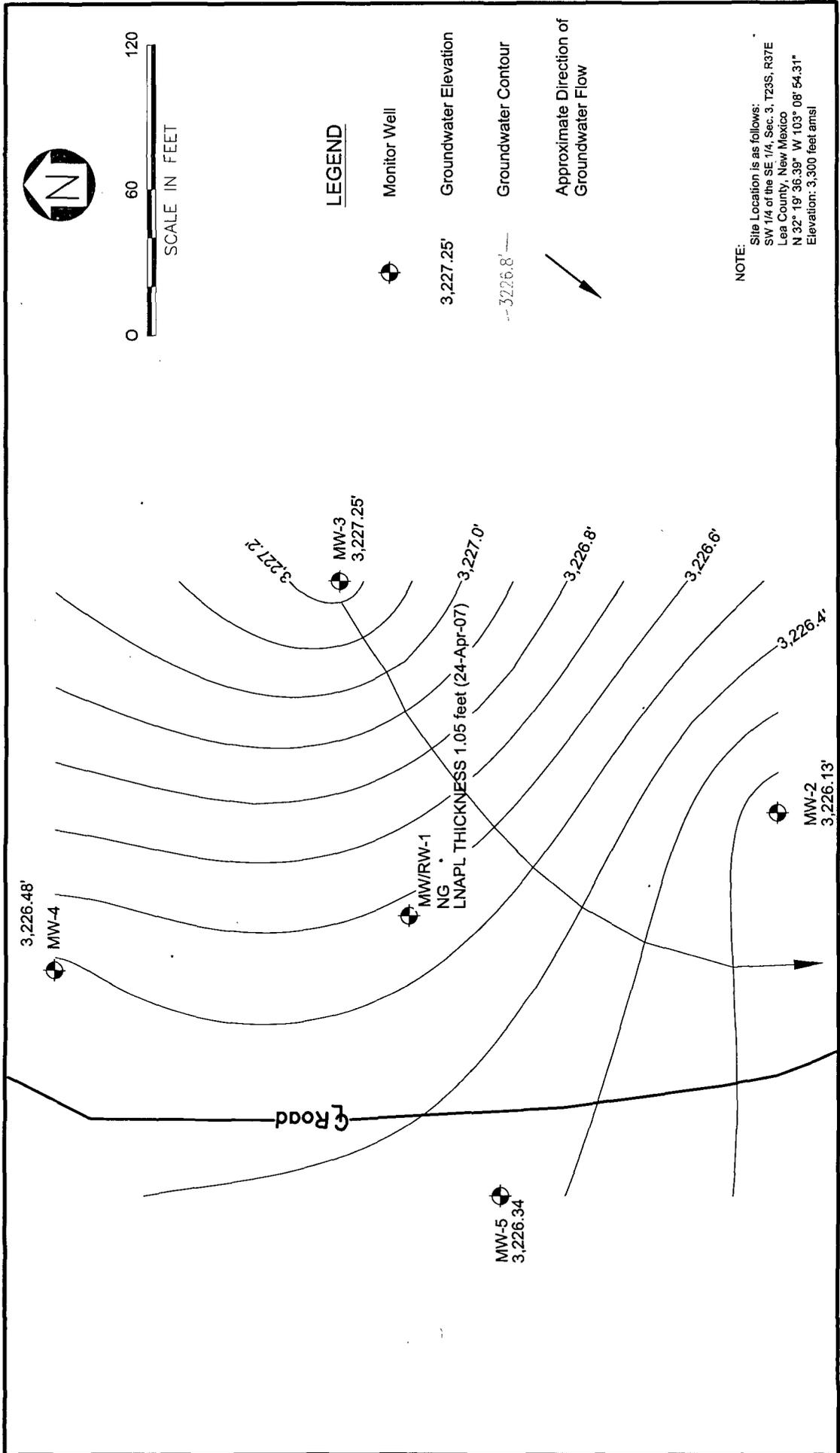


Figure 4: Hydrograph for Groundwater Monitoring Wells MW-1 through MW-5, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-07.



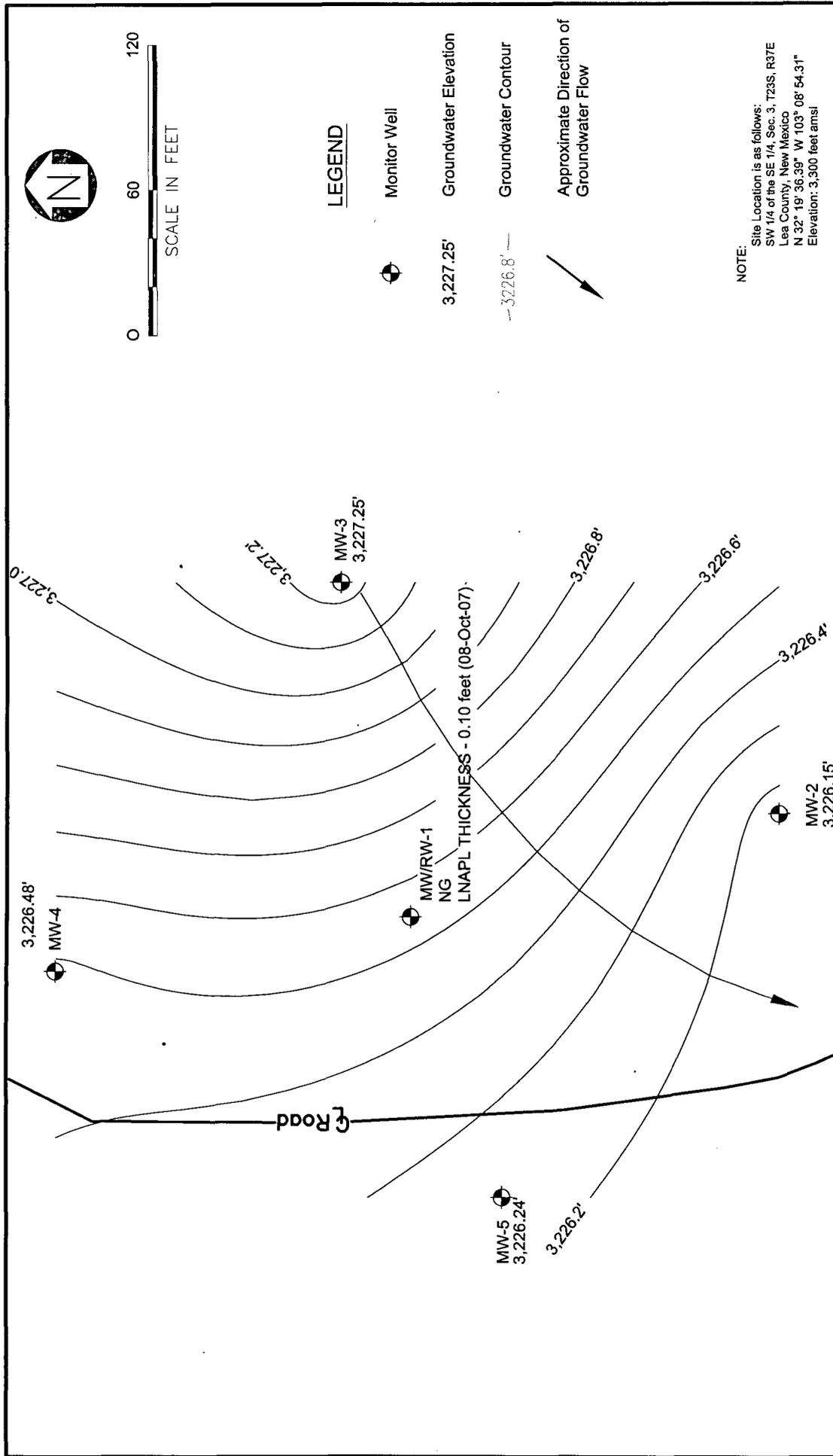
GROUNDWATER ELEVATION CONTOUR MAP

KENNAN PENROSE "A"

28 MARCH 2007



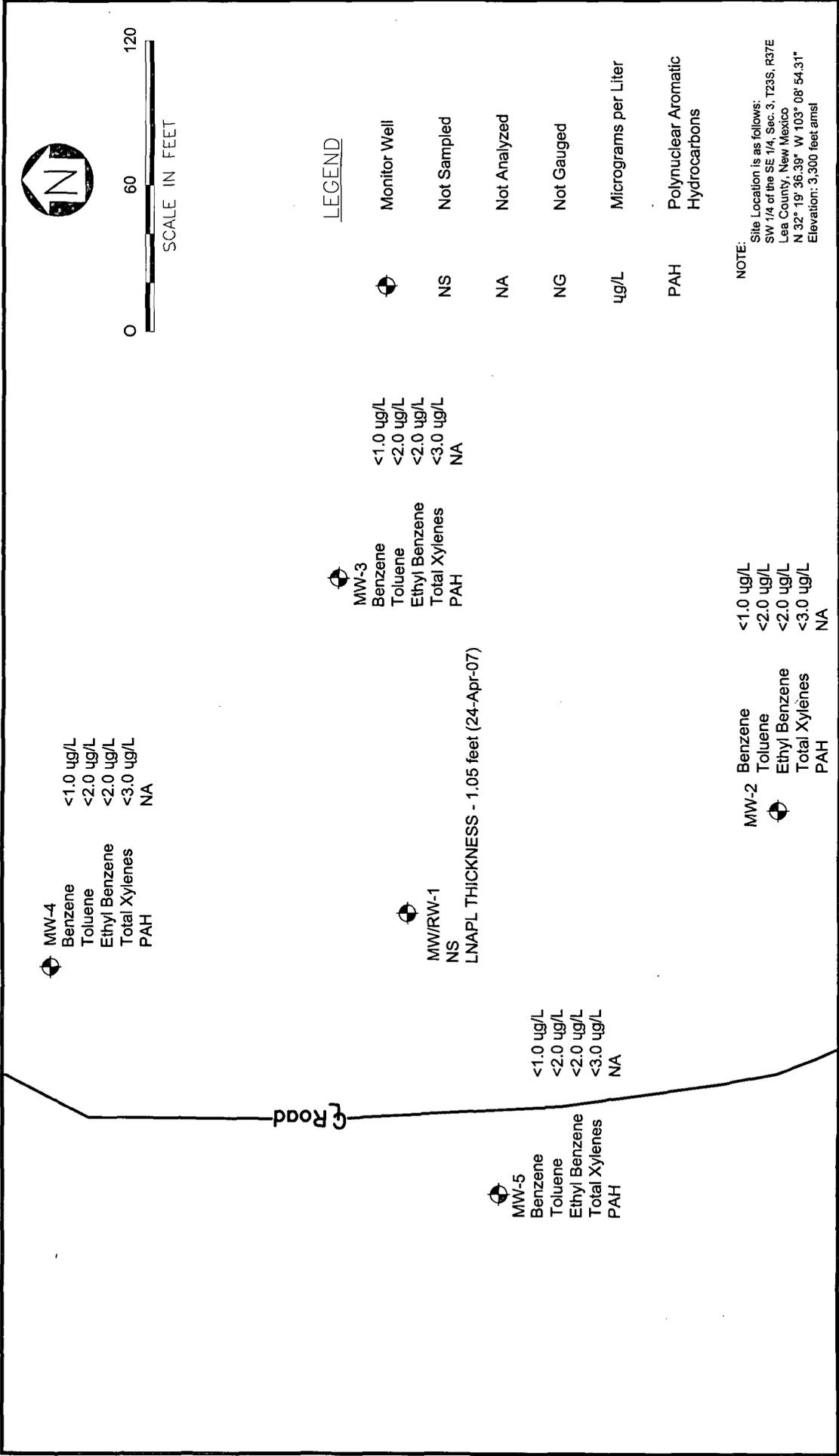
Figure 5



GROUNDWATER ELEVATION CONTOUR MAP
KENNAN PENROSE "A"
02 NOVEMBER 2007



Figure 6



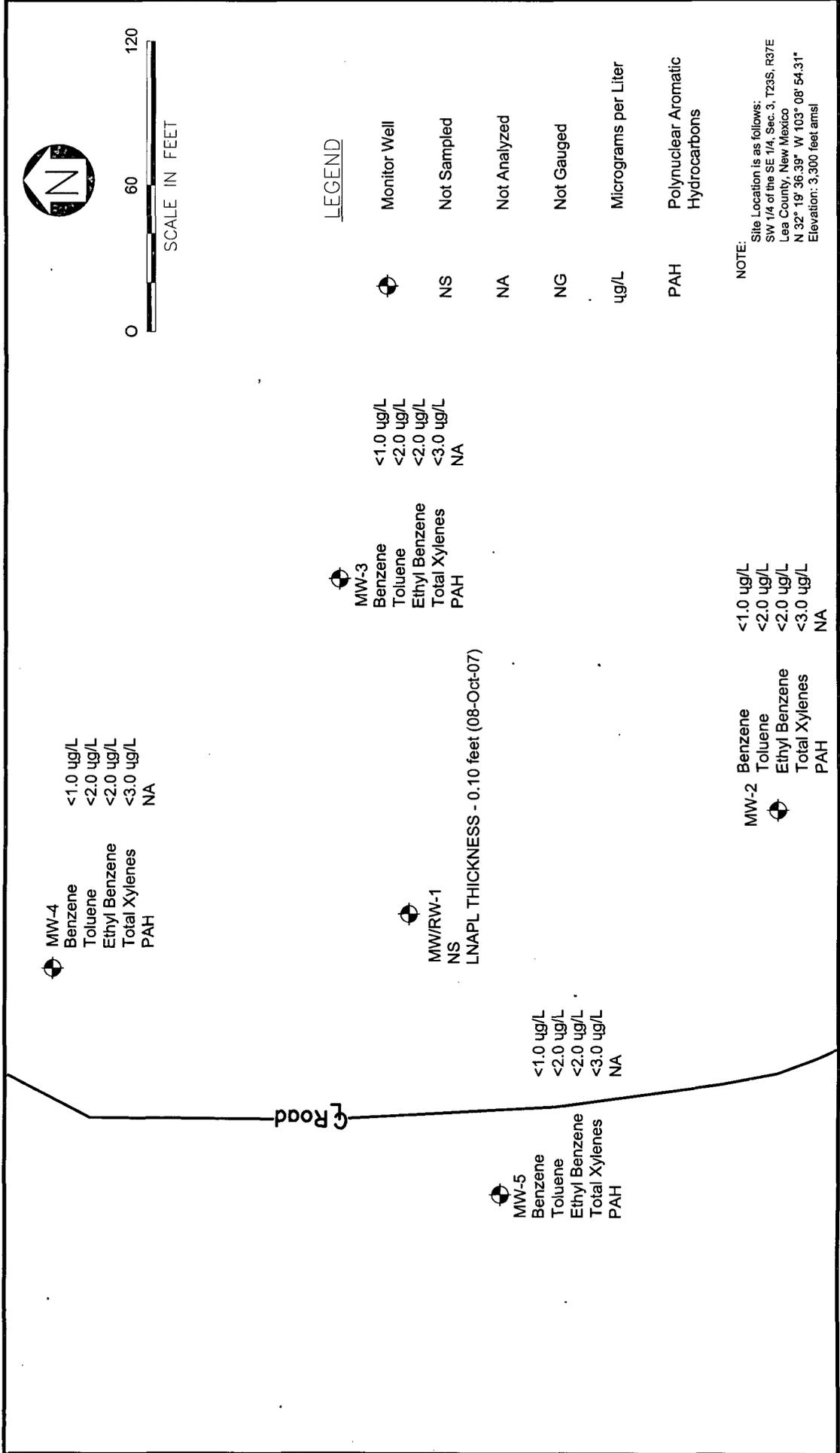
GROUNDWATER BTEX AND PAH ANALYTICAL RESULTS

KENNAN PENROSE "A"

28 MARCH 2007



Figure 7



GROUNDWATER BTEX AND PAH ANALYTICAL RESULTS

KENNAN PENROSE "A"

02 NOVEMBER 2007



Figure 8

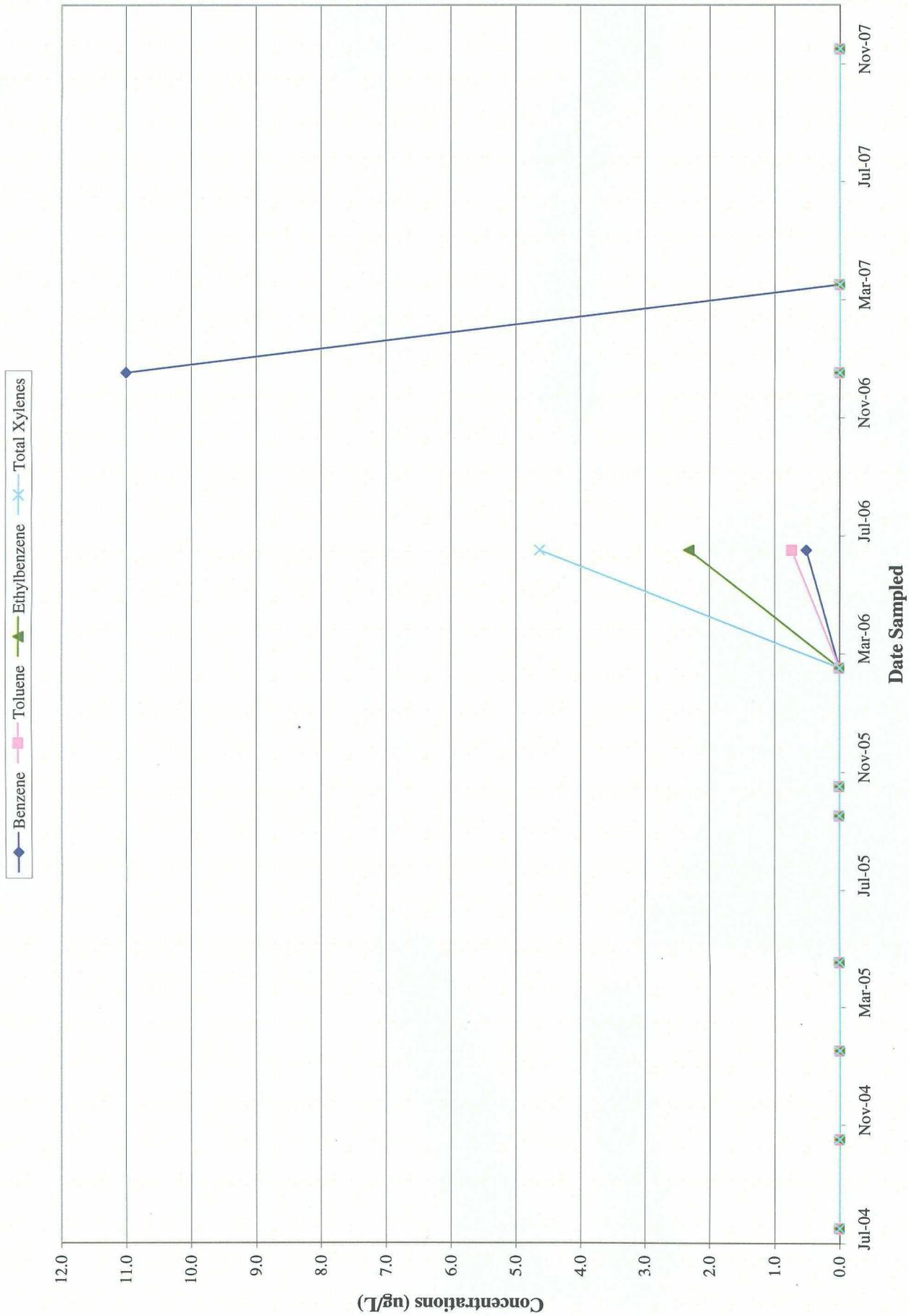


Figure 9: BTEX Concentrations for Groundwater Monitoring Well MW-2, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-07.

Non-detectable concentrations are illustrated as zero concentrations.

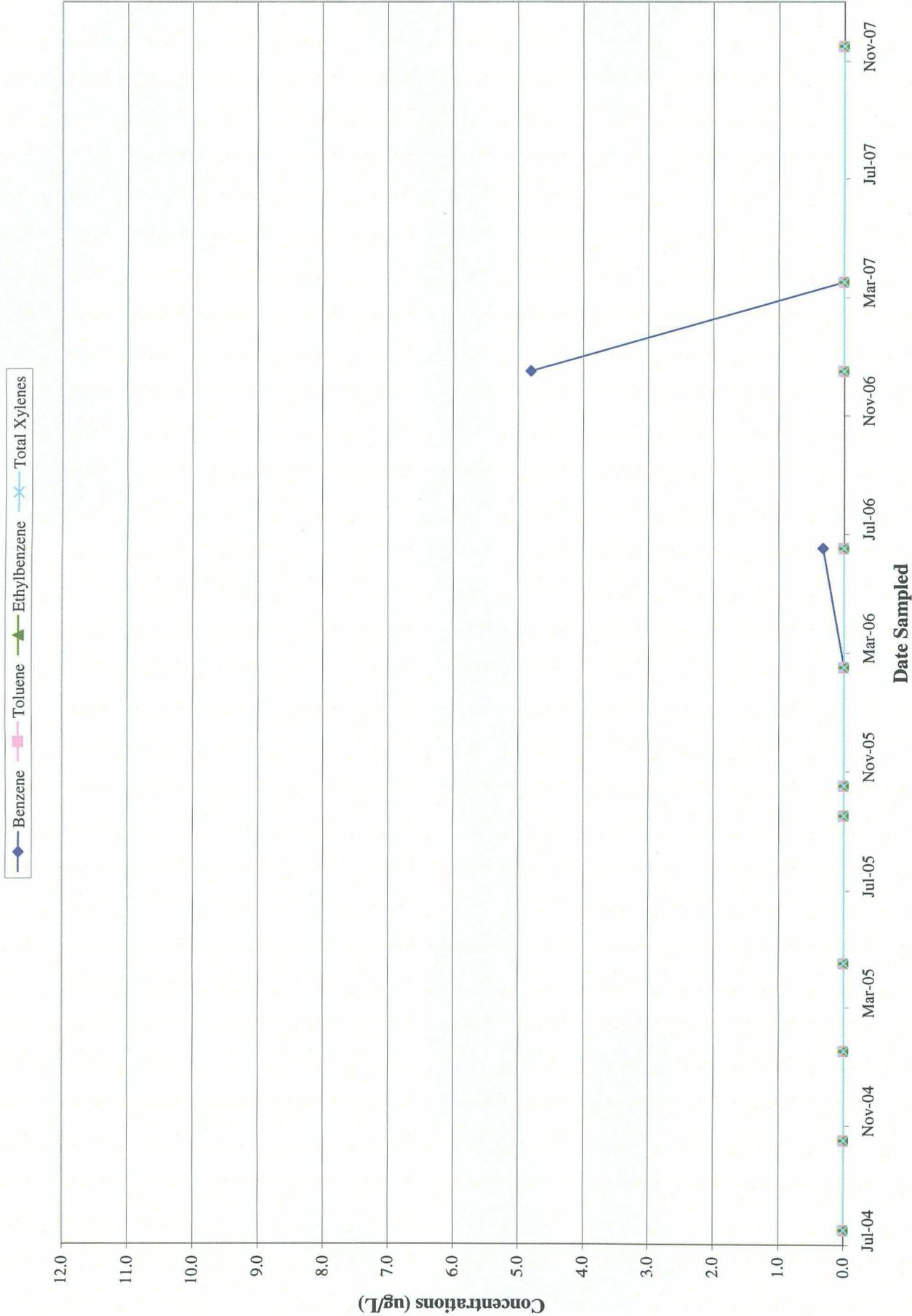


Figure 10: BTEX Concentrations for Groundwater Monitoring Well MW-3, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-07.

Non-detectable concentrations are illustrated as zero concentrations.



Figure 11: BTEX Concentrations for Groundwater Monitoring Well MW-4, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-07.

Non-detectable concentrations are illustrated as zero concentrations.



Figure 12: BTEX Concentrations for Groundwater Monitoring Well MW-5, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-07.

Non-detectable concentrations are illustrated as zero concentrations.

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA
 SHELL OIL PRODUCTS US
 PENROSE "A" LEASE (WINNIE KENNAN RANCH)
 LEA COUNTY, NEW MEXICO

Well ID TOC ¹ Elevation	Date	Casing Diameter (in)	Depth to LNAPL ² (ft TOC ¹)	Depth to Groundwater (ft TOC ¹)	Groundwater Elevation ³ (ft)	LNAPL ² Thickness (ft)	LNAPL ² Recovery (gallons)	LNAPL ² Cumulative Recovery (gallons)	Type of Recovery		
MW-1 3,296.75	26-Jul-04	2	69.94	72.90	3,226.51	2.96	0.50	0.50	Hand Bail		
	14-Oct-04		70.10	72.26	3,226.43	2.16	0.00	0.50	Hand Bail		
	27-Oct-04		69.99	72.54	3,226.51	2.55	2.00	2.50	Hand Bail		
	21-Nov-04		69.98	72.67	3,226.50	2.69	1.50	4.00	Hand Bail		
	22-Dec-04		70.01	72.01	3,226.54	2.00	1.50	5.50	Hand Bail		
	25-Jan-05		69.89	72.72	3,226.58	2.83	2.00	7.50	Hand Bail		
	25-Apr-05		69.91	71.68	3,226.66	1.77	2.00	9.50	Hand Bail		
	01-Sep-05		69.91	71.85	3,226.65	1.94	2.00	11.50	System installed		
	25-Oct-05		70.08	70.71	3,226.61	0.63	7.00	18.50	Adjusted pump		
	28-Feb-06		69.83	72.00	3,226.70	2.17	NR ⁴		Skimmer Pump		
	30-Jun-06		69.88	71.75	3,226.68	1.87	NR ⁴		Skimmer Pump		
	03-Oct-06		70.11	71.01	3,226.55	0.90	0.83	19.33	Skimmer Pump		
	28-Dec-06		NOT GAUGED						NO ⁵		None
	28-Mar-07										
	24-Apr-07		70.20	71.25	3,226.45	1.05					
	28-May-07		70.33	70.45	3,226.41	0.12					
	15-Jun-07		70.30	70.40	3,226.44	0.10					
	06-Jul-07		NOT GAUGED - Bird Nest in Vault Cap								
	13-Aug-07		70.30	70.45	3,226.44	0.15					
	17-Sep-07		70.30	70.41	3,226.44	0.11					
08-Oct-07	70.20		70.30	3,226.54	0.10						
02-Nov-07	NOT GAUGED										
MW-2 3,299.25	26-Jul-04		4	---	73.01	3,226.24	0.00	---	---	---	
	14-Oct-04	---		73.06	3,226.19	0.00	---	---	---		
	27-Oct-04	NOT GAUGED									
	21-Nov-04	NOT GAUGED									
	22-Dec-04	NOT GAUGED									
	25-Jan-05	---		73.01	3,226.24	0.00	---	---	---		
	25-Apr-05	---		72.92	3,226.33	0.00	---	---	---		
	01-Sep-05	---		72.91	3,226.34	0.00	---	---	---		
	25-Oct-05	---		72.97	3,226.28	0.00	---	---	---		
	28-Feb-06	---		72.95	3,226.30	0.00	---	---	---		
	30-Jun-06	---		72.98	3,226.27	0.00	---	---	---		
	03-Oct-06	---		73.02	3,226.23	0.00	---	---	---		
	28-Dec-06	---		73.08	3,226.17	0.00	---	---	---		
	28-Mar-07										
	24-Apr-07		---	73.10	3,226.15	0.00					
	28-May-07		---	73.12	3,226.13	0.00					
	15-Jun-07		---	73.10	3,226.15	0.00					
	06-Jul-07		---	73.15	3,226.10	0.00					
	13-Aug-07		---	73.15	3,226.10	0.00					
	17-Sep-07		---	73.15	3,226.10	0.00					
08-Oct-07	---		73.10	3,226.15	0.00						
02-Nov-07	---		73.10	3,226.15	0.00						

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA
 SHELL OIL PRODUCTS US
 PENROSE "A" LEASE (WINNIE KENNAN RANCH)
 LEA COUNTY, NEW MEXICO

Well ID TOC ¹ Elevation	Date	Casing Diameter (in)	Depth to LNAPL ² (ft TOC ¹)	Depth to Groundwater (ft TOC ¹)	Groundwater Elevation ³ (ft)	LNAPL ² Thickness (ft)	LNAPL ² Recovery (gallons)	LNAPL ² Cumulative Recovery (gallons)	Type of Recovery	
MW-3 3,299.25	26-Jul-04	4	---	71.88	3,227.37	0.00	---	---	---	
	14-Oct-04		---	71.93	3,227.32	0.00	---	---	---	
	27-Oct-04		NOT GAUGED							
	21-Nov-04		NOT GAUGED							
	22-Dec-04		NOT GAUGED							
	25-Jan-05		---	71.90	3,227.35	0.00	---	---	---	
	25-Apr-05		---	71.80	3,227.45	0.00	---	---	---	
	01-Sep-05		---	71.78	3,227.47	0.00	---	---	---	
	25-Oct-05		---	71.82	3,227.43	0.00	---	---	---	
	28-Feb-06		---	71.80	3,227.45	0.00	---	---	---	
	30-Jun-06		---	71.83	3,227.42	0.00	---	---	---	
	03-Oct-06		---	71.87	3,227.38	0.00	---	---	---	
	28-Dec-06		---	71.99	3,227.26	0.00	---	---	---	
	28-Mar-07									
	24-Apr-07		---	71.95	3,227.30	0.00	---	---	---	
	28-May-07		---	72.00	3,227.25	0.00	---	---	---	
	15-Jun-07		---	71.95	3,227.30	0.00	---	---	---	
	06-Jul-07		---	72.00	3,227.25	0.00	---	---	---	
	13-Aug-07		---	72.00	3,227.25	0.00	---	---	---	
	17-Sep-07		---	72.00	3,227.25	0.00	---	---	---	
08-Oct-07	---	72.00	3,227.25	0.00	---	---	---			
02-Nov-07	---	72.00	3,227.25	0.00	---	---	---			
MW-4 3,297.43	26-Jul-04	4	---	70.85	3,226.58	0.00	---	---	---	
	14-Oct-04		---	70.90	3,226.53	0.00	---	---	---	
	27-Oct-04		NOT GAUGED							
	21-Nov-04		NOT GAUGED							
	22-Dec-04		NOT GAUGED							
	25-Jan-05		---	70.87	3,226.56	0.00	---	---	---	
	25-Apr-05		---	70.80	3,226.63	0.00	---	---	---	
	01-Sep-05		---	70.79	3,226.64	0.00	---	---	---	
	25-Oct-05		---	70.80	3,226.63	0.00	---	---	---	
	28-Feb-06		---	70.80	3,226.63	0.00	---	---	---	
	30-Jun-06		---	70.79	3,226.64	0.00	---	---	---	
	03-Oct-06		---	70.86	3,226.57	0.00	---	---	---	
	28-Dec-06		---	70.97	3,226.46	0.00	---	---	---	
	28-Mar-07									
	24-Apr-07		---	71.00	3,226.43	0.00	---	---	---	
	28-May-07		---	71.00	3,226.43	0.00	---	---	---	
	15-Jun-07		---	70.95	3,226.48	0.00	---	---	---	
	06-Jul-07		---	70.95	3,226.48	0.00	---	---	---	
	13-Aug-07		---	71.00	3,226.43	0.00	---	---	---	
	17-Sep-07		---	71.00	3,226.43	0.00	---	---	---	
08-Oct-07	---	70.95	3,226.48	0.00	---	---	---			
02-Nov-07	---	70.95	3,226.48	0.00	---	---	---			

TABLE 2

SUMMARY OF GROUNDWATER ELEVATION DATA
 SHELL OIL PRODUCTS US
 PENROSE "A" LEASE (WINNIE KENNAN RANCH)
 LEA COUNTY, NEW MEXICO

Well ID TOC ¹ Elevation	Date	Casing Diameter (in)	Depth to LNAPL ² (ft TOC ¹)	Depth to Groundwater (ft TOC ¹)	Groundwater Elevation ³ (ft)	LNAPL ² Thickness (ft)	LNAPL ² Recovery (gallons)	LNAPL ² Cumulative Recovery (gallons)	Type of Recovery	
MW-5 3,299.34	26-Jul-04	4	---	72.97	3,226.37	0.00	---	---	---	
	14-Oct-04		---	73.03	3,226.31	0.00	---	---		
	27-Oct-04		NOT GAUGED							
	21-Nov-04		NOT GAUGED							
	22-Dec-04		NOT GAUGED							
	25-Jan-05		---	72.95	3,226.39	0.00	---	---	---	
	25-Apr-05		---	72.86	3,226.48	0.00	---	---	---	
	01-Sep-05		---	72.85	3,226.49	0.00	---	---	---	
	25-Oct-05		---	72.91	3,226.43	0.00	---	---	---	
	28-Feb-06		---	72.90	3,226.44	0.00	---	---	---	
	30-Jun-06		---	72.94	3,226.40	0.00	---	---	---	
	03-Oct-06		---	72.98	3,226.36	0.00	---	---	---	
	28-Dec-06		---	73.07	3,226.27	0.00	---	---	---	
	28-Mar-07									
	24-Apr-07				73.05	3,226.29	0.00			
	28-May-07				73.05	3,226.29	0.00			
	15-Jun-07				73.05	3,226.29	0.00			
	06-Jul-07				73.06	3,226.28	0.00			
	13-Aug-07				73.10	3,226.24	0.00			
	17-Sep-07				73.05	3,226.29	0.00			
08-Oct-07			73.10	3,226.24	0.00					
02-Nov-07			73.10	3,226.24	0.00					

Total Recovered LNAPL is 19.33 gallons

Notes:

1. TOC-Top of Casing.
2. LNAPL - Light non-aqueous phase liquid.
3. Corrected groundwater elevations were calculated using an LNAPL specific gravity of 0.90 per previously reported data.
4. NR - Not Recorded
5. NO - Not Operating

TABLE 3

SUMMARY OF ANALYTICAL RESULTS-BTEX
SHELL OIL PRODUCTS US
PENROSE "A" LEASE
LEA COUNTY, NEW MEXICO

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
		NMWQCC Standard 3102.A,B.				
		10.0 ¹ (µg/L)	750 ¹ (µg/L)	750 ¹ (µg/L)	620 ¹ (µg/L)	--- (µg/L)
MW-1	26-Jul-04	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	14-Oct-04	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	25-Jan-05	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	25-Apr-05	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	01-Sep-05	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	25-Oct-05	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	28-Feb-06	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	30-Jun-06	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	03-Oct-06	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	28-Dec-06	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
	28-Mar-07	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL
02-Nov-07	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	26-Jul-04	<1.0	<1.0	<1.0	<1.0	<1.0
	14-Oct-04	<5.0	<5.0	<5.0	<5.0	<5.0
	25-Jan-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Apr-05	<1.0	<1.0	<1.0	<1.0	<1.0
	01-Sep-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Oct-05	<1.0	<1.0	<1.0	<1.0	<1.0
	28-Feb-06	<0.440	<0.540	<0.410	<1.23	<2.62
	30-Jun-06	0.510	0.730	2.32	4.63	8.19
	03-Oct-06	NOT ANALYZED				
	28-Dec-06	11	<2.0	<2.0	<3.0	<18
	28-Mar-07	<1.0	<2.0	<2.0	<3.0	<8.0
02-Nov-07	<1.0	<2.0	<2.0	<3.0	<8.0	
MW-3	26-Jul-04	<1.0	<1.0	<1.0	<1.0	<1.0
	14-Oct-04	<5.0	<5.0	<5.0	<5.0	<5.0
	25-Jan-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Apr-05	<1.0	<1.0	<1.0	<1.0	<1.0
	01-Sep-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Oct-05	<1.0	<1.0	<1.0	<1.0	<1.0
	28-Feb-06	<0.440	<0.540	<0.410	<1.23	<2.62
	30-Jun-06	0.320	<0.280	<0.340	<0.820	0.320
	03-Oct-06	NOT ANALYZED				
	28-Dec-06	4.8	<2.0	<2.0	<3.0	4.8
	28-Mar-07	<1.0	<2.0	<2.0	<3.0	<8.0

TABLE 3

SUMMARY OF ANALYTICAL RESULTS-BTEX
SHELL OIL PRODUCTS US
PENROSE "A" LEASE
LEA COUNTY, NEW MEXICO

Sample ID	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX
		NMWQCC Standard 3102.A,B.				
		10.0 ¹ (µg/L)	750 ¹ (µg/L)	750 ¹ (µg/L)	620 ¹ (µg/L)	--- (µg/L)
MW-3 (cont.)	02-Nov-07	<1.0	<2.0	<2.0	<3.0	<8.0
MW-4	26-Jul-04	<1.0	<1.0	<1.0	<1.0	<1.0
	14-Oct-04	<5.0	<5.0	<5.0	<5.0	<5.0
	25-Jan-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Apr-05	<1.0	<1.0	<1.0	<1.0	<1.0
	01-Sep-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Oct-05	<1.0	<1.0	<1.0	<1.0	<1.0
	28-Feb-06	<0.440	0.710	<0.410	<1.23	<2.79
	30-Jun-06	<0.290	<0.280	<0.340	<0.820	<1.73
	03-Oct-06	NOT ANALYZED				
	28-Dec-06	<1.0	<2.0	<2.0	<3.0	<8.0
	28-Mar-07	<1.0	<2.0	<2.0	<3.0	<8.0
02-Nov-07	<1.0	<2.0	<2.0	<3.0	<8.0	
MW-5	26-Jul-04	<1.0	<1.0	<1.0	<1.0	<1.0
	14-Oct-04	<5.0	<5.0	<5.0	<5.0	<5.0
	25-Jan-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Apr-05	<1.0	<1.0	<1.0	<1.0	<1.0
	01-Sep-05	<1.0	<1.0	<1.0	<1.0	<1.0
	25-Oct-05	<1.0	<1.0	<1.0	<1.0	<1.0
	28-Feb-06	<0.440	<0.540	<0.410	<1.23	<2.62
	30-Jun-06	<0.290	0.710	<0.340	4.59	4.59
	03-Oct-06	NOT ANALYZED				
	28-Dec-06	4.0	<2.0	<2.0	<3.0	4.0
	28-Mar-07	<1.0	<2.0	<2.0	<3.0	<8.0
02-Nov-07	<1.0	<2.0	<2.0	<3.0	<8.0	

Notes:

1. New Mexico Water Quality Control Commission Standard 3103.A,B.
2. BTEX analysis by EPA Method 8021B (through Oct 05) and 8260B (Oct 05 through present).
3. LNAPL - Light non-aqueous phase liquids.
4. Data prior to Jan 06 collected by Enercon Services.
5. Data collected from Jan 06 through Sep 06 collected by Conestoga-Rovers and Associates (CRA)
6. Data collected since Oct 06 was collected under the direction of URS Corporation.

APPENDIX A

CERTIFIED LABORATORY REPORTS

&

CHAIN-OF-CUSTODY DOCUMENTATION

LABORATORY REPORT

Prepared For: URS - Phoenix - Shell
7720 N. 16th Street Suite 100
Phoenix, AZ 85020
Attention: Iain Olness

Project: Kennan Penrose A
300108/7105335

Sampled: 03/28/07
Received: 03/29/07
Issued: 04/12/07 10:51

NELAP #01109CA Arizona DHS#AZ0426

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.
This entire report was reviewed and approved for release.*

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PQC0956-01	MW-2	Water
PQC0956-02	MW-3	Water
PQC0956-03	MW-4	Water
PQC0956-04	MW-5	Water
PQC0956-05	Trip Blank	Water

SAMPLE RECEIPT: Samples were received intact, at 2°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica - Phoenix, AZ
Tina Paulauskas
Project Manager

URS - Phoenix - Shell
 7720 N. 16th Street Suite 100
 Phoenix, AZ 85020
 Attention: Iain Olness

Project ID: Kennan Penrose A
 300108/7105335
 Report Number: PQC0956

Sampled: 03/28/07
 Received: 03/29/07

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PQC0956-01 (MW-2 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7D0534	1.0	ND	1	4/5/2007	4/5/2007	
Ethylbenzene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Toluene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Xylenes, Total	EPA 8260B	P7D0534	3.0	ND	1	4/5/2007	4/5/2007	
<i>Surrogate: Dibromofluoromethane (80-130%)</i>				117 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>				102 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>				102 %				
Sample ID: PQC0956-02 (MW-3 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7D0534	1.0	ND	1	4/5/2007	4/5/2007	
Ethylbenzene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Toluene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Xylenes, Total	EPA 8260B	P7D0534	3.0	ND	1	4/5/2007	4/5/2007	
<i>Surrogate: Dibromofluoromethane (80-130%)</i>				121 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>				104 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>				112 %				
Sample ID: PQC0956-03 (MW-4 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7D0534	1.0	ND	1	4/5/2007	4/5/2007	
Ethylbenzene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Toluene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Xylenes, Total	EPA 8260B	P7D0534	3.0	ND	1	4/5/2007	4/5/2007	
<i>Surrogate: Dibromofluoromethane (80-130%)</i>				116 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>				107 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>				106 %				

TestAmerica - Phoenix, AZ
 Tina Paulauskas
 Project Manager

URS - Phoenix - Shell
 7720 N. 16th Street Suite 100
 Phoenix, AZ 85020
 Attention: Iain Olness

Project ID: Kennan Penrose A
 300108/7105335
 Report Number: PQC0956

Sampled: 03/28/07
 Received: 03/29/07

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PQC0956-04 (MW-5 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7D0534	1.0	ND	1	4/5/2007	4/5/2007	
Ethylbenzene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Toluene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Xylenes, Total	EPA 8260B	P7D0534	3.0	ND	1	4/5/2007	4/5/2007	
Surrogate: Dibromofluoromethane (80-130%)				122 %				
Surrogate: Toluene-d8 (80-120%)				106 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				113 %				

Sample ID: PQC0956-05 (Trip Blank - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7D0534	1.0	ND	1	4/5/2007	4/5/2007	
Ethylbenzene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Toluene	EPA 8260B	P7D0534	2.0	ND	1	4/5/2007	4/5/2007	
Xylenes, Total	EPA 8260B	P7D0534	3.0	ND	1	4/5/2007	4/5/2007	
Surrogate: Dibromofluoromethane (80-130%)				118 %				
Surrogate: Toluene-d8 (80-120%)				104 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				111 %				

TestAmerica - Phoenix, AZ
 Tina Paulauskas
 Project Manager

URS - Phoenix - Shell 7720 N. 16th Street Suite 100 Phoenix, AZ 85020 Attention: Iain Olness	Project ID: Kennan Penrose A 300108/7105335 Report Number: PQC0956	Sampled: 03/28/07 Received: 03/29/07
---	--	---

METHOD BLANK/QC DATA

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: P7D0534 Extracted: 04/05/07										
Blank Analyzed: 04/05/2007 (P7D0534-BLK1)										
Benzene	ND	1.0	ug/l							
Ethylbenzene	ND	2.0	ug/l							
Toluene	ND	2.0	ug/l							
Xylenes, Total	ND	3.0	ug/l							
Surrogate: Dibromofluoromethane	29.7		ug/l	25.0		119	80-130			
Surrogate: Toluene-d8	25.5		ug/l	25.0		102	80-120			
Surrogate: 4-Bromofluorobenzene	27.0		ug/l	25.0		108	80-120			
LCS Analyzed: 04/05/2007 (P7D0534-BS1)										
Benzene	24.8	1.0	ug/l	25.0		99	80-120			
Ethylbenzene	26.6	2.0	ug/l	25.0		106	80-125			
Toluene	24.8	2.0	ug/l	25.0		99	80-125			
Xylenes, Total	50.9	3.0	ug/l	50.0		102	80-125			
Surrogate: Dibromofluoromethane	29.1		ug/l	25.0		116	80-130			
Surrogate: Toluene-d8	26.4		ug/l	25.0		106	80-120			
Surrogate: 4-Bromofluorobenzene	26.9		ug/l	25.0		108	80-120			
LCS Dup Analyzed: 04/05/2007 (P7D0534-BSD1)										
Benzene	25.9	1.0	ug/l	25.0		104	80-120	4	10	
Ethylbenzene	26.6	2.0	ug/l	25.0		106	80-125	0	15	
Toluene	24.9	2.0	ug/l	25.0		100	80-125	0	10	
Xylenes, Total	50.3	3.0	ug/l	50.0		101	80-125	1	15	
Surrogate: Dibromofluoromethane	29.5		ug/l	25.0		118	80-130			
Surrogate: Toluene-d8	25.9		ug/l	25.0		104	80-120			
Surrogate: 4-Bromofluorobenzene	25.5		ug/l	25.0		102	80-120			
Matrix Spike Analyzed: 04/05/2007 (P7D0534-MS1)										
Source: PQC0956-02										
Benzene	25.6	1.0	ug/l	25.0	ND	102	80-125			
Ethylbenzene	26.2	2.0	ug/l	25.0	ND	105	80-130			
Toluene	26.1	2.0	ug/l	25.0	ND	104	80-130			
Xylenes, Total	51.9	3.0	ug/l	50.0	ND	104	80-125			
Surrogate: Dibromofluoromethane	31.3		ug/l	25.0		125	80-130			
Surrogate: Toluene-d8	27.4		ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	28.1		ug/l	25.0		112	80-120			

TestAmerica - Phoenix, AZ
Tina Paulauskas
Project Manager

URS - Phoenix - Shell
7720 N. 16th Street Suite 100
Phoenix, AZ 85020
Attention: Iain Olness

Project ID: Kennan Penrose A
300108/7105335

Report Number: PQC0956

Sampled: 03/28/07
Received: 03/29/07

METHOD BLANK/QC DATA

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: P7D0534 Extracted: 04/05/07										
Matrix Spike Dup Analyzed: 04/05/2007 (P7D0534-MSD1)					Source: PQC0956-02					
Benzene	27.2	1.0	ug/l	25.0	ND	109	80-125	6	15	
Ethylbenzene	27.0	2.0	ug/l	25.0	ND	108	80-130	3	15	
Toluene	25.6	2.0	ug/l	25.0	ND	102	80-130	2	15	
Xylenes, Total	53.0	3.0	ug/l	50.0	ND	106	80-125	2	15	
Surrogate: Dibromofluoromethane	30.7		ug/l	25.0		123	80-130			
Surrogate: Toluene-d8	26.8		ug/l	25.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	27.2		ug/l	25.0		109	80-120			

TestAmerica - Phoenix, AZ
Tina Paulauskas
Project Manager

URS - Phoenix - Shell
7720 N. 16th Street Suite 100
Phoenix, AZ 85020
Attention: Jain Olness

Project ID: Kennan Penrose A
300108/7105335
Report Number: PQC0956

Sampled: 03/28/07
Received: 03/29/07

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD Relative Percent Difference

TestAmerica - Phoenix, AZ
Tina Paulauskas
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PQC0956 <Page 6 of 7>

TestAmerica

ANALYTICAL TESTING CORPORATION

9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 (480) 785-0043 Fax:(480) 785-0851

URS - Phoenix - Shell
7720 N. 16th Street Suite 100
Phoenix, AZ 85020
Attention: Iain Olness

Project ID: Kennan Penrose A
300108/7105335
Report Number: PQC0956

Sampled: 03/28/07
Received: 03/29/07

Certification Summary

TestAmerica - Phoenix, AZ

Method	Matrix	Nelac	Arizona
EPA 8260B	Water	X	X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica - Phoenix, AZ

Tina Paulauskas
Project Manager

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PQC0956 <Page 7 of 7>



SHELL Chain of Custody Record

LAB:

- TA - Irvine, California
- TA - Morgan Hill, California
- TA - Sacramento, California
- TA - Nashville, Tennessee
- Calscience
- Other: Phoenix

NAME OF PERSON TO BILL:

Kenneth Springer

- ENVIRONMENTAL SERVICES
- NETWORK DEV / FE
- COMPLIANCE

- BILL CONSULTANT
- RMT/CRMT

CHECK BOX TO VERIFY IF NO INCIDENT # APPLIES

INCIDENT # (ES ONLY)

3 0 0 1 0 8

PO #

SAP or CRMT #

7 1 0 5 3 3 5

DATE: 3/28/07
 PAGE: 1 of 1

SAMPLING COMPANY:

URS Corporation

LOG CODE:

ADDRESS: 7720 North 16th Avenue, Suite 100, Phoenix, AZ 85020

SITE ADDRESS: Street and City

Kennan Penrose "A"

EDF DELIVERABLE TO (Name, Company, Office Location)

State

NM

E-MAIL:

PHONE NO.:

CONSULTANT PROJECT NO.:

John Savioie

SAMPLER NAME(S) (Print): John Savioie

LAB USE ONLY

PQ00956

TELEPHONE: (602) 648-2402 FAX: (602) 371-1615
 E-MAIL: j.savioie@urscorp.com

TAT (STD IS 10 BUSINESS DAYS / RUSH IS CALENDAR DAYS):
 STD 5 DAY 3 DAY 2 DAY 24 HOURS

REQUESTED ANALYSIS

- SPECIAL INSTRUCTIONS OR NOTES:
- LA - RWQCB REPORT FORMAT UST AGENCY:
 - EDD NOT NEEDED
 - SHELL CONTRACT RATE APPLIES
 - STATE REIMB RATE APPLIES
 - RECEIPT VERIFICATION REQUESTED

FIELD NOTES:
 Container/Preservative
 or PID Readings
 or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	TIME	MATRIX	NO. OF CONT.
1	MW-2	3-28-07	1010	H ₂ O	3
2	MW-3	3-28-07	0900	H ₂ O	3
3	MW-4	3-28-07	0830	H ₂ O	3
4	MW-5	3-28-07	0935	H ₂ O	3
5	Trip Blank			H ₂ O	1

TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	(MTBE, TBA, DIPE, TAME, ETBE)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	TVPH by 8015	VOCs (Full List) by 8260B
		X													
		X													
		X													
		X													
		X													

TEMPERATURE ON RECEIPT °C

Received by: (Signature) *[Signature]* Date: 3/29/07 Time: 11:30

Received by: (Signature) *[Signature]* Date: 03/29/07 Time: 09:40

Received by: (Signature) *[Signature]* Date: 03/29/07 Time: 09:40

Temp 2-20C

LABORATORY REPORT

Prepared For: URS - Phoenix - Shell
7720 N. 16th Street Suite 100
Phoenix, AZ 85020
Attention: Iain Olness

Project: 88870999/121360

Sampled: 11/02/07
Received: 11/03/07
Issued: 11/19/07 16:57

NELAP #01109CA Arizona DHS#AZ0426

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PQK0101-01	MW-2	Water
PQK0101-02	MW-3	Water
PQK0101-03	MW-4	Water
PQK0101-04	MW-5	Water
PQK0101-05	Trip Blank	Water

SAMPLE RECEIPT: Samples were received intact, at 2°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:



TestAmerica - Phoenix, AZ

Corey Schrader For Tina Paulauskas
Project Manager

URS - Phoenix - Shell
 7720 N. 16th Street Suite 100
 Phoenix, AZ 85020
 Attention: Iain Olness

Project ID: 88870999/121360

Report Number: PQK0101

Sampled: 11/02/07
 Received: 11/03/07

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PQK0101-01 (MW-2 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7K1503	1.0	ND	1	11/14/2007	11/14/2007	
Ethylbenzene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Toluene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Xylenes, Total	EPA 8260B	P7K1503	3.0	ND	1	11/14/2007	11/14/2007	
Surrogate: Dibromofluoromethane (80-130%)				110 %				
Surrogate: Toluene-d8 (80-120%)				107 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				105 %				
Sample ID: PQK0101-02 (MW-3 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7K1503	1.0	ND	1	11/14/2007	11/14/2007	
Ethylbenzene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Toluene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Xylenes, Total	EPA 8260B	P7K1503	3.0	ND	1	11/14/2007	11/14/2007	
Surrogate: Dibromofluoromethane (80-130%)				114 %				
Surrogate: Toluene-d8 (80-120%)				108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				108 %				
Sample ID: PQK0101-03 (MW-4 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7K1503	1.0	ND	1	11/14/2007	11/14/2007	
Ethylbenzene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Toluene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Xylenes, Total	EPA 8260B	P7K1503	3.0	ND	1	11/14/2007	11/14/2007	
Surrogate: Dibromofluoromethane (80-130%)				116 %				
Surrogate: Toluene-d8 (80-120%)				109 %				
Surrogate: 4-Bromofluorobenzene (80-120%)				110 %				

TestAmerica - Phoenix, AZ

Corey Schrader For Tina Paulauskas
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PQK0101 <Page 2 of 7>

URS - Phoenix - Shell
 7720 N. 16th Street Suite 100
 Phoenix, AZ 85020
 Attention: Iain Olness

Project ID: 88870999/121360

Report Number: PQK0101

Sampled: 11/02/07
 Received: 11/03/07

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PQK0101-04 (MW-5 - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7K1503	1.0	ND	1	11/14/2007	11/14/2007	
Ethylbenzene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Toluene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Xylenes, Total	EPA 8260B	P7K1503	3.0	ND	1	11/14/2007	11/14/2007	
<i>Surrogate: Dibromofluoromethane (80-130%)</i>				115 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>				109 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>				107 %				
Sample ID: PQK0101-05 (Trip Blank - Water)								
Reporting Units: ug/l								
Benzene	EPA 8260B	P7K1503	1.0	ND	1	11/14/2007	11/14/2007	
Ethylbenzene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Toluene	EPA 8260B	P7K1503	2.0	ND	1	11/14/2007	11/14/2007	
Xylenes, Total	EPA 8260B	P7K1503	3.0	ND	1	11/14/2007	11/14/2007	
<i>Surrogate: Dibromofluoromethane (80-130%)</i>				119 %				
<i>Surrogate: Toluene-d8 (80-120%)</i>				109 %				
<i>Surrogate: 4-Bromofluorobenzene (80-120%)</i>				107 %				

TestAmerica - Phoenix, AZ

Corey Schrader For Tina Paulauskas
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

URS - Phoenix - Shell 7720 N. 16th Street Suite 100 Phoenix, AZ 85020 Attention: Iain Olness	Project ID: 88870999/121360 Report Number: PQK0101	Sampled: 11/02/07 Received: 11/03/07
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METHOD BLANK/QC DATA

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: P7K1503 Extracted: 11/14/07										
Blank Analyzed: 11/14/2007 (P7K1503-BLK1)										
Benzene	ND	1.0	ug/l							
Ethylbenzene	ND	2.0	ug/l							
Toluene	ND	2.0	ug/l							
Xylenes, Total	ND	3.0	ug/l							
Surrogate: Dibromofluoromethane	27.6		ug/l	25.0		111	80-130			
Surrogate: Toluene-d8	27.1		ug/l	25.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	26.7		ug/l	25.0		107	80-120			
LCS Analyzed: 11/14/2007 (P7K1503-BS1)										
Benzene	25.4	1.0	ug/l	25.0		102	80-120			
Ethylbenzene	24.5	2.0	ug/l	25.0		98	80-125			
Toluene	24.6	2.0	ug/l	25.0		98	80-125			
Xylenes, Total	48.4	3.0	ug/l	50.0		97	80-125			
Surrogate: Dibromofluoromethane	27.4		ug/l	25.0		110	80-130			
Surrogate: Toluene-d8	26.6		ug/l	25.0		106	80-120			
Surrogate: 4-Bromofluorobenzene	26.6		ug/l	25.0		106	80-120			
LCS Dup Analyzed: 11/14/2007 (P7K1503-BSD1)										
Benzene	25.6	1.0	ug/l	25.0		103	80-120	1	10	
Ethylbenzene	25.2	2.0	ug/l	25.0		101	80-125	3	15	
Toluene	25.4	2.0	ug/l	25.0		101	80-125	3	10	
Xylenes, Total	49.9	3.0	ug/l	50.0		100	80-125	3	15	
Surrogate: Dibromofluoromethane	27.5		ug/l	25.0		110	80-130			
Surrogate: Toluene-d8	26.8		ug/l	25.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	26.2		ug/l	25.0		105	80-120			
Matrix Spike Analyzed: 11/14/2007 (P7K1503-MS1)										
Benzene	25.1	1.0	ug/l	25.0	ND	101	80-125			
Ethylbenzene	24.7	2.0	ug/l	25.0	ND	99	80-130			
Toluene	25.5	2.0	ug/l	25.0	ND	102	80-130			
Xylenes, Total	48.6	3.0	ug/l	50.0	ND	97	80-125			
Surrogate: Dibromofluoromethane	28.2		ug/l	25.0		113	80-130			
Surrogate: Toluene-d8	26.8		ug/l	25.0		107	80-120			
Surrogate: 4-Bromofluorobenzene	26.6		ug/l	25.0		106	80-120			

Source: PQK0101-01

TestAmerica - Phoenix, AZ

Corey Schrader For Tina Paulauskas
Project Manager

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URS - Phoenix - Shell 7720 N. 16th Street Suite 100 Phoenix, AZ 85020 Attention: Iain Olness	Project ID: 88870999/121360 Report Number: PQK0101	Sampled: 11/02/07 Received: 11/03/07
---	---	---

METHOD BLANK/QC DATA

BTEX BY GC/MS (EPA 5030B/8260B)

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: P7K1503 Extracted: 11/14/07										
Matrix Spike Dup Analyzed: 11/14/2007 (P7K1503-MSD1)					Source: PQK0101-01					
Benzene	25.7	1.0	ug/l	25.0	ND	103	80-125	2	15	
Ethylbenzene	24.7	2.0	ug/l	25.0	ND	99	80-130	0	15	
Toluene	25.2	2.0	ug/l	25.0	ND	101	80-130	1	15	
Xylenes, Total	48.5	3.0	ug/l	50.0	ND	97	80-125	0	15	
Surrogate: Dibromofluoromethane	27.8		ug/l	25.0		111	80-130			
Surrogate: Toluene-d8	27.7		ug/l	25.0		111	80-120			
Surrogate: 4-Bromofluorobenzene	27.0		ug/l	25.0		108	80-120			

TestAmerica - Phoenix, AZ
Corey Schrader For Tina Paulauskas
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

URS - Phoenix - Shell
7720 N. 16th Street Suite 100
Phoenix, AZ 85020
Attention: Iain Olness

Project ID: 88870999/121360

Report Number: PQK0101

Sampled: 11/02/07

Received: 11/03/07

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD Relative Percent Difference

TestAmerica - Phoenix, AZ

Corey Schrader For Tina Paulauskas
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PQK0101 <Page 6 of 7>

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 (480) 785-0043 Fax:(480) 785-0851

URS - Phoenix - Shell
7720 N. 16th Street Suite 100
Phoenix, AZ 85020
Attention: Iain Olness

Project ID: 88870999/121360

Report Number: PQK0101

Sampled: 11/02/07
Received: 11/03/07

Certification Summary

TestAmerica - Phoenix, AZ

Method	Matrix	Nelac	Arizona
EPA 8260B	Water	X	X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

TestAmerica - Phoenix, AZ

Corey Schrader For Tina Paulauskas
Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from TestAmerica.

PQK0101 <Page 7 of 7>

LAB:
 TA - Irvine, California
 TA - Morgan Hill, California
 TA - Sacramento, California
 TA - Nashville, Tennessee
 Caldecott
 Other: Phoenix



SHELL Chain Of Custody Record

NAME OF PERSON TO BILL: Kenneth Springer

CHECK BOX TO VERIFY IF NO INCIDENT # APPLIES

INCIDENT # (ES ONLY)	
3	0
0	1
0	0
8	

DATE: 11-2-07

ENVIRONMENTAL SERVICES
 NETWORK DEV / E
 COMPLIANCE

BILL CONSULTANT
 REPORT

PO #

SAP or CRMT #	
7	1
0	5
3	3
5	

PAGE: 1 of 1

URS Corporation
 7720 North 16th Avenue, Suite 100, Phoenix, AZ 85020

LAB USE ONLY
 POK0101

John Ohress
 Telephone: (602) 648-2402
 Fax: (602) 371-1615
 Email: john_ohress@urscorp.com

PROJECT CONTRACT (Inventory or RCR Report):
 TAT (STD IS 10 BUSINESS DAYS / RUBHS CALENDAR DAYS):
 STD 5 DAY 3 DAY 2 DAY 24 HOURS

RESULTS NEEDED ON WEEKEND:

PHONE NO: (602) 648-2402

EMAIL: john_ohress@urscorp.com

CONSULTANT PROJECT NO: 49194413

SPECIAL INSTRUCTIONS OR NOTES:
 LA - RANCS REPORT FORMAT UST AGENCY:

EDO NOT NEEDED
 SHELL CONTRACT RATE APPLIES
 STATE REIMB RATE APPLIES
 RECEIPT VERIFICATION REQUESTED

REQUESTED ANALYSIS

TPH - Purgeable (8260B)	
TPH - Extractable (8015M)	
BTEX (8260B)	
5 Oxygenates (8260B) (MTBE, TBA, DIPE, TAME, ETBE)	
MTBE (8260B)	
TBA (8260B)	
DIPE (8260B)	
TAME (8260B)	
ETBE (8260B)	
1,2 DCA (8260B)	
EDB (8260B)	
Ethanol (8260B)	
Methanol (8015M)	
TVFH by 8015	
VOCS (Full List) by 8260B	

FIELD NOTES:

Container/Preservative
 or PID Readings
 or Laboratory Notes

TEMPERATURE ON RECEIPT: C

ID# USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO OF CONT.
		DATE	TIME		
1	MW-2	11-2-07	1:02 PM	H ₂ O	3
2	MW-3	11-2-07	1:55 PM	H ₂ O	3
3	MW-4	11-2-07	11:27 AM	H ₂ O	3
4	MW-5	11-2-07	09:47 AM	H ₂ O	3
5	Triph Blank			H ₂ O	1

Prepared by (Signature): *[Signature]*
 Date: 11-3-07
 Form: 0900

Requested by (Signature): *[Signature]*
 Date: 11-2-07
 Form: 1700

Date: 11-3-07
 Form: 0900