1R-299

Annual Monitoring Report

DATE:
2008

URS

30 March 2009

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

Re: 2008 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 for semi-annual monitoring activities indicate the absence 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. Due to this, URS, on behalf of Shell, is recommending discontinuing sampling of these wells and continuing free-product recovery activities associated with 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: *2008 Annual Groundwater Monitoring Report*

cc: Ken Springer, SOPUS – Houston
Larry Johnson, NMOCD – Hobbs
Leo Sims, Property Owner Representative - Hobbs

URS Corporation
7720 North 16th Street, Suite 100
Phoenix, AZ 85020
Tel: 602.371.1100
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2008 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
27 March 2009

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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 2008 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). The subject-property is located in the SW¼ of the SE¼ of Section 3, T23S, R37E. A review of the New Mexico Office of the State Engineer website in 2007 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 2008. 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) in groundwater. The sampling events were performed on March 14, and November 17, 2008 by H_2A 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 2008.

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 open 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 *Workplan for Soil Remediation and Monitor Well Installation* to NMOCD. Workplan includes installation of clay liner over remaining hydrocarbon impacted soils.
May 2002	Enercon submits *Report Detailing the Installation of Temporary Monitor Well TMW-1* 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 *Phase II Backfilling Activities with Site Groundwater/Soil Characterization* to NMOCD.
January 2005	Continued monthly LNAPL recovery from MW-1.
March 2005	Enercon submits *2004 Annual Groundwater Monitoring Report* 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	H_2A conducts semi-annual sampling activities.
November 2, 2007	H_2A 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.
March 14, 2008	H_2A conducts semi-annual sampling activities.
November 17, 2008	H_2A conducts semi-annual sampling activities.
January 2009	Continued monthly LNAPL recovery from MW-1.
March 2009	URS submits *2008 Annual Groundwater Monitoring Report* to SOPUS and the NMOCD.

3.0 2008 GROUNDWATER MONITORING AND SAMPLING ACTIVITIES

3.1 FIELD PROCEDURES

Groundwater sampling events were performed on March 14 and November 17, 2008. Groundwater monitoring 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 2008, depth to groundwater across the site ranged from 70.38 feet to 73.24 feet below the top of the casing, with an average groundwater gradient of approximately 0.0054ft/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 2008 sampling events were 3,226.50 feet, and 3,226.41 feet above mean sea level, respectively. These data indicate the average groundwater elevation at the site decreased approximately 0.10 feet between November 2, 2007 and November 17, 2008. Groundwater gradient maps for the March and November 2008 sampling events are illustrated on Figures 5 and 7, respectively.

3.3 ANALYTICAL RESULTS

Groundwater samples were submitted to Xenco Laboratories (Xenco), of Midland, Texas 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 2008 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 Table 3 and on Figures 6 and 8 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 2008 monitoring period, measurable LNAPL in the form of crude oil was present in monitor well MW-1 with an average thickness of 0.11 feet (reference Table 2). Historically, from July 2004 through October 2007, the LNAPL thickness averaged 1.45 feet in MW-1. LNAPL thicknesses during 2007 averaged 0.26 feet. Based on these averages, this is a decrease in average LNAPL thicknesses of 0.16 feet for 2008. During 2008, 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 2008. 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, 2008, an approximate total of 37.5 gallons of LNAPL have been recovered at the site. Of this, approximately 11.5 gallons of LNAPL have been recovered by hand bailing, and 26 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 2008 are presented below:

- The groundwater gradient remains relatively constant at approximately 0.0054 ft/ft to the southwest.
- LNAPL was present throughout the year in monitor well MW-1 with an average thickness of 0.11 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 26 gallons since installation.
- BTEX constituents were reported as non-detectable in samples collected from all groundwater monitoring wells during 2008.

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) Based on analytical results collected during 2008 and recommendations included in the *2007 Annual Groundwater Monitoring Report*, 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. At this time, groundwater samples will be collected from the entire groundwater monitoring well network to ascertain the possibility of closure.
2) Continue monitoring the free-product recovery system to ensure the system is operating efficiently and effectively.
3) Submit the results of the Annual Sampling Program to the New Mexico Oil Conservation Division by April 1, 2010.

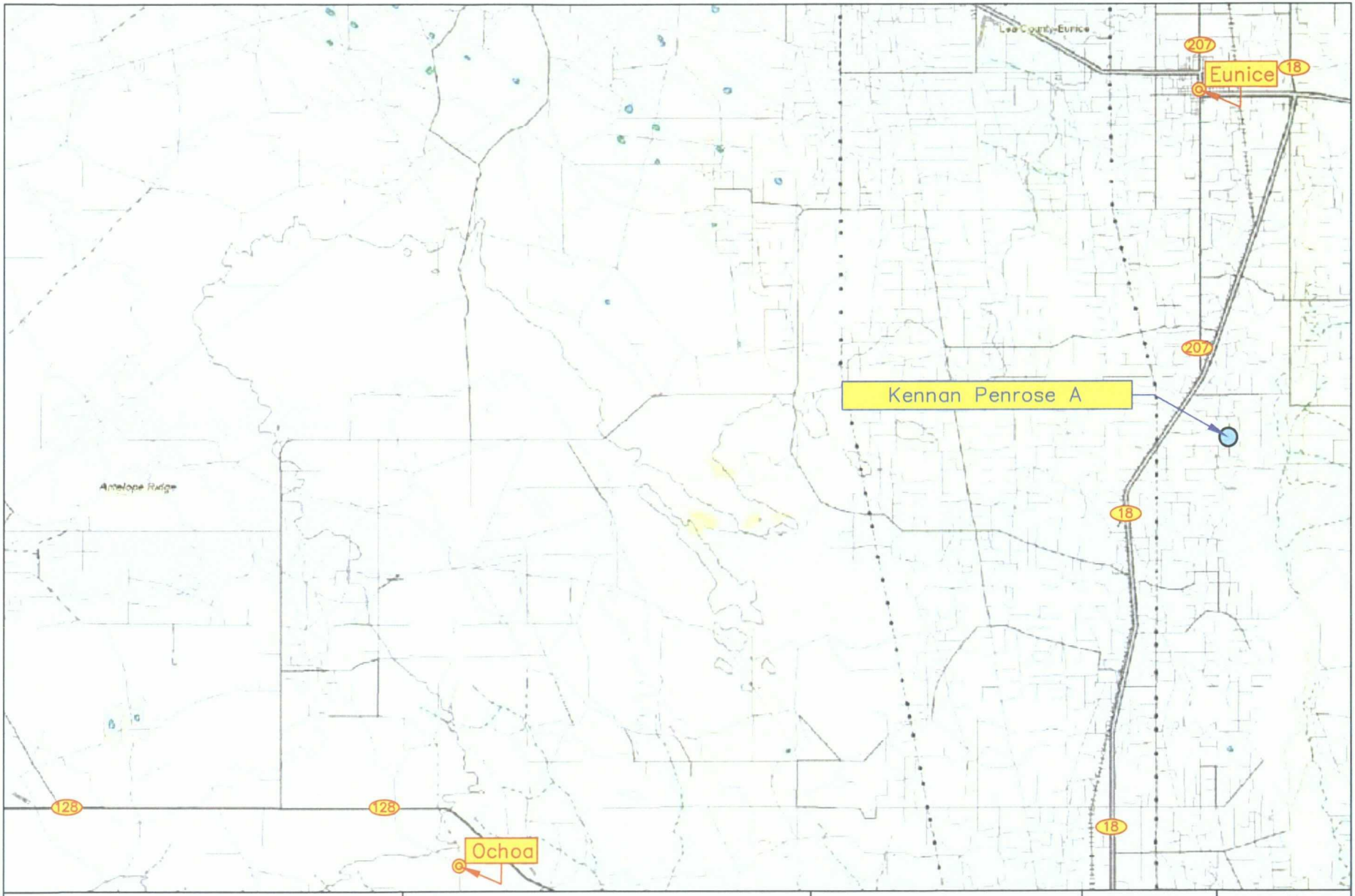


Figure 1 Area Map URS Kennan Penrose A	Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 3, T23S, R37E N 32° 19' 36.39" W 103° 08' 54.31" Elevation: 3,300 feet amsl	DWG By: Daniel Dominguez October 2006	REVISED:	N
		0 3 6 Miles	SHEET 1 of 1	

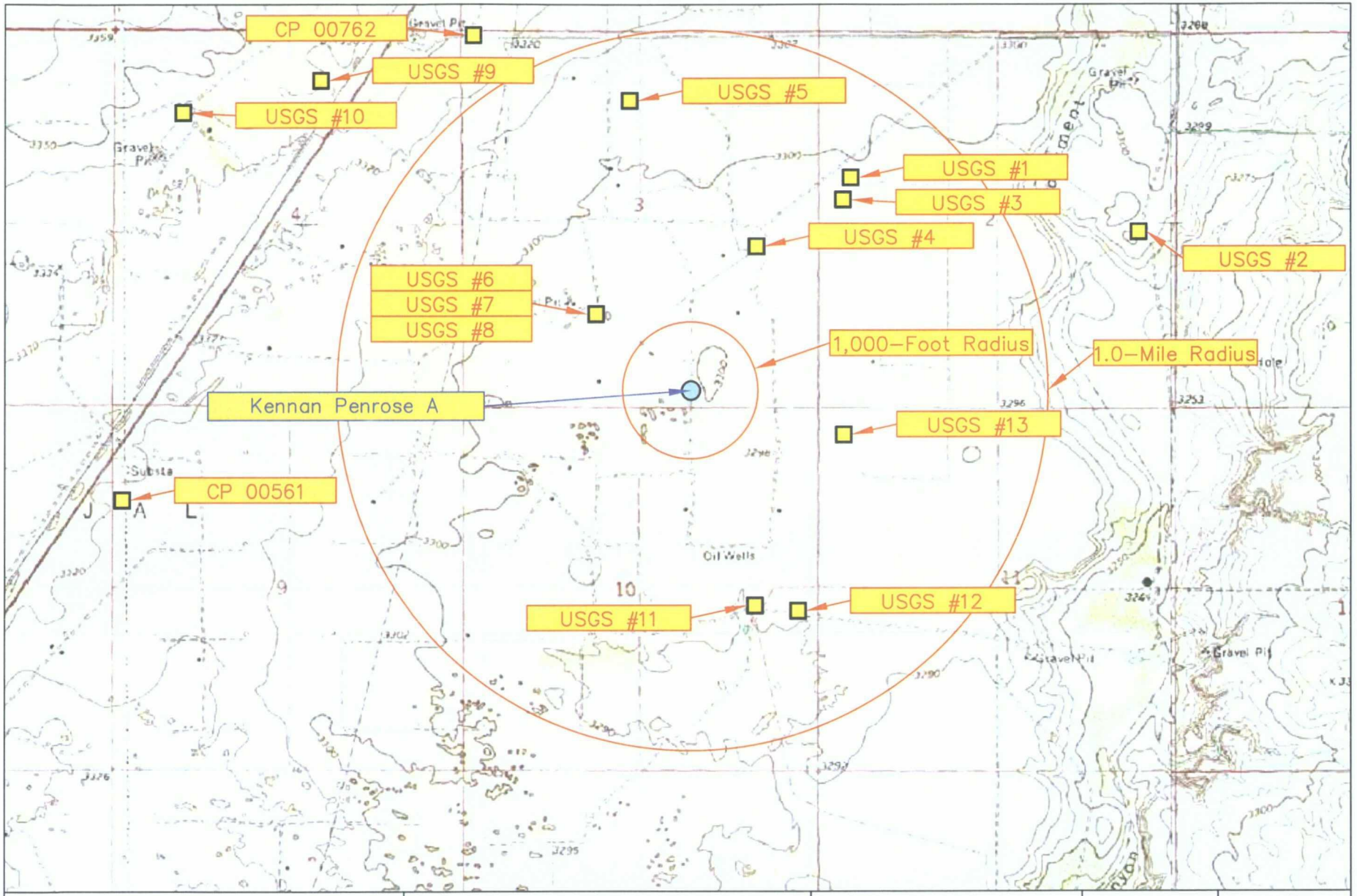
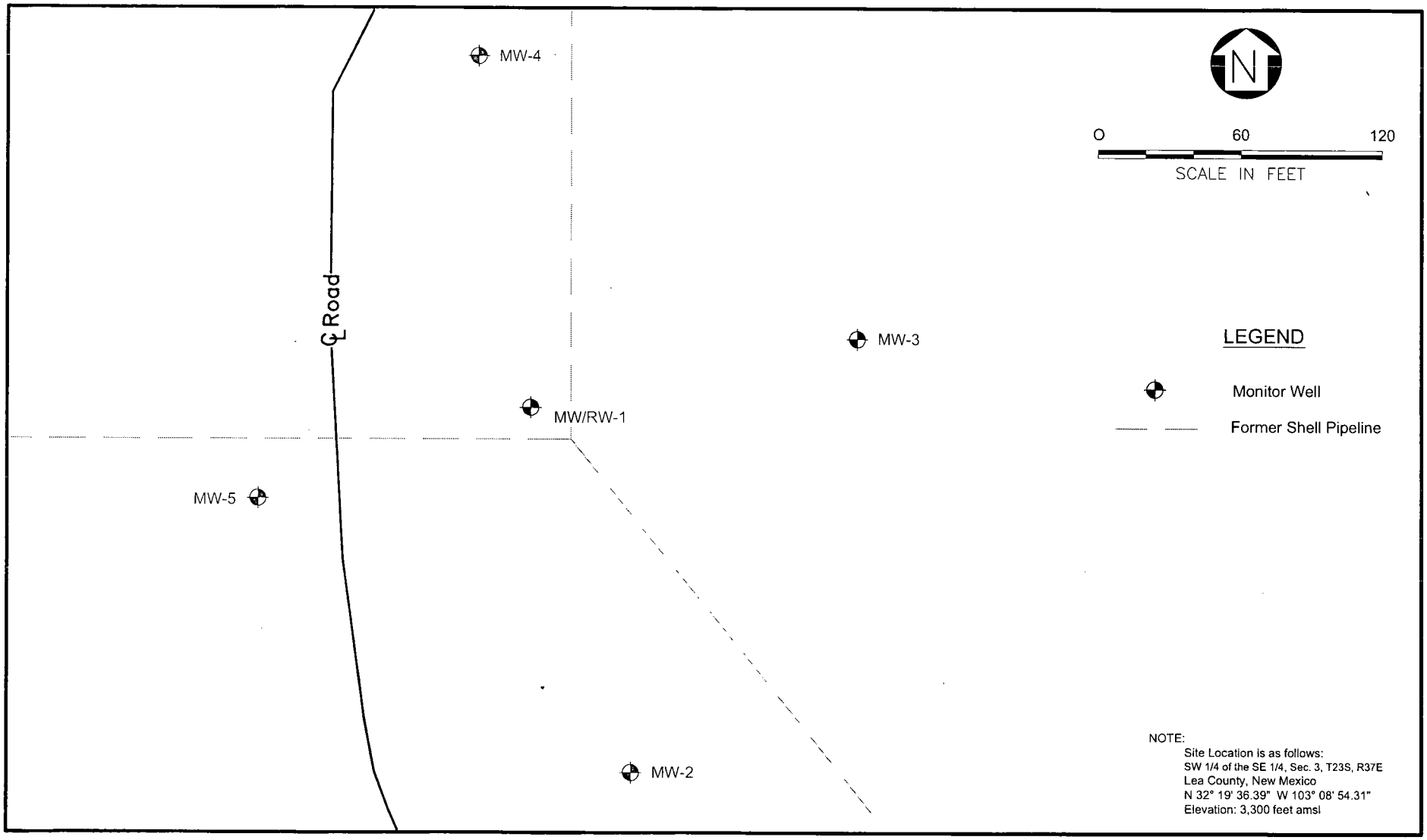


Figure 2 Site Location Map URS Kennan Penrose A	Lea County, New Mexico SW 1/4 of the SE 1/4, Sec. 3, T23S, R37E N 32° 19' 36.39" W 103° 08' 54.31" Elevation: 3,300 feet amsl	DWG By: Daniel Dominguez October 2006 0 2,000 4,000 Feet	REVISED: SHEET 1 of 1



SITE MAP
KENNAN PENROSE "A"
28 FEBRUARY 2006

URS

Figure 3

P/SHELL/JOB SITES/NEW MEXICO SITES/300108(KENNAN-PENROSE A- LEA WINK ALT)/FIGURES/A17103.DWG 02-12-07

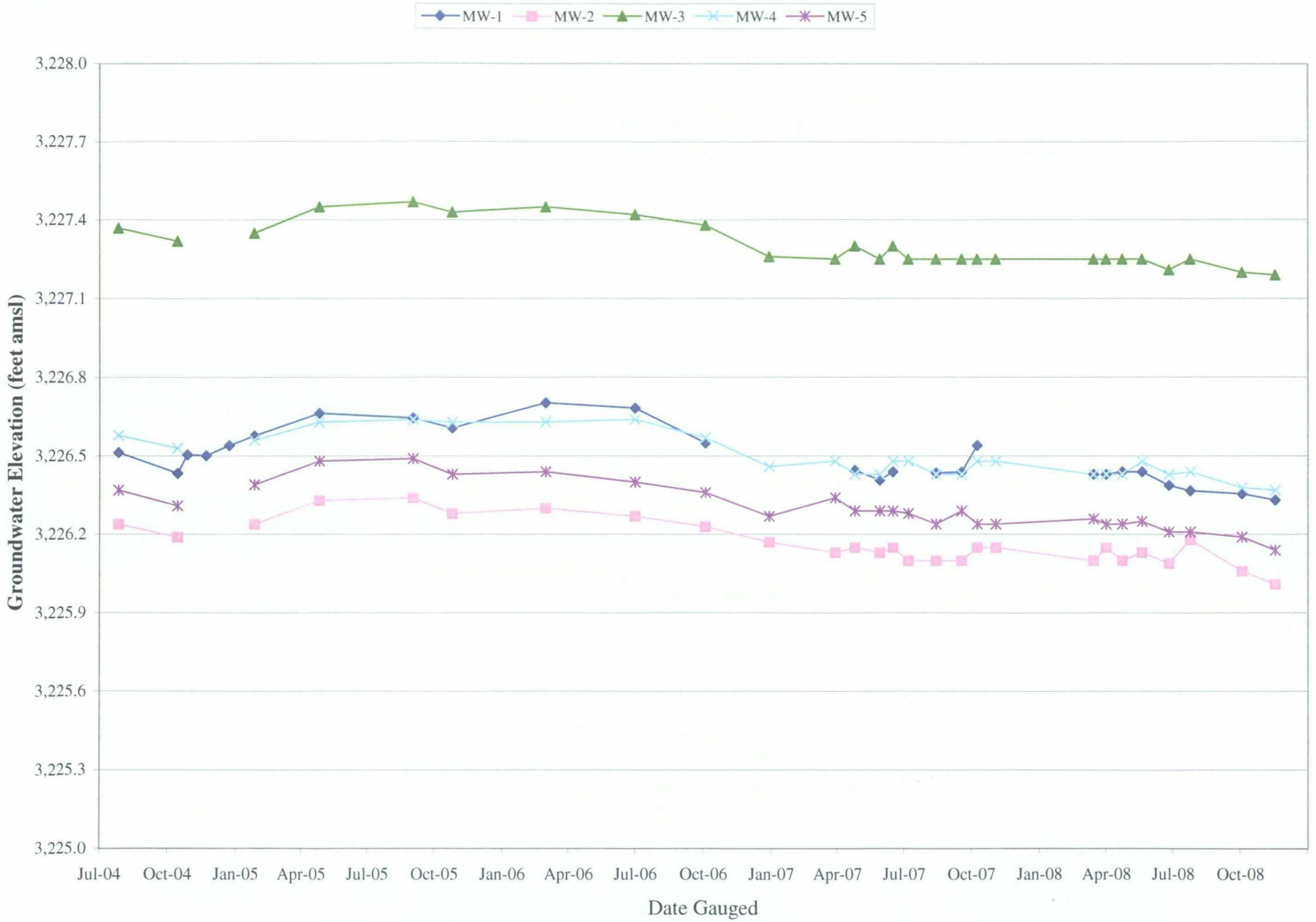
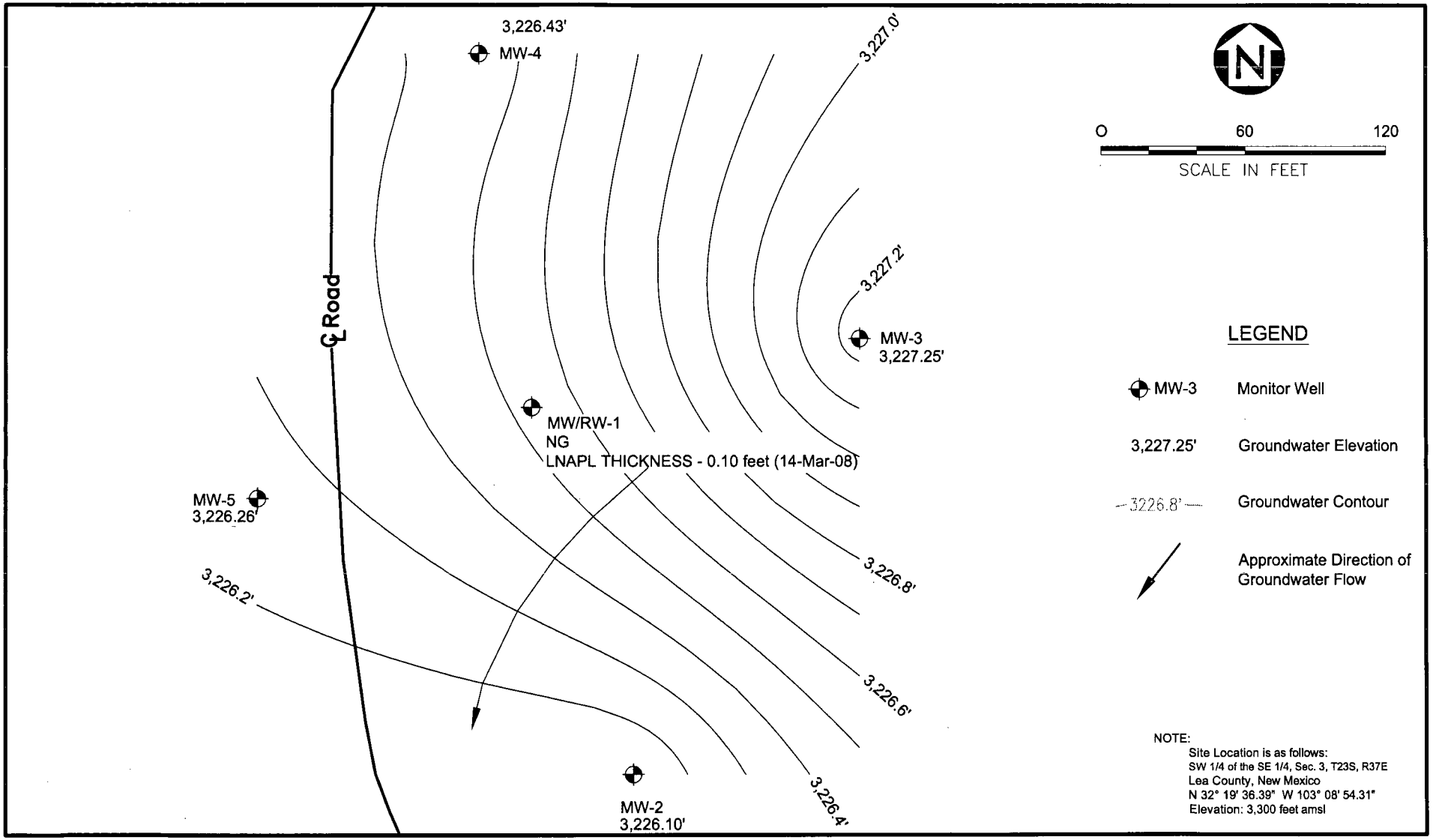


Figure 4: Hydrograph for Groundwater Monitoring Wells MW-1 through MW-5, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-07.



GROUNDWATER ELEVATION CONTOUR MAP

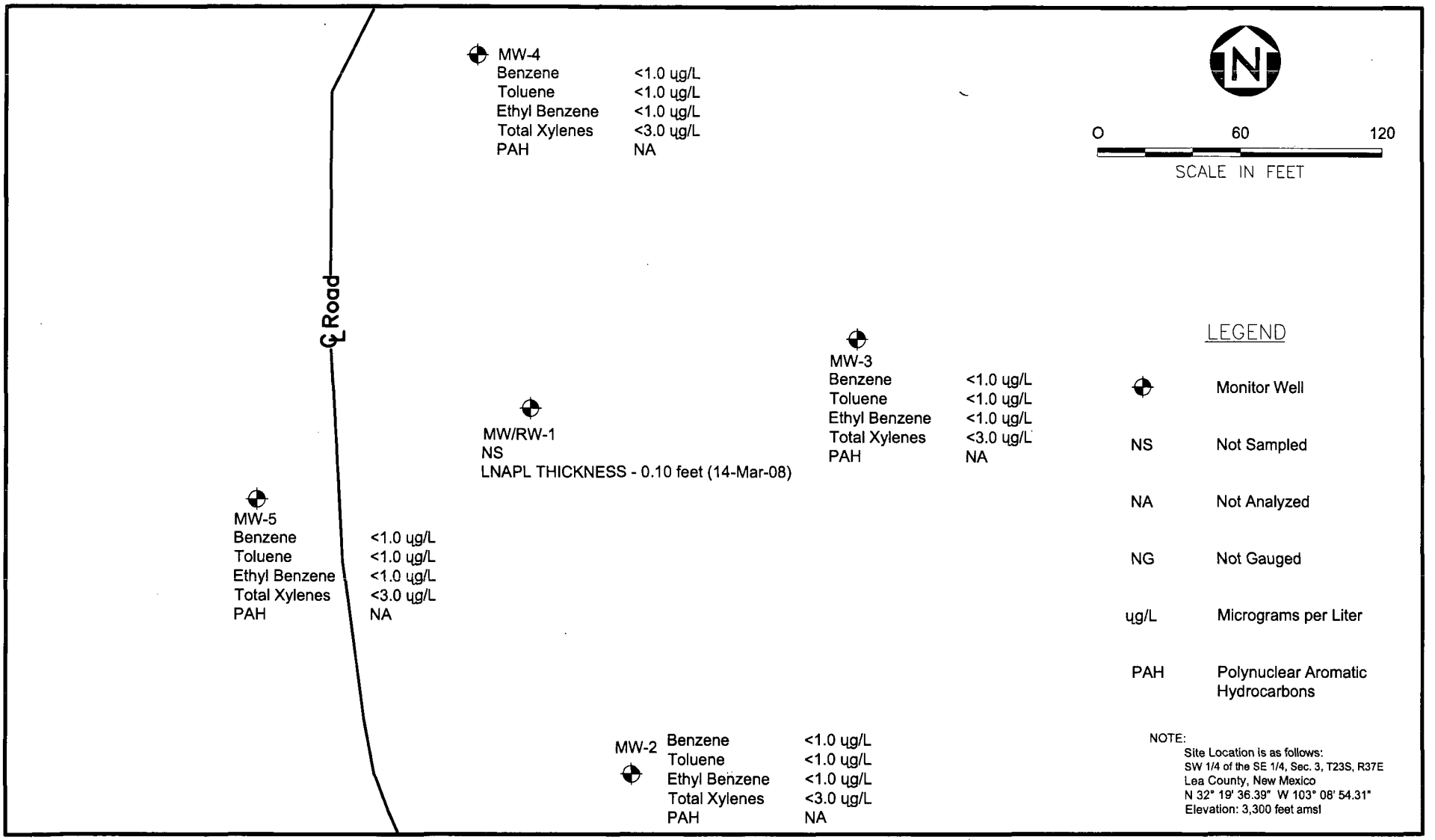
KENNAN PENROSE "A"

14 MARCH 2008

URS

Figure 5

P/SHELL/JOB SITES/NEW MEXICO SITES/300108(KENNAN-PENROSE A- LEA WINK ALT)/FIGURES/2008-03-14 GW.DWG



GROUNDWATER BTEX AND PAH ANALYTICAL RESULTS

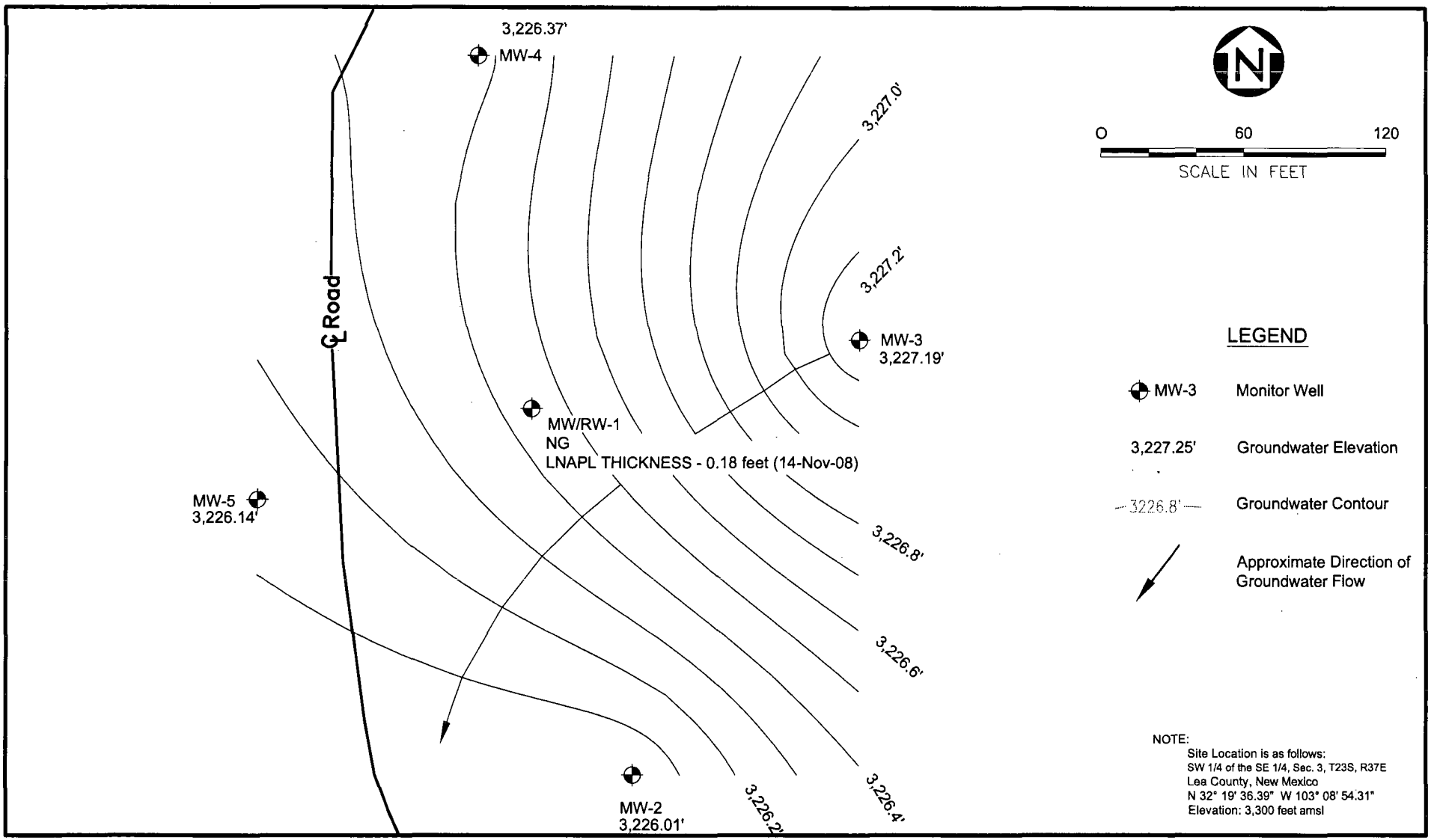
KENNAN PENROSE "A"

14 MARCH 2008

URS

Figure 6

P/SHELL/JOB SITES/NEW MEXICO SITES/300108(KENNAN-PENROSE A- LEA WINK ALT)/FIGURES/2008-03-14 Analytical.dwg



GROUNDWATER ELEVATION CONTOUR MAP

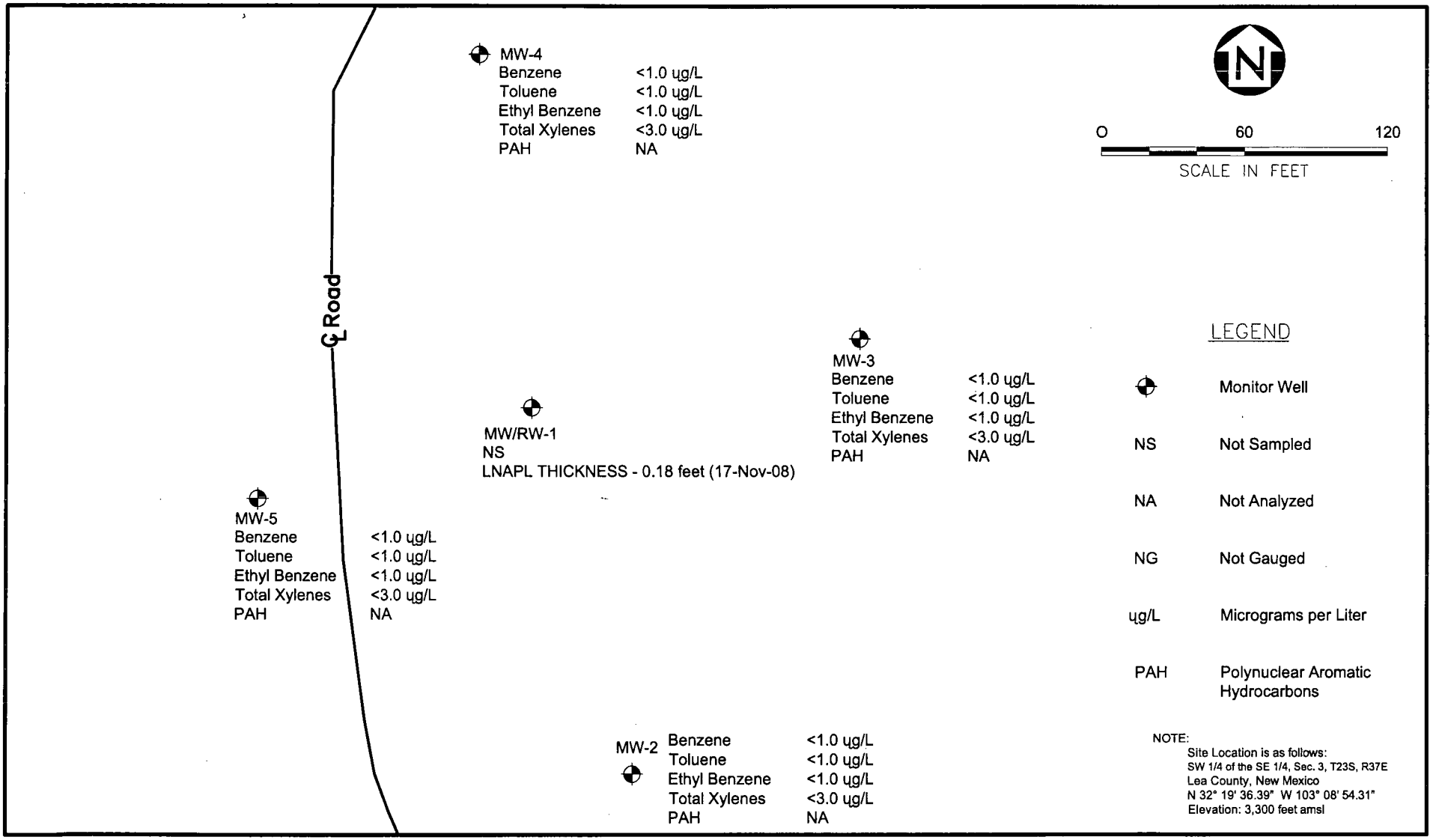
KENNAN PENROSE "A"

17 NOVEMBER 2008

URS

Figure 7

P/SHELL/JOB SITES/NEW MEXICO SITES/300108(KENNAN-PENROSE A- LEA WINK ALT)/FIGURES/2008-11-17 GW.DWG



GROUNDWATER BTEX AND PAH ANALYTICAL RESULTS

KENNAN PENROSE "A"

17 NOVEMBER 2008

URS

Figure 8

P/SHELL/JOB SITES/NEW MEXICO SITES/300108(KENNAN-PENROSE A- LEA WINK ALT)/FIGURES/2008-11-17 Analytical.dwg

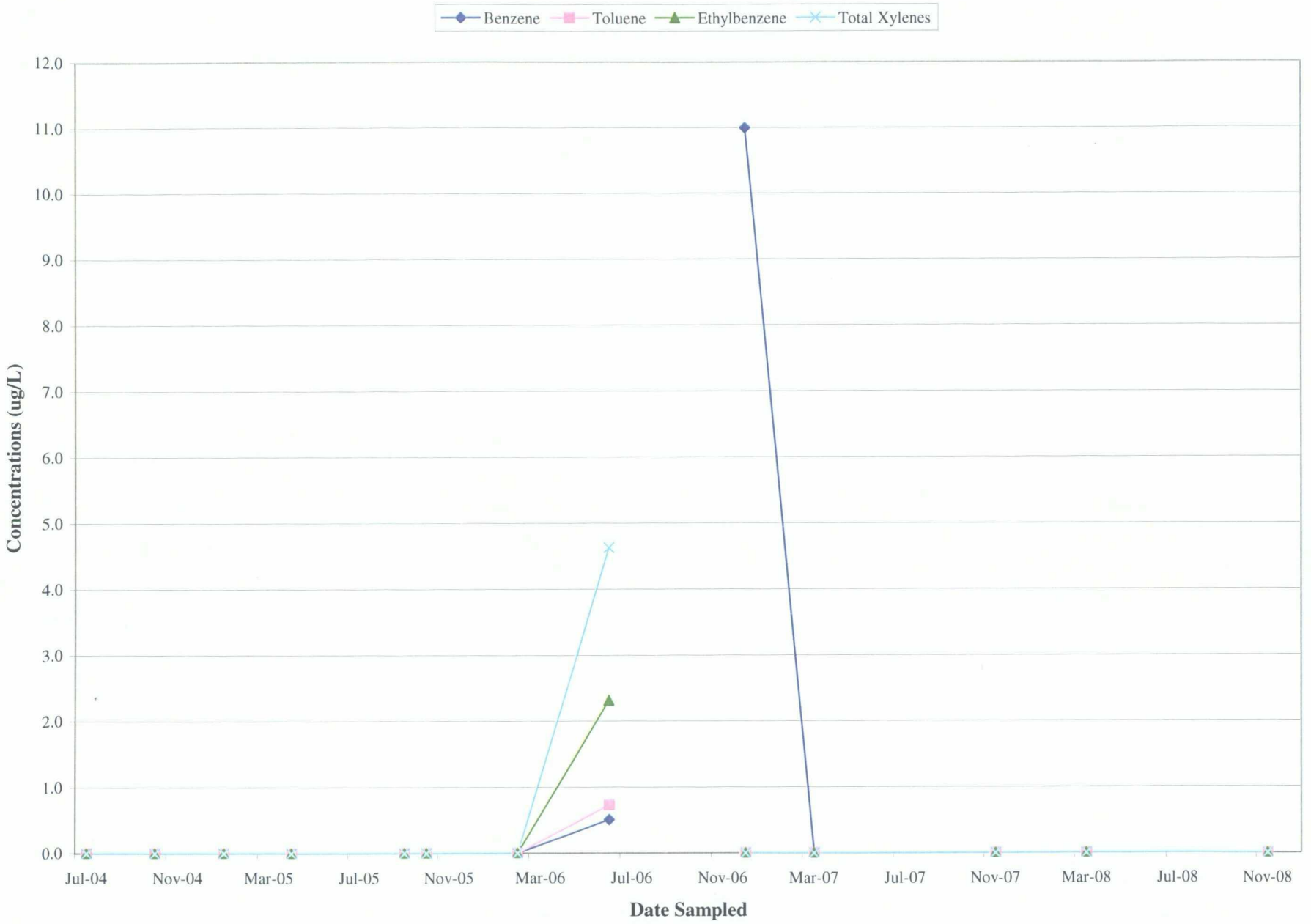


Figure 9: BTEX Concentrations for Groundwater Monitoring Well MW-2, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-08.

Non-detectable concentrations are illustrated as zero concentrations.

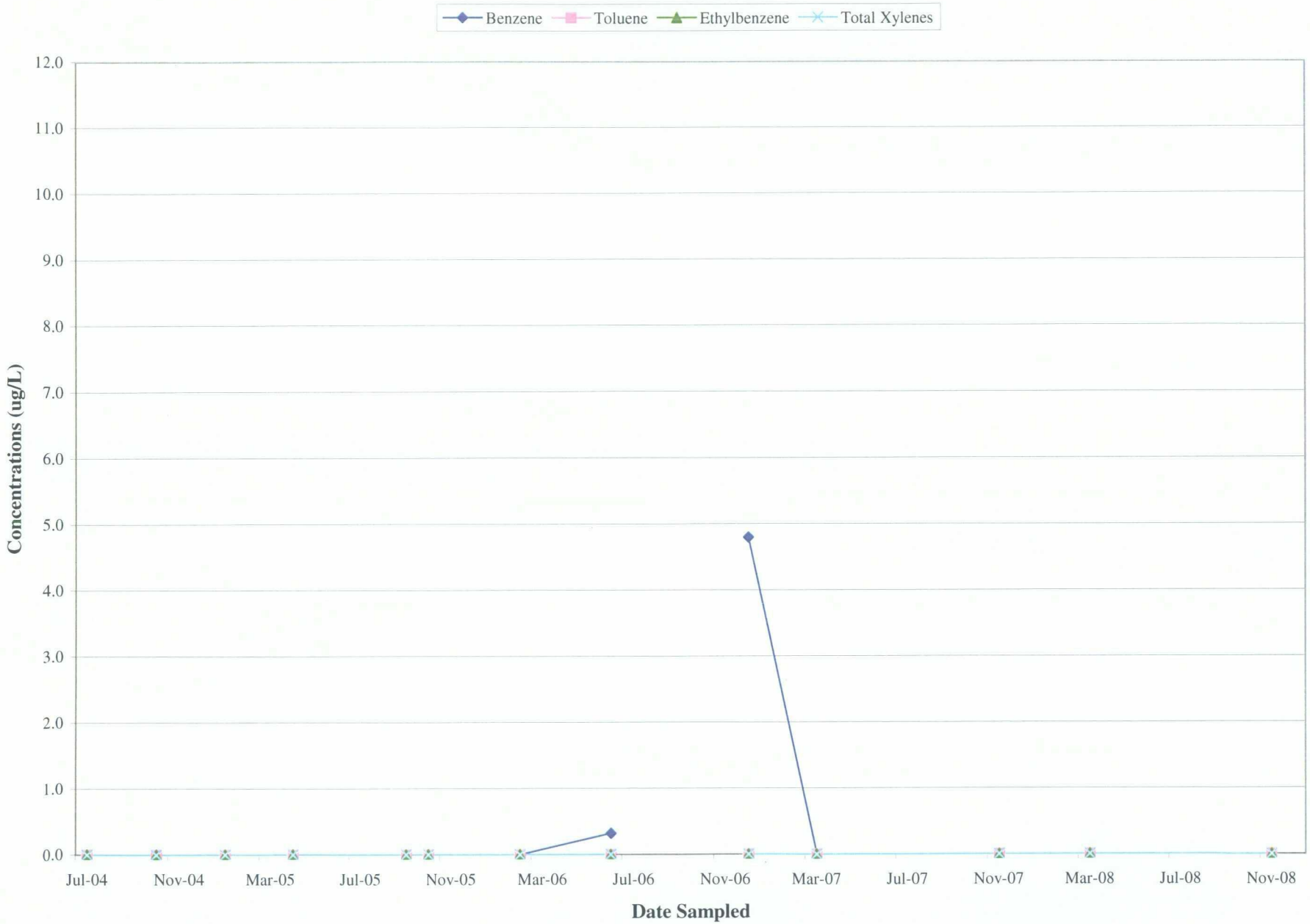


Figure 10: BTEX Concentrations for Groundwater Monitoring Well MW-3, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-08.

Non-detectable concentrations are illustrated as zero concentrations.

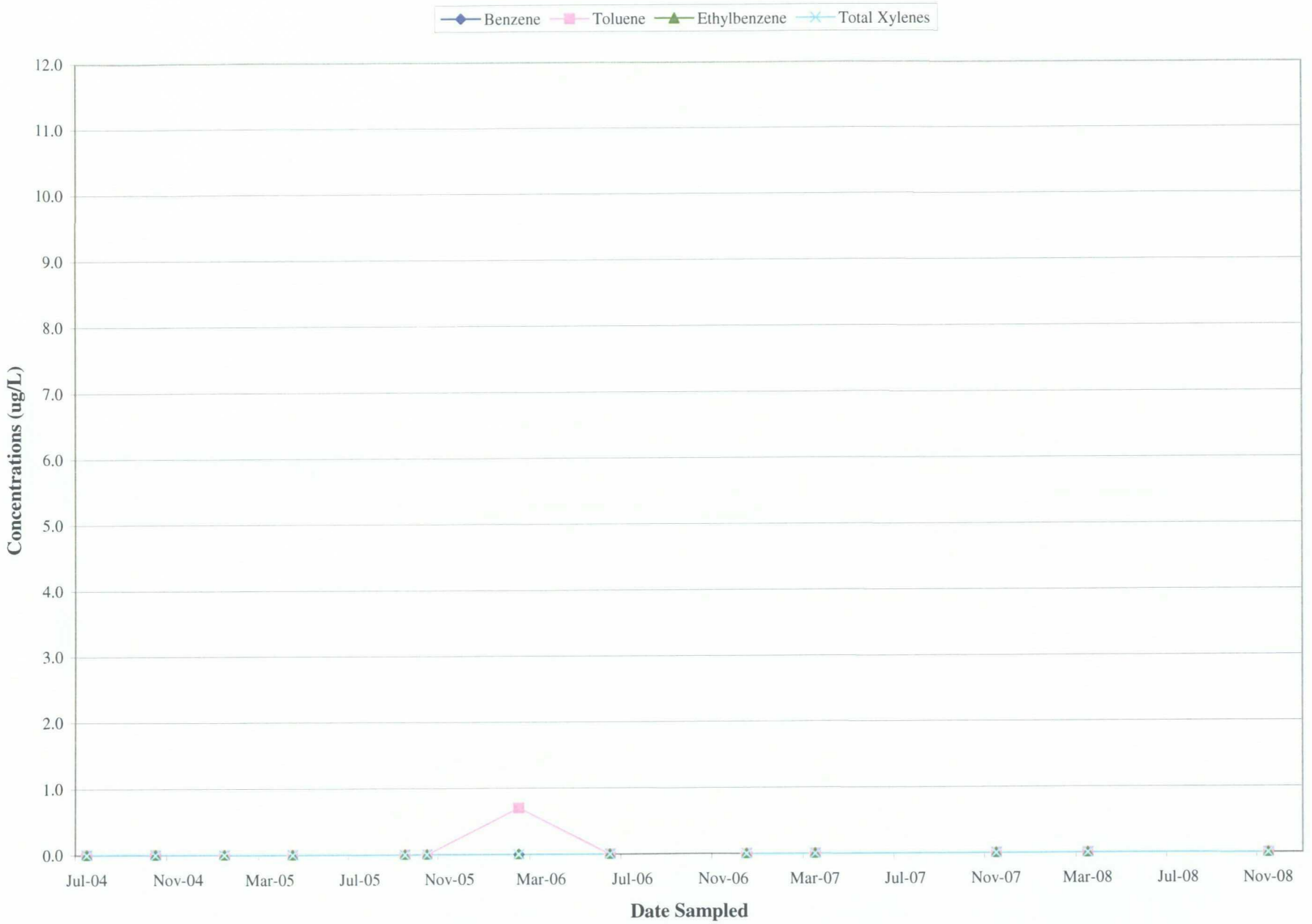


Figure 11: BTEX Concentrations for Groundwater Monitoring Well MW-4, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-08.

Non-detectable concentrations are illustrated as zero concentrations.

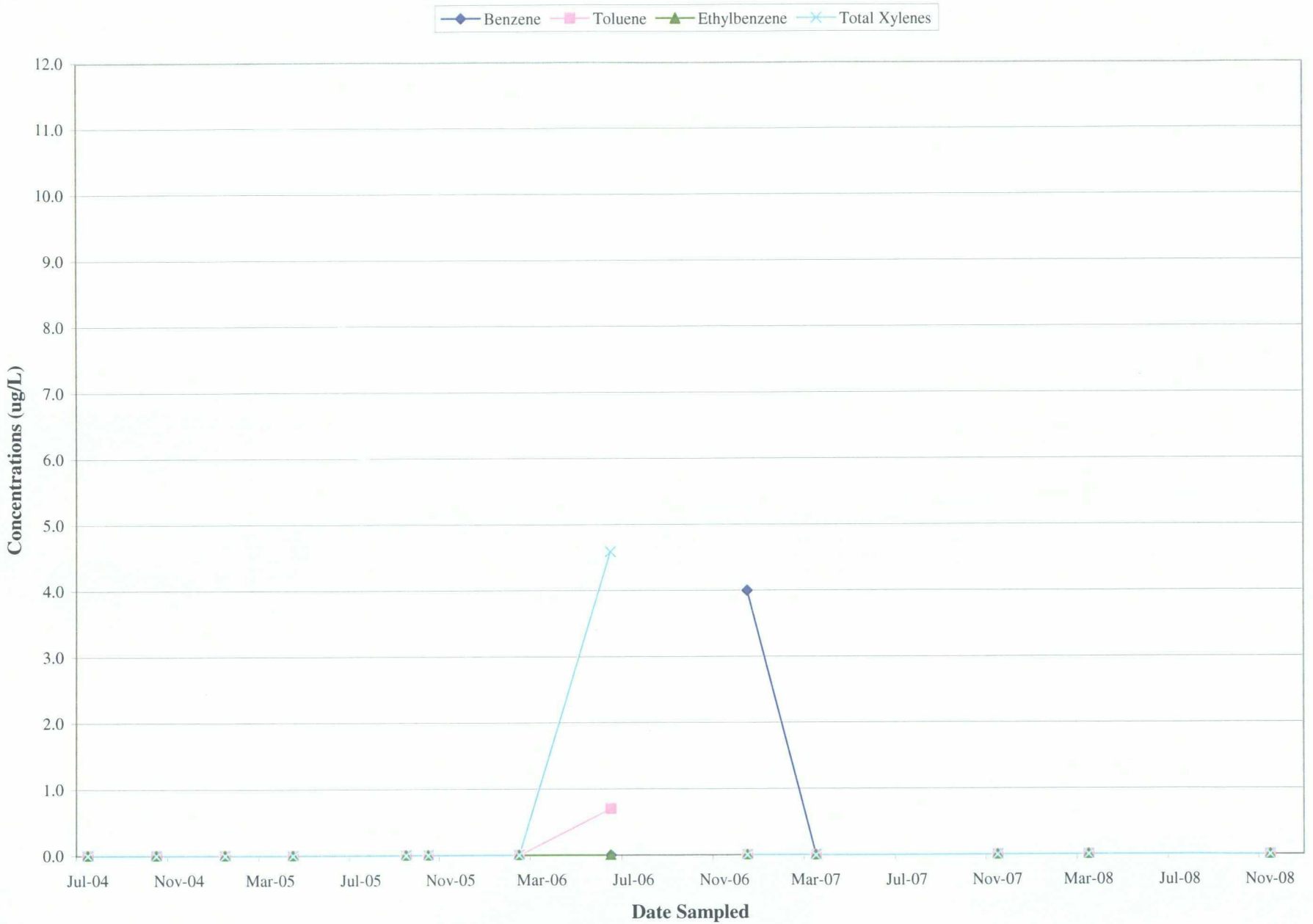


Figure 12: BTEX Concentrations for Groundwater Monitoring Well MW-5, Shell Oil Products US Kennan Penrose "A" Lease, Lea County, New Mexico, from 07-26-04 through 12-31-08.

Non-detectable concentrations are illustrated as zero concentrations.

TABLE 1

Well Data

URS - Kennan Penrose A (EPI Ref. #350001)

Well Number	Diversion[A]	Owner	Use	Twsp	Rng	Sec q q q	Latitude	Longitude	Date Measured	Surface Elevation[B]	Depth to Water (ft bgs)
CP 00762	0	TEXACO	PRO	23S	37E	09 1 1	N32° 19' 20.79"	W103° 10' 33.43"	09-May-91	3,319	100
CP 00561	3	DELLA M. FERGUSON	STK	22S	37E	34 3 3 3	N32° 20' 27.50"	W103° 09' 31.85"	29-Dec-76	3,325	60
USGS #1				23S	37E	2 1 3 3			18-Dec-70	3,299	71.18R
USGS #2				23S	37E	2 4 2 2			29-Feb-96	3,300	63.09
USGS #3				23S	37E	2 1 3 3			19-Mar-81	3,298	64.34
USGS #4				23S	37E	3 4 2 1			16-Jan-76	3,296	70.56
USGS #5				23S	37E	3 1 2 4			21-Feb-96	3,305	69.85
USGS #6				23S	37E	3 3 2 3			19-Mar-81	3,297	107.85
USGS #7				23S	37E	3 3 4 1			27-Oct-65	3,297	66.20
USGS #8				23S	37E	3 3 4 2			16-May-91	3,297	70.52
USGS #9				23S	37E	4 2 1 1			20-Mar-86	3,340	78.90
USGS #10				23S	37E	4 1 1 4			19-Mar-86	3,340	83.25
USGS #11				23S	37E	10 4 2 1			21-Feb-96	3,291	65.93
USGS #12				23S	37E	10 4 2 2			21-Mar-86	3,291	68.74
USGS #13				23S	37E	11 1 1 1			21-Feb-96	3,298	68.55
USGS #14				22S	37E	33 2 2 3			14-Feb-96		72.97
USGS #15				22S	37E	34 4 1 1			19-Mar-81		51.01
USGS #16				22S	37E	34 1 2 1			26-Apr-91		48.47
USGS #17				22S	37E	35 1 4 4			05-Mar-86		54.49
USGS #18				22S	37E	35 1 4 2			19-Mar-81		57.43
USGS #19				22S	37E	35 2 3 2			25-Apr-91		48.28

* = Data obtained from the New Mexico Office of the State Engineer Website (http://iwaters.ose.state.nm.us:7001/iWATERS/wr_RegisServlet1) and USGS Database.

[A] = in acre feet per annum

[B] = Elevation interpolated from USGS topographical map based on referenced location.

PRO = 72-12-1 Prospecting or development of natural resource

STK = 72-12-1 Livestock watering

quarters are 1=NW, 2=NE, 3=SW, 4=SE; quarters are biggest to smallest

Shaded area indicates wells not shown in Figure 2

Well information data provided by EPI Consultants in December 2006

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	26-Jul-04	2	69.94	72.90	3,226.51	2.96	0.50	0.50	Hand Bail
3,296.75	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		NOT GAUGED				NR[4]		Skimmer Pump
	24-Apr-07		70.20	71.25	3,226.45	1.05	NR[4]		Skimmer Pump
	28-May-07		70.33	70.45	3,226.41	0.12	2.68	22.01	Skimmer Pump
	15-Jun-07		70.30	70.40	3,226.44	0.10	1.03	23.05	Skimmer Pump
	06-Jul-07		NOT GAUGED - Bird Nest in Vault Cap				0.41	23.46	Skimmer Pump
	13-Aug-07		70.30	70.45	3,226.44	0.15	5.16	28.62	Skimmer Pump
	17-Sep-07		70.30	70.41	3,226.44	0.11	2.06	30.68	Skimmer Pump
	08-Oct-07		70.20	70.30	3,226.54	0.10	1.03	31.71	Skimmer Pump
	02-Nov-07		NOT GAUGED				0.62	32.33	Skimmer Pump
	14-Mar-08		70.31	70.41	3,226.43	0.10	2.06	34.40	Skimmer Pump
	31-Mar-08		70.30	70.50	3,226.43	0.20	1.03	35.43	Skimmer Pump
	22-Apr-08		70.30	70.40	3,226.44	0.10	0.62	36.05	Skimmer Pump
	19-May-08		70.30	70.40	3,226.44	0.10	0.00	36.05	Skimmer Pump
	25-Jun-08		70.36	70.38	3,226.39	0.02	0.41	36.46	Skimmer Pump
	24-Jul-08		70.38	70.41	3,226.37	0.03	1.03	37.49	Skimmer Pump
	03-Oct-08		70.38	70.52	3,226.36	0.14	-0.83	36.67	Skimmer Pump
	17-Nov-08		70.40	70.58	3,226.33	0.18	0.00	36.67	Skimmer Pump
MW-2	26-Jul-04	4	---	73.01	3,226.24	0.00	---	---	---
3,299.25	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		---	73.12	3,226.13	0.00	---	---	---
	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	---	---	---

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-2	06-Jul-07	4	---	73.15	3,226.10	0.00	---	---	---
(cont.)	13-Aug-07		---	73.15	3,226.10	0.00	---	---	---
3,299.25	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	---	---	---
	14-Mar-08		---	73.15	3,226.10	0.00	---	---	---
	31-Mar-08		---	73.10	3,226.15	0.00	---	---	---
	22-Apr-08		---	73.15	3,226.10	0.00	---	---	---
	19-May-08		---	73.12	3,226.13	0.00	---	---	---
	25-Jun-08		---	73.16	3,226.09	0.00	---	---	---
	24-Jul-08		---	73.07	3,226.18	0.00	---	---	---
	03-Oct-08		---	73.19	3,226.06	0.00	---	---	---
	17-Nov-08		---	73.24	3,226.01	0.00	---	---	---
MW-3	26-Jul-04	4	---	71.88	3,227.37	0.00	---	---	---
3,299.25	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		---	72.00	3,227.25	0.00	---	---	---
	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	---	---	---
	14-Mar-08		---	72.00	3,227.25	0.00	---	---	---
	31-Mar-08		---	72.00	3,227.25	0.00	---	---	---
	22-Apr-08		---	72.00	3,227.25	0.00	---	---	---
	19-May-08		---	72.00	3,227.25	0.00	---	---	---
	25-Jun-08		---	72.04	3,227.21	0.00	---	---	---
	24-Jul-08		---	72.00	3,227.25	0.00	---	---	---
	03-Oct-08		---	72.05	3,227.20	0.00	---	---	---
	17-Nov-08		---	72.06	3,227.19	0.00	---	---	---
MW-4	26-Jul-04	4	---	70.85	3,226.58	0.00	---	---	---
3,297.43	14-Oct-04		---	70.90	3,226.53	0.00	---	---	---
	27-Oct-04		NOT GAUGED						
	21-Nov-04		NOT GAUGED						

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-4	22-Dec-04	4	NOT GAUGED						
(cont.)	25-Jan-05		---	70.87	3,226.56	0.00	---	---	---
3,297.43	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		---	70.95	3,226.48	0.00	---	---	---
	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	---	---	---
	14-Mar-08		---	71.00	3,226.43	0.00	---	---	---
	31-Mar-08		---	71.00	3,226.43	0.00	---	---	---
	22-Apr-08		---	71.00	3,226.43	0.00	---	---	---
	19-May-08		---	70.95	3,226.48	0.00	---	---	---
	01-Jun-08		---	71.00	3,226.43	0.00	---	---	---
	24-Jul-09		---	70.99	3,226.44	0.00	---	---	---
	03-Oct-08		---	71.05	3,226.38	0.00	---	---	---
	17-Nov-08		---	71.06	3,226.37	0.00	---	---	---
MW-5	26-Jul-04	4	---	72.97	3,226.37	0.00	---	---	---
3,299.34	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		---	73.00	3,226.34	0.00	---	---	---
	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	---	---	---

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	02-Nov-07		---	73.10	3,226.24	0.00	---	---	---
(cont.)	14-Mar-08		---	73.08	3,226.26	0.00	---	---	---
3,299.34	31-Mar-08		---	73.10	3,226.24	0.00	---	---	---
	22-Apr-08		---	73.10	3,226.24	0.00	---	---	---
	19-May-08		---	73.09	3,226.25	0.00	---	---	---
	25-Jun-08		---	73.13	3,226.21	0.00	---	---	---
	24-Jul-08		---	73.13	3,226.21	0.00	---	---	---
	03-Oct-08		---	73.15	3,226.19	0.00	---	---	---
	17-Nov-08		---	73.20	3,226.14	0.00	---	---	---
							Total Recovered LNAPL is	32.33	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
6. Shaded cells include data for reporting period.

TABLE 3

SUMMARY OF GROUNDWATER 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 Present				
	14-Oct-04	LNAPL Present				
	25-Jan-05	LNAPL Present				
	25-Apr-05	LNAPL Present				
	01-Sep-05	LNAPL Present				
	25-Oct-05	LNAPL Present				
	28-Feb-06	LNAPL Present				
	30-Jun-06	LNAPL Present				
	03-Oct-06	LNAPL Present				
	28-Dec-06	LNAPL Present				
	28-Mar-07	LNAPL Present				
	02-Nov-07	LNAPL Present				
	14-Mar-08	LNAPL Present				
	17-Nov-08	LNAPL Present				
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
	14-Mar-08	<1.0	<1.0	<1.0	<3.0	<6.0
	17-Nov-08	<1.0	<1.0	<1.0	<3.0	<6.0
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 GROUNDWATER 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
	14-Mar-08	<1.0	<1.0	<1.0	<3.0	<6.0
	17-Nov-08	<1.0	<1.0	<1.0	<3.0	<6.0
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
	14-Mar-08	<1.0	<1.0	<1.0	<3.0	<6.0
	17-Nov-08	<1.0	<1.0	<1.0	<3.0	<6.0
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				5.300
	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
	14-Mar-08	<1.0	<1.0	<1.0	<3.0	<6.0
	17-Nov-08	<1.0	<1.0	<1.0	<3.0	<6.0

Notes:

1. New Mexico Water Quality Control Commission Standard 3103.A,B.
2. BTEX analysis by EPA Method 8021B.
3. LNAPL - Light non-aqeous phase liquids.
4. Data prior to Jan 06 collected by Enercon Services.
5. Shaded cells include data for reporting period.

APPENDIX A

CERTIFIED LABORATORY REPORTS

&

CHAIN-OF-CUSTODY DOCUMENTATION

Analytical Report 317908

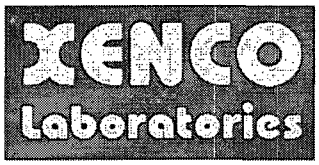
for

URS Corporation

Project Manager: Iain Olness

Kennan Penrose "A"

21-NOV-08



12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215-08B - Odessa/Midland, TX T104704400-08

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

21-NOV-08

Project Manager: **Iain Olness**
URS Corporation
7720 N. 16th St. Suite100
Phoenix, AZ 85020

Reference: XENCO Report No: **317908**
Kennan Penrose "A"
Project Address:

Iain Olness:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 317908. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 317908 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 317908

URS Corporation, Phoenix, AZ

Kennan Penrose "A"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	Nov-17-08 08:45		317908-001
MW-3	W	Nov-17-08 09:17		317908-002
MW-4	W	Nov-17-08 09:54		317908-003
MW-5	W	Nov-17-08 08:06		317908-004
Trip Blank	W	Nov-17-08 00:00		317908-005

Certificate of Analysis Summary 317908
URS Corporation, Phoenix, AZ

Project Name: Kennan Penrose "A"

Project Id:
Contact: Iain Olness
Project Location:

Date Received in Lab: Nov-17-08 01:27 pm
Report Date: 21-NOV-08
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	317908-001		317908-002		317908-003		317908-004	
	Field Id:	MW-2		MW-3		MW-4		MW-5	
	Depth:								
	Matrix:	WATER		WATER		WATER		WATER	
	Sampled:	Nov-17-08 08:45		Nov-17-08 09:17		Nov-17-08 09:54		Nov-17-08 08:06	
BTEX by SW 8260B	*Extracted:*	Nov-20-08 11:10		Nov-20-08 11:15		Nov-20-08 11:20		Nov-20-08 11:25	
	Analyzed:	Nov-20-08 17:19		Nov-20-08 17:37		Nov-20-08 17:55		Nov-20-08 18:13	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND	0.0030	ND	0.0030	ND	0.0030	ND	0.0030
Total BTEX		ND	0.0060	ND	0.0060	ND	0.0060	ND	0.0060

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 317908
URS Corporation, Phoenix, AZ

Project Name: Kennan Penrose "A"

Project Id:
Contact: Iain Olness
Project Location:

Date Received in Lab: Nov-17-08 01:27 pm
Report Date: 21-NOV-08
Project Manager: Brent Barron, II

Analysis Requested						
	Lab Id:	317908-005				
	Field Id:	Trip Blank				
	Depth:					
	Matrix:	WATER				
	Sampled:	Nov-17-08 00:00				
BTEX by SW 8260B	***Extracted:***	Nov-20-08 11:30				
	Analyzed:	Nov-20-08 18:31				
	Units/RL:	mg/L	RL			
Benzene		ND	0.0010			
Toluene		ND	0.0010			
Ethylbenzene		ND	0.0010			
m,p-Xylene		ND	0.0020			
o-Xylene		ND	0.0010			
Total Xylenes		ND	0.0030			
Total BTEX		ND	*0.0060*			

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL and above the SQL.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

Form 2 - Surrogate Recoveries

Project Name: Kennan Penrose "A"

Work Orders : 317908,

Project ID:

Lab Batch #: 741037 **Sample:** 317672-005 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0497	0.0500	99	70-130	
Dibromofluoromethane	0.0504	0.0500	101	70-130	
1,2-Dichloroethane-D4	0.0518	0.0500	104	70-130	
Toluene-D8	0.0486	0.0500	97	70-130	

Lab Batch #: 741037 **Sample:** 317672-005 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0495	0.0500	99	70-130	
Dibromofluoromethane	0.0483	0.0500	97	70-130	
1,2-Dichloroethane-D4	0.0499	0.0500	100	70-130	
Toluene-D8	0.0484	0.0500	97	70-130	

Lab Batch #: 741037 **Sample:** 317908-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0519	0.0500	104	70-130	
Dibromofluoromethane	0.0512	0.0500	102	70-130	
1,2-Dichloroethane-D4	0.0502	0.0500	100	70-130	
Toluene-D8	0.0495	0.0500	99	70-130	

Lab Batch #: 741037 **Sample:** 317908-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0515	0.0500	103	70-130	
Dibromofluoromethane	0.0497	0.0500	99	70-130	
1,2-Dichloroethane-D4	0.0495	0.0500	99	70-130	
Toluene-D8	0.0499	0.0500	100	70-130	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Kennan Penrose "A"

Work Orders : 317908,

Project ID:

Lab Batch #: 741037 **Sample:** 317908-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0518	0.0500	104	70-130	
Dibromofluoromethane	0.0491	0.0500	98	70-130	
1,2-Dichloroethane-D4	0.0472	0.0500	94	70-130	
Toluene-D8	0.0510	0.0500	102	70-130	

Lab Batch #: 741037 **Sample:** 317908-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0512	0.0500	102	70-130	
Dibromofluoromethane	0.0487	0.0500	97	70-130	
1,2-Dichloroethane-D4	0.0468	0.0500	94	70-130	
Toluene-D8	0.0506	0.0500	101	70-130	

Lab Batch #: 741037 **Sample:** 317908-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0518	0.0500	104	70-130	
Dibromofluoromethane	0.0487	0.0500	97	70-130	
1,2-Dichloroethane-D4	0.0473	0.0500	95	70-130	
Toluene-D8	0.0506	0.0500	101	70-130	

Lab Batch #: 741037 **Sample:** 519723-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0498	0.0500	100	70-130	
Dibromofluoromethane	0.0518	0.0500	104	70-130	
1,2-Dichloroethane-D4	0.0527	0.0500	105	70-130	
Toluene-D8	0.0475	0.0500	95	70-130	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Kennan Penrose "A"

Work Orders : 317908,

Project ID:

Lab Batch #: 741037 **Sample:** 519723-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0505	0.0500	101	70-130	
Dibromofluoromethane	0.0530	0.0500	106	70-130	
1,2-Dichloroethane-D4	0.0531	0.0500	106	70-130	
Toluene-D8	0.0488	0.0500	98	70-130	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Kennan Penrose "A"

Work Order #: 317908 **Project ID:**

Lab Batch #: 741037 **Sample:** 519723-1-BKS **Matrix:** Water

Date Analyzed: 11/20/2008 **Date Prepared:** 11/20/2008 **Analyst:** JEA

Reporting Units: mg/L **Batch #:** 1

BTEX by SW 8260B Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
		BLANK /BLANK SPIKE RECOVERY STUDY				
Benzene	ND	0.1000	0.0815	82	66-142	
Toluene	ND	0.1000	0.0833	83	59-139	
Ethylbenzene	ND	0.1000	0.0864	86	75-125	
m,p-Xylene	ND	0.2000	0.1772	89	75-125	
o-Xylene	ND	0.1000	0.0950	95	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS / MSD Recoveries

Project Name: Kennan Penrose "A"

Work Order # : 317908 **Project ID:**

Lab Batch ID: 741037 **QC- Sample ID:** 317672-005 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 11/20/2008 **Date Prepared:** 11/20/2008 **Analyst:** JEA

Reporting Units: mg/L

BTEX by SW 8260B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.0807	81	0.1000	0.0798	80	1	66-142	20	
Toluene	ND	0.1000	0.0840	84	0.1000	0.0846	85	1	59-139	20	
Ethylbenzene	ND	0.1000	0.0872	87	0.1000	0.0873	87	0	75-125	20	
m,p-Xylene	ND	0.2000	0.1786	89	0.2000	0.1815	91	2	75-125	20	
o-Xylene	ND	0.1000	0.0934	93	0.1000	0.0930	93	0	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*|(C-F)/(C+F)|

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- [x] XENCO (_____)
- [ ] CALSCIENCE (_____)
- [ ] TEST AMERICA (_____)
- [ ] SPL (_____)
- [ ] OTHER (_____)

Please Check Appropriate Box:
- [ ] ENV. SERVICES
- [ ] MOTIVA RETAIL
- [ ] SHELL RETAIL
- [ ] MOTIVA SD&DM
- [ ] CONSULTANT
- [ ] LUBES
- [x] SHELL PIPELINE
- [ ] OTHER

Print Bill To Contact Name: Kenneth Springer

INCIDENT # (ENV SERVICES): 3 0 0 1 0 8 — [ ] CHECK IF NO INCIDENT # APPLIES

DATE: 11/17/08

PO #:

SAP #: 7 1 0 5 3 3 5

PAGE: 1 of 1

CONSULTANT COMPANY: URS Corporation

ADDRESS: 7720 N. 16th Street, Suite 100

CITY: Phoenix, AZ 85020

TELEPHONE: (602) 648-2402 | FAX: (602) 371-1615 | E-MAIL: iain.olness@urscorp.com

SITE ADDRESS (Street, City and State): Kennan Penrose "A"

CONSULTANT PROJECT CONTACT (Report to): Iain Olness

CONSULTANT PROJECT NO.:

SAMPLER NAME(S) PRINT: John Savoie

LAB USE ONLY: 317908

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (14 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

DELIVERABLES:
- [ ] LEVEL 1
- [x] LEVEL 2
- [ ] LEVEL 3
- [ ] LEVEL 4
- [ ] OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C°: Cooler #1 4.0 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES: w/labels no seals

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	BTEX 8260	Container PID Readings or Laboratory Notes
01	MW-2	11/17/08	845	WATER	X					3	X	
02	MW-3	11/17/08	917	WATER	X					3	X	
03	MW-4	11/17/08	954	WATER	X					3	X	
04	MW-5	11/17/08	808	WATER	X					3	X	
05	TRIP BLANK	8/21/08	1700	WATER	X					3	X	

Relinquished by: (Signature)		Date: 11-17-08	Time: 1327
Relinquished by: (Signature)	Received by: (Signature) Andrea Lam	Date: 11-17-08	Time: 1327
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

05/2/06 Revision

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: URS

Date/ Time: 11.17.08

Lab ID # : 317908

Initials: CL

Sample Receipt Checklist

					Client Initials
	Temperature of container/ cooler?	Yes	No	4.0 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	Not Applicable	
#20	VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event

Analytical Report 299644

for

URS Corporation

Project Manager: Kenneth Springer

Kennan Penrose "A"

25-MAR-08

12600 West I-20 East Odessa, Texas 79765

Texas certification numbers:
Houston, TX T104704215

Florida certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675
Norcross(Atlanta), GA E87429

South Carolina certification numbers:
Norcross(Atlanta), GA 98015

North Carolina certification numbers:
Norcross(Atlanta), GA 483

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America
Midland - Corpus Christi - Atlanta

25-MAR-08

Project Manager: **Kenneth Springer**
URS Corporation
7720 N. 16th St. Suite100
Phoenix, AZ 85020

Reference: XENCO Report No: **299644**
Kennan Penrose "A"
Project Address:

Kenneth Springer:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 299644. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 299644 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Brent Barron, II
Odessa Laboratory Manager

Sample Cross Reference 299644

URS Corporation, Phoenix, AZ

Kennan Penrose "A"

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
MW-2	W	Mar-14-08 08:49		299644-001
MW-3	W	Mar-14-08 08:00		299644-002
MW-4	W	Mar-14-08 07:18		299644-003
MW-5	W	Mar-14-08 09:31		299644-004
Trip Blank	W	Mar-14-08 00:00		299644-005

Certificate of Analysis Summary 299644
URS Corporation, Phoenix, AZ

Project Name: Kennan Penrose "A"

Project Id:
Contact: Kenneth Springer
Project Location:

Date Received in Lab: Mar-14-08 01:13 pm
Report Date: 25-MAR-08
Project Manager: Brent Barron, II

Analysis Requested	*Lab Id:*	299644-001		299644-002		299644-003		299644-004	
	Field Id:	MW-2		MW-3		MW-4		MW-5	
	Depth:								
	Matrix:	WATER		WATER		WATER		WATER	
	Sampled:	Mar-14-08 08:49		Mar-14-08 08:00		Mar-14-08 07:18		Mar-14-08 09:31	
BTEX by SW 8260B	*Extracted:*	Mar-19-08 16:18		Mar-20-08 15:36		Mar-20-08 15:38		Mar-20-08 15:40	
	Analyzed:	Mar-19-08 21:31		Mar-20-08 19:06		Mar-20-08 19:28		Mar-20-08 19:49	
	Units/RL:	mg/L	RL	mg/L	RL	mg/L	RL	mg/L	RL
Benzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Toluene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Ethylbenzene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
m,p-Xylene		ND	0.0020	ND	0.0020	ND	0.0020	ND	0.0020
o-Xylene		ND	0.0010	ND	0.0010	ND	0.0010	ND	0.0010
Total Xylenes		ND		ND		ND		ND	
Total BTEX		ND		ND		ND		ND	

Brent Barron
Odessa Laboratory Director

Certificate of Analysis Summary 299644
URS Corporation, Phoenix, AZ

Project Name: Kennan Penrose "A"

Project Id:
Contact: Kenneth Springer
Project Location:

Date Received in Lab: Mar-14-08 01:13 pm
Report Date: 25-MAR-08
Project Manager: Brent Barron, II

Analysis Requested						
	Lab Id:	299644-005				
	Field Id:	Trip Blank				
	Depth:					
	Matrix:	WATER				
	Sampled:	Mar-14-08 00:00				
BTEX by SW 8260B	*Extracted:*	Mar-20-08 15:42				
	Analyzed:	Mar-20-08 20:11				
	Units/RL:	mg/L	RL			
Benzene		ND	0.0010			
Toluene		0.0011	0.0010			
Ethylbenzene		ND	0.0010			
m,p-Xylene		ND	0.0020			
o-Xylene		ND	0.0010			
Total Xylenes		ND				
Total BTEX		0.0011				

Brent Barron
Odessa Laboratory Director

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the MQL(PQL) and above the SQL(MDL).

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

* Outside XENCO'S scope of NELAC Accreditation

Form 2 - Surrogate Recoveries

Project Name: Kennan Penrose "A"

Work Order #: 299644 **Project ID:**

Lab Batch #: 717831 **Sample:** 299644-002 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0477	0.0500	95	86-115	
Dibromofluoromethane	0.0561	0.0500	112	86-118	
1,2-Dichloroethane-D4	0.0601	0.0500	120	80-120	
Toluene-D8	0.0468	0.0500	94	88-110	

Lab Batch #: 717831 **Sample:** 299644-003 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0493	0.0500	99	86-115	
Dibromofluoromethane	0.0565	0.0500	113	86-118	
1,2-Dichloroethane-D4	0.0610	0.0500	122	80-120	**
Toluene-D8	0.0479	0.0500	96	88-110	

Lab Batch #: 717831 **Sample:** 299644-004 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0510	0.0500	102	86-115	
Dibromofluoromethane	0.0541	0.0500	108	86-118	
1,2-Dichloroethane-D4	0.0564	0.0500	113	80-120	
Toluene-D8	0.0470	0.0500	94	88-110	

Lab Batch #: 717831 **Sample:** 299644-005 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0476	0.0500	95	86-115	
Dibromofluoromethane	0.0552	0.0500	110	86-118	
1,2-Dichloroethane-D4	0.0599	0.0500	120	80-120	
Toluene-D8	0.0472	0.0500	94	88-110	

** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Kennan Penrose "A"

Work Order #: 299644 **Project ID:**

Lab Batch #: 717831 **Sample:** 299701-002 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0498	0.0500	100	86-115	
Dibromofluoromethane	0.0575	0.0500	115	86-118	
1,2-Dichloroethane-D4	0.0592	0.0500	118	80-120	
Toluene-D8	0.0441	0.0500	88	88-110	

Lab Batch #: 717831 **Sample:** 299701-002 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0495	0.0500	99	86-115	
Dibromofluoromethane	0.0565	0.0500	113	86-118	
1,2-Dichloroethane-D4	0.0564	0.0500	113	80-120	
Toluene-D8	0.0451	0.0500	90	88-110	

Lab Batch #: 717831 **Sample:** 506197-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0497	0.0500	99	86-115	
Dibromofluoromethane	0.0479	0.0500	96	86-118	
1,2-Dichloroethane-D4	0.0495	0.0500	99	80-120	
Toluene-D8	0.0486	0.0500	97	88-110	

Lab Batch #: 717831 **Sample:** 506197-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B	SURROGATE RECOVERY STUDY				
Analytes	Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0500	0.0500	100	86-115	
Dibromofluoromethane	0.0477	0.0500	95	86-118	
1,2-Dichloroethane-D4	0.0518	0.0500	104	80-120	
Toluene-D8	0.0496	0.0500	99	88-110	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Kennan Penrose "A"

Work Order #: 299644 **Project ID:**

Lab Batch #: 717833 **Sample:** 299219-001 S / MS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0460	0.0500	92	86-115	
Dibromofluoromethane	0.0570	0.0500	114	86-118	
1,2-Dichloroethane-D4	0.0558	0.0500	112	80-120	
Toluene-D8	0.0488	0.0500	98	88-110	

Lab Batch #: 717833 **Sample:** 299219-001 SD / MSD **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0492	0.0500	98	86-115	
Dibromofluoromethane	0.0554	0.0500	111	86-118	
1,2-Dichloroethane-D4	0.0574	0.0500	115	80-120	
Toluene-D8	0.0454	0.0500	91	88-110	

Lab Batch #: 717833 **Sample:** 299644-001 / SMP **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0501	0.0500	100	86-115	
Dibromofluoromethane	0.0583	0.0500	117	86-118	
1,2-Dichloroethane-D4	0.0592	0.0500	118	80-120	
Toluene-D8	0.0461	0.0500	92	88-110	

Lab Batch #: 717833 **Sample:** 506198-1-BKS / BKS **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0488	0.0500	98	86-115	
Dibromofluoromethane	0.0468	0.0500	94	86-118	
1,2-Dichloroethane-D4	0.0466	0.0500	93	80-120	
Toluene-D8	0.0478	0.0500	96	88-110	

** Surrogates outside limits; data and surrogates confirmed by reanalysis

*** Poor recoveries due to dilution

Surrogate Recovery [D] = 100 * A / B

All results are based on MDL and validated for QC purposes.

Form 2 - Surrogate Recoveries

Project Name: Kennan Penrose "A"

Work Order #: 299644 **Project ID:**

Lab Batch #: 717833 **Sample:** 506198-1-BLK / BLK **Batch:** 1 **Matrix:** Water

Units: mg/L

BTEX by SW 8260B Analytes	SURROGATE RECOVERY STUDY Amount Found [A]	True Amount [B]	Recovery %R [D]	Control Limits %R	Flags
4-Bromofluorobenzene	0.0488	0.0500	98	86-115	
Dibromofluoromethane	0.0484	0.0500	97	86-118	
1,2-Dichloroethane-D4	0.0492	0.0500	98	80-120	
Toluene-D8	0.0487	0.0500	97	88-110	

** Surrogates outside limits; data and surrogates confirmed by reanalysis
*** Poor recoveries due to dilution
Surrogate Recovery [D] = 100 * A / B
All results are based on MDL and validated for QC purposes.

Blank Spike Recovery

Project Name: Kennan Penrose "A"

Work Order #: 299644 **Project ID:**

Lab Batch #: 717831 **Sample:** 506197-1-BKS **Matrix:** Water

Date Analyzed: 03/20/2008 **Date Prepared:** 03/20/2008 **Analyst:** ZHO

Reporting Units: mg/L **Batch #:** 1

BTEX by SW 8260B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.1000	0.1150	115	66-142	
Toluene	ND	0.1000	0.1068	107	59-139	
Ethylbenzene	ND	0.1000	0.1118	112	75-125	
m,p-Xylene	ND	0.2000	0.2212	111	75-125	
o-Xylene	ND	0.1000	0.1096	110	75-125	

Lab Batch #: 717833 **Sample:** 506198-1-BKS **Matrix:** Water

Date Analyzed: 03/19/2008 **Date Prepared:** 03/19/2008 **Analyst:** ZHO

Reporting Units: mg/L **Batch #:** 1

BTEX by SW 8260B Analytes	Blank Result [A]	BLANK /BLANK SPIKE RECOVERY STUDY Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Benzene	ND	0.1000	0.1035	104	66-142	
Toluene	ND	0.1000	0.0942	94	59-139	
Ethylbenzene	ND	0.1000	0.1002	100	75-125	
m,p-Xylene	ND	0.2000	0.1999	100	75-125	
o-Xylene	ND	0.1000	0.0998	100	75-125	

Blank Spike Recovery [D] = 100*[C]/[B]
All results are based on MDL and validated for QC purposes.

Form 3 - MS / MSD Recoveries

Project Name: Kennan Penrose "A"

Work Order # : 299644 **Project ID:**

Lab Batch ID: 717831 **QC- Sample ID:** 299701-002 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/20/2008 **Date Prepared:** 03/20/2008 **Analyst:** ZHO

Reporting Units: mg/L

BTEX by SW 8260B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	ND	0.1000	0.1250	125	0.1000	0.0980	98	24	66-142	20	F
Toluene	ND	0.1000	0.1052	105	0.1000	0.0845	85	21	59-139	20	F
Ethylbenzene	ND	0.1000	0.1124	112	0.1000	0.0900	90	22	75-125	20	F
m,p-Xylene	ND	0.2000	0.2238	112	0.2000	0.1780	89	23	75-125	20	F
o-Xylene	ND	0.1000	0.1143	114	0.1000	0.0914	91	22	75-125	20	F

Lab Batch ID: 717833 **QC- Sample ID:** 299219-001 S **Batch #:** 1 **Matrix:** Water

Date Analyzed: 03/19/2008 **Date Prepared:** 03/19/2008 **Analyst:** ZHO

Reporting Units: mg/L

BTEX by SW 8260B Analytes	MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY										
	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Benzene	0.0639	0.1000	0.1574	94	0.1000	0.1789	115	20	66-142	20	
Toluene	0.0051	0.1000	0.0970	92	0.1000	0.1061	101	9	59-139	20	
Ethylbenzene	0.0034	0.1000	0.0973	94	0.1000	0.1089	106	12	75-125	20	
m,p-Xylene	0.0084	0.2000	0.1934	93	0.2000	0.2247	108	15	75-125	20	
o-Xylene	0.0031	0.1000	0.1031	100	0.1000	0.1107	108	8	75-125	20	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not ApplicableN = See Narrative, EQL = Estimated Quantitation Limit

Shell Oil Products Chain Of Custody Record

LAB (LOCATION)
- [x] XENCO (_____)
- [ ] CALSCIENCE (_____)
- [ ] TEST AMERICA (_____)
- [ ] SPL (_____)
- [ ] OTHER (_____)

Please Check Appropriate Box:
- [ ] ENV. SERVICES
- [ ] MOTIVA RETAIL
- [ ] SHELL RETAIL
- [ ] MOTIVA SD&CM
- [ ] CONSULTANT
- [ ] LUBES
- [x] SHELL PIPELINE
- [ ] OTHER _____

Print Bill To Contact Name: Kenneth Springer

PO #:

INCIDENT # (ENV SERVICES): 3 0 0 1 0 8

- [ ] CHECK IF NO INCIDENT # APPLIES

SAP #: 7 1 0 5 3 3 5

DATE: 3/14/08

PAGE: 1 of 1

CONSULTANT COMPANY: URS Corporation

ADDRESS: 7720 N. 16th Street, Suite 100

CITY: Phoenix, AZ 85020

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

SITE ADDRESS (Street, City and State): Kennan Penrose "A"

CONSULTANT PROJECT CONTACT (Report to): Iain Olness

CONSULTANT PROJECT NO.:

SAMPLER NAME(S) (Print): John Savoie

LAB USE ONLY: 2996644

TURNAROUND TIME (CALENDAR DAYS):
- [x] STANDARD (14 DAY)
- [ ] 5 DAYS
- [ ] 3 DAYS
- [ ] 2 DAYS
- [ ] 24 HOURS
- [ ] RESULTS NEEDED ON WEEKEND

DELIVERABLES:
- [ ] LEVEL 1
- [x] LEVEL 2
- [ ] LEVEL 3
- [ ] LEVEL 4
- [ ] OTHER (SPECIFY) _____

TEMPERATURE ON RECEIPT C°: Cooler #1 4.5 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES : w/labels

- [x] SHELL CONTRACT RATE APPLIES
- [ ] STATE REIMBURSEMENT RATE APPLIES
- [ ] PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	BTEX 8260	Container PID Readings or Laboratory Notes
	MW-2	3/14/08	0849	WATER	X					3	X	-01
	MW-3	3/14/08	0800	WATER	X					3	X	-02
	MW-4	3/14/08	0718	WATER	X					3	X	-03
	MW-5	3/14/08	0931	WATER	X					3	X	-04
	TRIP BLANK			WATER	X					2	X	-05

		Date:	Time:
Relinquished by: (Signature)		3-14-08	1313
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 3.14.08	Time: 13:13

05/2/08 Revision

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: IRS Corp.

Date/ Time: 3.14.08 13:13

Lab ID # : 279644

Initials: AL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	4.5 °C	
#2	Shipping container in good condition?	Yes	No		
#3	Custody Seals intact on shipping container/ cooler?	Yes	No	~~Not Present~~	
#4	Custody Seals intact on sample bottles/ container?	Yes	No	~~Not Present~~	
#5	Chain of Custody present?	Yes	No		
#6	Sample instructions complete of Chain of Custody?	Yes	No		
#7	Chain of Custody signed when relinquished/ received?	Yes	No		
#8	Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
#9	Container label(s) legible and intact?	Yes	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	Yes	No		
#11	Containers supplied by ELOT?	Yes	No		
#12	Samples in proper container/ bottle?	Yes	No	See Below	
#13	Samples properly preserved?	Yes	No	See Below	
#14	Sample bottles intact?	Yes	No		
#15	Preservations documented on Chain of Custody?	Yes	No		
#16	Containers documented on Chain of Custody?	Yes	No		
#17	Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
#18	All samples received within sufficient hold time?	Yes	No	See Below	
#19	Subcontract of sample(s)?	Yes	No	~~Not Applicable~~	
#20	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

Contact: _____ Contacted by: _____ Date/ Time: _____

Regarding: _____

Corrective Action Taken: _____

Check all that Apply:

- ☐ See attached e-mail/ fax
- ☐ Client understands and would like to proceed with analysis
- ☐ Cooling process had begun shortly after sampling event