District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company **COG Operating LLC**	Contact **Pat Ellis**
Address **500 W. Texas Ave. Ste 1300 Midland, Texas 79701**	Telephone No. **432-683-4340**
Facility Name **Jalmat Yates Unit #7**	Facility Type **Gas Well**

Surface Owner **Greg Fulfer**	Mineral Owner	Lease No. ~~301048~~

API 30 025 09747

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	12	25S	36E	990	South	1650	East	Lea

Latitude 32.13752 Longitude 103.21412

NATURE OF RELEASE

Type of Release **produced water**	Volume of Release **6 BO, 75 BW**	Volume Recovered **1 BO, 5 BW**
Source of Release **Hole in flow line**	Date and Hour of Occurrence **9/5/06 time unknown**	Date and Hour of Discovery **9/5/06 approx. 3:00 PM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Left message w/ Hobbs NMOCD**	
By Whom? **COG employee Boyd Chesser**	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

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APR 03 2008
HOBBS OCD

Describe Cause of Problem and Remedial Action Taken.*
Hole in flow line

Describe Area Affected and Cleanup Action Taken.*
Leak ¼ mile SE of flow line. Pick up standing fluids. The spill was assessed and remediated. Part of spill area was excavated and hauled to proper disposal. The remaining areas were tilled to remediate the soils below the RRAL. Confirmation samples were collected from the excavation and remediated areas were below the RRAL. A closure report was submitted to the NMOCD for approval.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Patrick L. Ellis	OIL CONSERVATION DIVISION
Printed Name: Pat Ellis	Approved by District Supervisor: ENVIRONMENTAL ENGINEER
Title: EH&S Coordinator	Approval Date: 4.4.08 Expiration Date: —
E-mail Address: PEllis@conchoresources.com	Conditions of Approval: — Attached ☐ IRP-1033
Date: 3-26-08 Phone: 432 683-7443	

* Attach Additional Sheets If Necessary

SITE INFORMATION

Type of Report: CLOSURE REPORT

1 RP-1033

General Site Information:	
Site:	Jalmat Yates Unit, Well #7
Company:	COG Operating Company
Well Location:	Section 12, T25S, R36E, Unit Letter O
Spill Location:	Section 13, T25S, R36E, Unit Letter A
Lease Number:	301048
County:	Lea
Spill Area GPS:	32.13752, 103.21412°
Surface Owner:	Greg Fulfer
Mineral Owner:	-
Directions:	From Jal, New Mexico, intersection of Hwy.18 and Hwy. 128, go 1.1 miles (west) on 128,
	turn right (north) into lease road, go north 0.8 miles and turn left (west) and go 0.4 mile
	pass the Jalmat Yates Tank Battery and turn right (north), go 0.2 miles
	and spill area is located east and west of lease road.(flowline east of road).

Release Data:	
Date Released:	9/5/2006
Type Release:	produced water and crude oil
Source of Contamination:	Hole in flow line
Fluid Released:	6 bbls oil and 75 bbls of water .
Fluids Recovered:	1 barrel oil and 5 barrels of water

Official Communication:

Name:	Pat Ellis		Ike Tavarez
Company:	COG Operating, LLC		Highlander Environmental Corp.
Address:	550 W. Texas Ave. Ste. 1300		1910 N. Big Spring
P.O. Box			
City:	Midland Texas, 79701		Midland, Texas
Phone number:	(432) 683-4340		(432) 682- 4559
Fax:	(432) 683-7441		(432) 682- 3946
Email:	PEllis@conchoresources.com		itavarez@hec-enviro.com

Ranking Criteria

Depth to Groundwater:	*Ranking Score*	*Site Data*
<50 ft	20	
50-99 ft	10	*Greater 50'*
>100 ft.	0	

WellHead Protection:	*Ranking Score*	*Site Data*
Water Source <1,000 ft., Private <200 ft.	*20*	*None*
Water Source >1,000 ft., Private >200 ft.	*0*	*None*

Surface Body of Water:	*Ranking Score*	*Site Data*
<200 ft.	*20*	*None*
200 ft - 1,000 ft.	10	*None*
>1,000 ft.	0	*None*

Total Ranking Score:	10

Acceptable Soil RRAL (mg/kg)		
Benzene	*Total BTEX*	*TPH*
10	50	1,000

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APR 03 2008

HOBBS OCD

Highlander Environmental Corp.

Midland, Texas

March 25, 2008

Mr. Larry Johnson
Environmental Engineer Specialist
Oil Conservation Division- District I
1625 N. French Drive
Hobbs, New Mexico 88240

RE: 1 RP – 1033
Closure Report
COG Operating Company LLC, Jalmat Yates Unit Well #7, Unit Letter O, Section 12, Township 25 South, Range 36 East, (Flow-line Spill is Located in Unit Letter A, Section 13, Township 25 South, Range 36 East), Lea County, New Mexico.

Dear Mr. Johnson:

Highlander Environmental Corp. (Highlander) was contacted by COG Operating Company LLC (COG) to assess and to remediate the soil impact from a flow-line spill that occurred at the Jalmat Yates, Well #7, located in Unit Letter O, Section 12, Township 25 South, Range 36 East, Lea County, New Mexico. The flow-line spill is located in Unit Letter A, Section 13, Township 25 South, Range 36 East. The spill site coordinates are N 32.13752°, W 103.21412°. The State of New Mexico C-141 (Initial) is included in Appendix C. The Site is shown on Figure 1.

Background

On September 5, 2006, the spill was discovered from a leaking flow-line, located approximately 1,400' northwest of the COG main tank battery. Approximately 6 barrels of oil and 75 barrels of water were spilled and an estimated 1 barrel of oil and 5 barrels of water were recovered. The surface impacted area measured approximately 1' to 2' wide and extended approximately ¾ mile from the release. The impacted area is further discussed in the Soil Sampling Section of the report. The spill location is shown on Figure 2.

Groundwater and Regulatory

The spill area is located in Section 13, Township 25 South, Range 36 East. The State of New Mexico Well Reports did not show any water wells in Section 13. However, there were water wells shown in Sections 19 and 20, Township 25 South, Range 37 East with an average groundwater depth of approximately 34' to 44' below surface.

Published data, from the Geology and Groundwater Conditions in Southern Lea County New Mexico, showed wells in Section 15 and 23, Township 25 South, Range 36 East with a reported depth of 120' and 53.7', respectively. In Sections 17, 19 and 20, Township 25 South, Range 37 East, water wells showed average groundwater depths of approximately 62' to 65' below surface. In addition, the USGS data base reported a depth to water at 51'in the southeast quarter of Section 18, Township 25 South, Range 37 East. A monitor well, located in the western edge of Section 18, reportedly had a water level of approximately 63.0' in 2004. Based on the relative elevation of the Site and surrounding wells, the groundwater appears to be greater than 50.0' below surface. The State of New Mexico Well Reports, USGS report and published reports are included in Appendix A.

A risk-based evaluation was performed for the Site in accordance with the NMOCD Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene and xylene). Based on the regional groundwater data, the proposed RRAL for TPH is 1,000 mg/kg.

Previous Assessment

On September 9, 2006, Highlander personnel inspected and sampled the spill area. At the release point, the majority of the surface staining was observed along the flow line measuring approximately 12' x 60'. Samples were not collected due to the dense caliche formation encountered in the shallow soils. To assess the soils, a total of sixteen (16) auger holes were installed in areas where surface staining was observed west of the release.

The spill ran west impacting an area of approximately 350' x 1'. During a heavy rain, the rainwater (runoff) had carried some of the oil across the lease road down an area measuring approximately 800' x 1.0'. The spill then extended down to another lease road. Apparently, some oil was then washed down south 680' along the lease road causing some minor staining. Some staining was also observed west of the lease road in an area measuring 200' x 1'. From this point, small stained areas (spots) and stained

vegetation were noted to the west for approximately 1,000'. The location of the auger holes are shown on Figure 2. The results are summarized in Table 1.

Referring to Table 1, the impacted areas (225' x 1.0'), immediately west of the flow lines, did show TPH and BTEX concentrations above the RRAL in AH-1, AH-2 and AH-3 at 1.0' to 2.0' below surface. The chloride concentrations detected in AH-1 and AH-2 did not show a significant impact to the soils. However, AH-3 did exhibit some increasing chloride concentrations with depth to 1,380 mg/kg at 2.0' below surface.

Auger holes (AH-4 through AH-13) were installed west of the lease road in the area measuring approximately 800' x 1.0'. Only four (4) auger holes (AH-4, AH-5, AH-7 and AH-12) exceeded the RRAL at 0-0.5' for TPH and the deeper samples at 0.5-1.0' were all below the RRAL. The remaining auger holes were all below the RRAL for TPH from 0-0.5' below surface. The chloride concentrations were not significant in these areas ranging from <20 mg/kg to 53.2 mg/kg. In the area measuring 200' x 1.0', auger holes (AH-14, AH-15 and AH-16) were placed and did not show any TPH exceeding the RRAL in the 0-0.5' samples. The chloride concentrations were below the reporting limit of <20 mg/kg.

Based on the results, Highlander submitted a work plan, dated October 3, 2006 to the NMOCD for review.

Remediation and Confirmation Sampling

As proposed, the flow line (release point) and the areas of auger holes (AH-1, AH-2 and AH-3) were excavated and approximately 800 cubic yards of material was hauled to Sundance Services for disposal. The areas of auger holes (AH-4 through AH-16) were tilled to aid the degradation of the surface impact. In addition, any other impacted areas found west of the auger holes were remediated.

The excavated area at the release point measured approximately 15' x 80' at depths ranging from 4.0' to 14.0' below surface. As shown on Figure 3, sidewall and bottom hole confirmation samples were collected from the excavated areas and are summarized in Table 2. In addition, the areas of AH-1, AH-2 and AH-3 were also excavated to depths of 2.0' to 4.0' below surface and the material hauled to disposal. The excavation of this area is shown on Figure 4. The remaining runoff areas were tilled and fertilized. Confirmation samples collected from these areas SS-4, (AH-4), SS-5 (AH-5) and SS-7 (AH-7) are summarized in Table 3.

Soil samples were analyzed for Total Petroleum Hydrocarbon (TPH) by method modified 8015 DRO/GRO and chloride by EPA method 300.0. Selected samples were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA method 8021B. All samples were collected and preserved in laboratory prepared sample containers, shipped under proper chain-of-custody control, and analyzed within the standard holding times. The sample results are presented in Tables 2 and 3. The laboratory reports are included in Appendix B.

Soil Sample Results and Conclusion

Referring to Table 2, the confirmation samples showed no TPH and BTEX concentrations above the RRAL. The chloride concentrations detected in the bottom hole samples ranged from 12.8 mg/kg to 774 mg/kg. However, the chloride levels decreased with depth and do not appear to an imminent threat to groundwater.

Based upon the results of the assessment, COG requests closure of this spill issue. The State of New Mexico C-141 (Final) is included in Appendix C. If you require any additional information or have any questions or comments, please contact us at (432) 682-4559.

Highlander Environmental Corp.

Ike Tavarez, P.G.
Project Manager/Senior Geologist

cc: COG – Pat Ellis

FIGURES

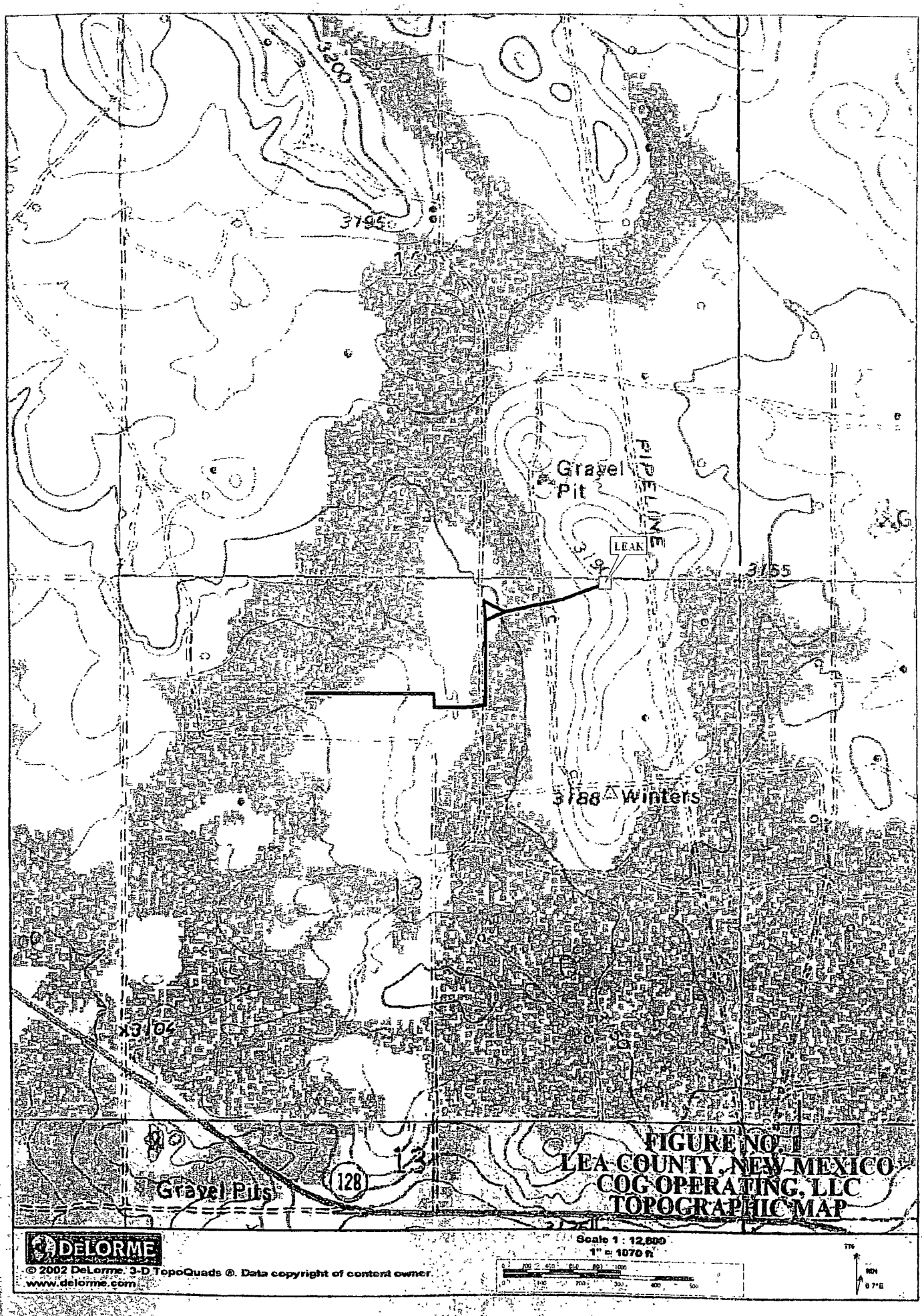
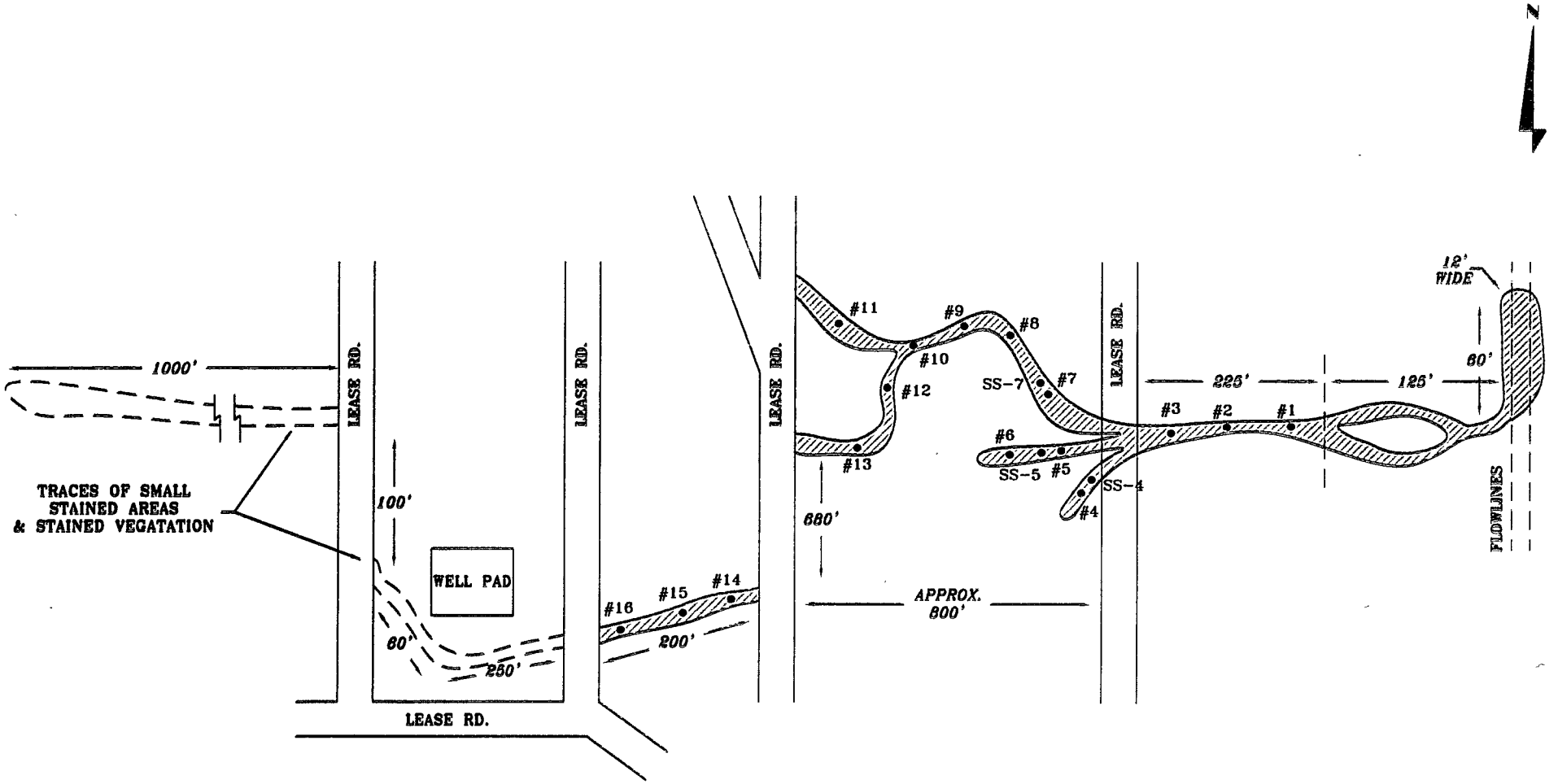


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC
TOPOGRAPHIC MAP



SPILL AREA

• SAMPLE LOCATIONS

NOT TO SCALE

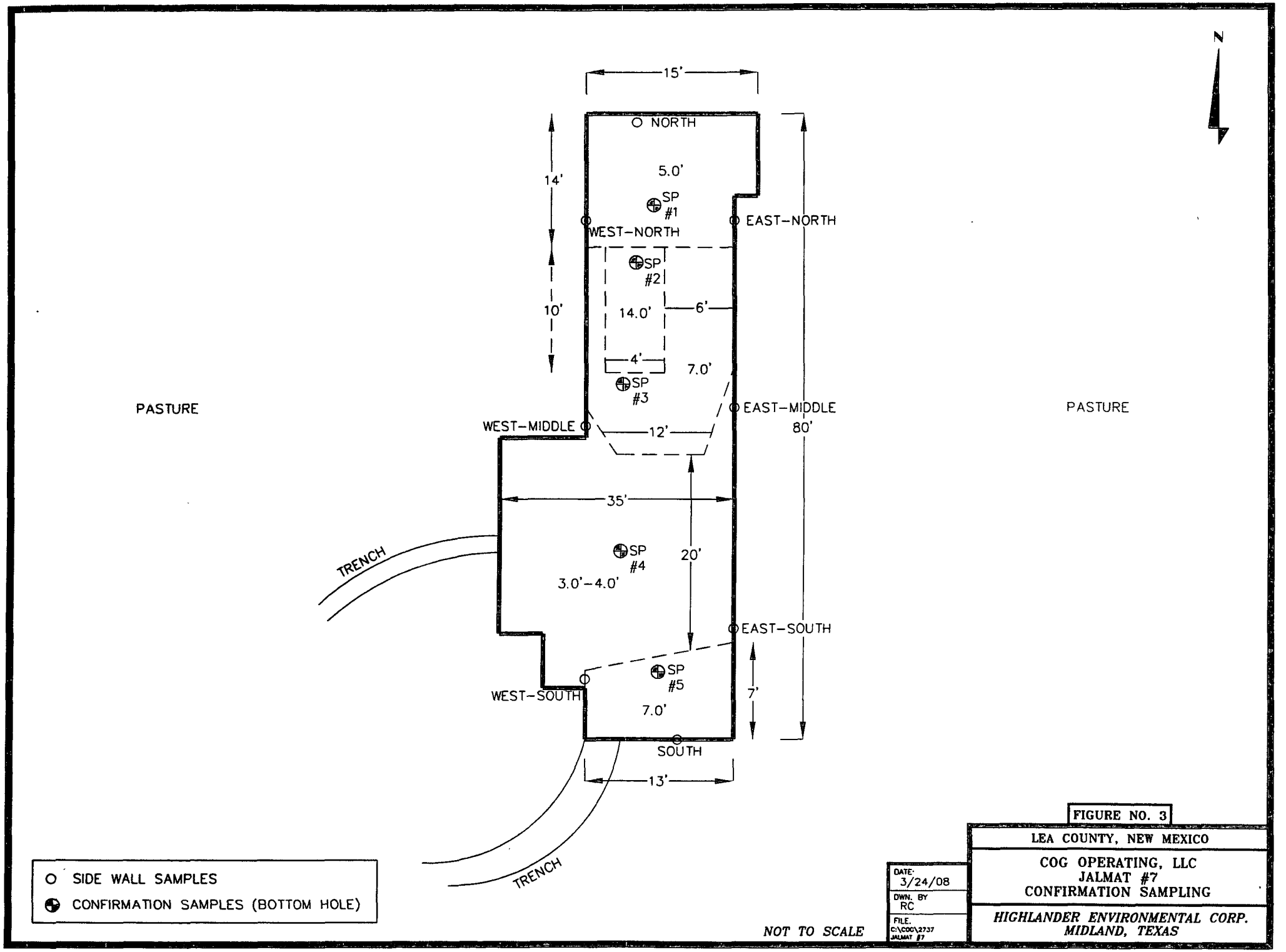
FIGURE NO. 2

LEA COUNTY, NEW MEXICO

COG OPERATING, LLC
JALMAT #7
ASSESSMENT SAMPLING

DATE: 3/24/08
DWN. BY: JJ
FILE: C:\COG\2737 JALMAT #7

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS


N
15'
NORTH
5.0'
14'
SP #1
WEST-NORTH
EAST-NORTH
SP #2
10'
14.0'
6'
4'
7.0'
SP #3
PASTURE
EAST-MIDDLE
WEST-MIDDLE
12'
80'
PASTURE
35'
TRENCH
SP #4
20'
3.0'-4.0'
EAST-SOUTH
SP #5
WEST-SOUTH
7'
7.0'
SOUTH
13'
TRENCH
O SIDE WALL SAMPLES
CONFIRMATION SAMPLES (BOTTOM HOLE)
NOT TO SCALE
DATE: 3/24/08
DWN. BY RC
FILE: C:\COG\2737 JALMAT #7
FIGURE NO. 3
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC
JALMAT #7
CONFIRMATION SAMPLING
HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

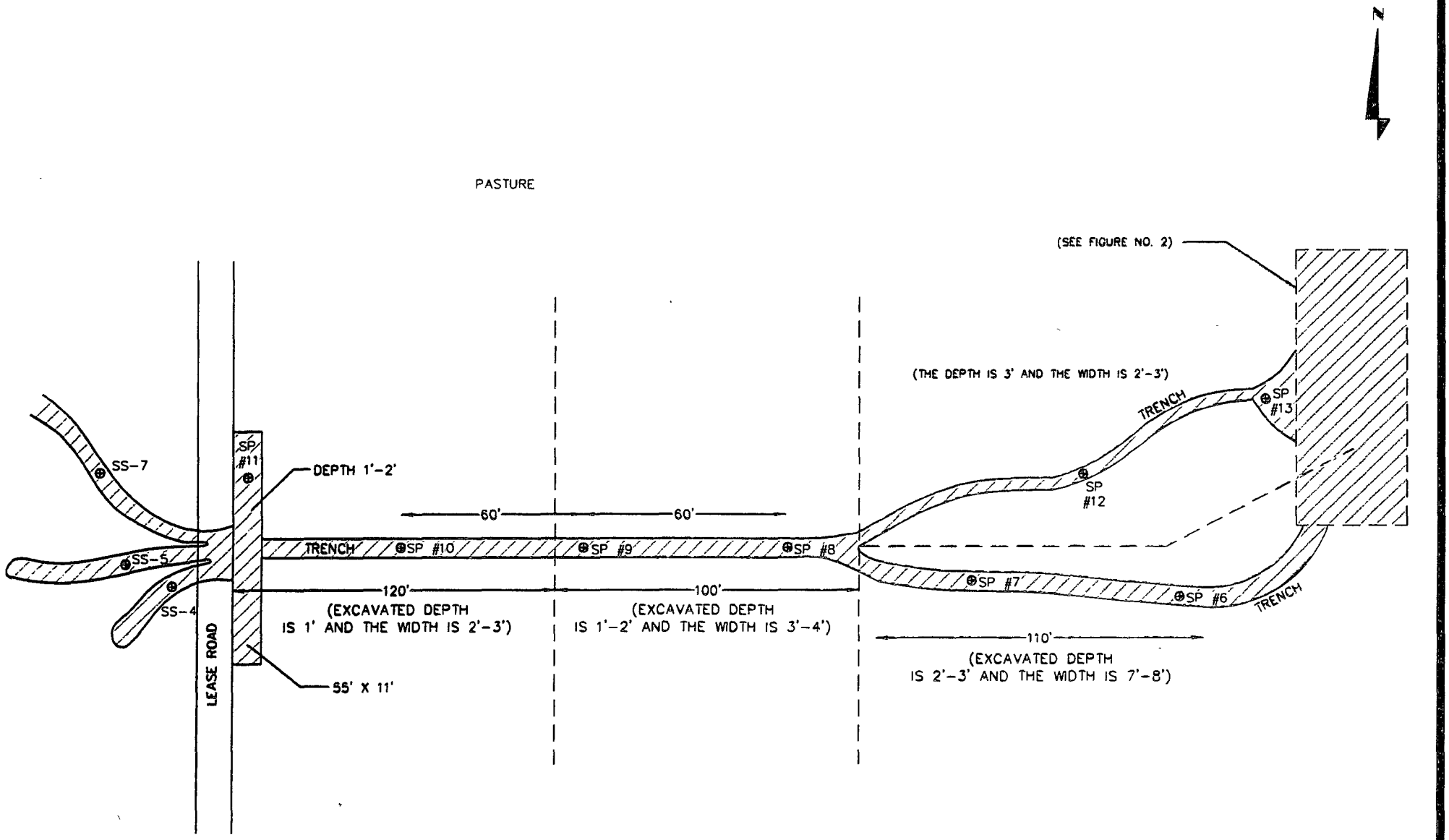


FIGURE NO. 4

LEA COUNTY, NEW MEXICO

COG OPERATING, LLC
JALMAT #7
CONFIRMATION SAMPLING

DATE: 3/24/08
DWN. BY: RC
FILE: C:\COG\2737 JALMAT #7

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TABLES

Table 1
COG Operating
JalMat Well #7 - Flowline Leak
Lea County, New Mexico

Sample ID	Date Sampled	Soil Status		Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
		Insitu	Removed		C6-C12	C12-C35	Total					
AH-1	9/18/2006		X	0-1.0'	7640	23680	**31300**	**0.413**	**11.4**	**23.9**	**72.3**	383
AH-1	9/18/2006		X	1.0'-1.5'	3640	11423	**15100**	**0.0723**	**3.67**	**11.5**	**35.2**	351
AH-1	9/18/2006		X	2.0'-2.5'	<10.0	179.0	179	<0.025	<0.025	<0.025	<0.025	128
AH-2	9/18/2006		X	0-1.0'	4570	13260	**17800**	0.0469	1.59	3.86	12.09	106
AH-2	9/18/2006		X	1.0'-1.5'	10.9	107.3	118	-	-	-	-	<20
AH-2	9/18/2006		X	2.0'-2.5'	13.3	134.5	148	-	-	-	-	<20
AH-3	9/18/2006		X	0-1.0'	3970	13828	**17800**	0.0215	1.52	5.42	14.1	**638**
AH-3	9/18/2006		X	1.0'-1.5'	<10.0	20.6	20.6	-	-	-	-	**830**
AH-3	9/18/2006		X	2.0'-2.5'	<10.0	<10.0	<10.0	-	-	-	-	**1,380**
AH-4	9/18/2006			0-0.5'	32.8	1115	**1150**	<0.025	<0.025	<0.025	<0.025	<20
AH-4	9/18/2006			0.5'-1.0'	<10.0	18.2	18.2	-	-	-	-	<20
AH-5	9/18/2006	X		0-0.5'	160	1476	**1640**	<0.025	<0.025	0.0262	0.123	21.3
AH-5	9/18/2006			0.5'-1.0'	<10.0	<10.0	<10.0	-	-	-	-	53.2
AH-6	9/18/2006	X		0-0.5'	58.6	776.5	835	<0.025	<0.025	<0.025	<0.025	21.3
AH-6	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	21.3
AH-7	9/18/2006	X		0-0.5'	472	3118	**3590**	-	-	-	-	21.3
AH-7	9/18/2006			0.5'-1.0'	<10.0	<10.0	<10.0	-	-	-	-	21.3
AH-8	9/18/2006	X		0-0.5'	<10.0	34.2	34.2	-	-	-	-	<20
AH-8	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20

(-) Not Analyzed

Table 1
COG Operating
JalMat #7 Well Flowline Leak
Lea County, NM

Sample ID	Date Sampled	Soil Status		Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
		Insitu	Removed		C6-C12	C12-C35	Total					
AH-9	9/18/2006	X		0-0.5'	<10.0	<10.0	<10.0	-	-	-	-	<20
AH-9	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-10	9/18/2006	X		0-0.5'	<10.0	48.3	48.3	-	-	-	-	<20
AH-10	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-11	9/18/2006	X		0-0.5'	<10.0	272	272					<20
AH-11	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-12	9/18/2006	X		0-0.5'	<10.0	1214	**1210**	-	-	-	-	<20
AH-12	9/18/2006			0.5'-1.0'	<10.0	<10.0	<10.0	-	-	-	-	<20
AH-13	9/18/2006	X		0-0.5'	<10.0	58.6	58.6	-	-	-	-	<20
AH-13	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-14	9/18/2006	X		0-0.5'	<10.0	124	124	-	-	-	-	<20
AH-14	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-15	9/18/2006	X		0-0.5'	27.5	501.5	529	-	-	-	-	<20
AH-15	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-16	9/18/2006	X		0-0.5'	27.4	797	824	-	-	-	-	<20
AH-16	9/18/2006			0.5'-1.0'	-	-	-	-	-	-	-	<20

(-) Not Analyzed

Table 2
COG Operating
JalMat Well #7 - Flowline Leak
Confirmation Sampling
Lea County, New Mexico

Sample ID	Date Sampled	Soil Status		Sample Depth (ft)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
		Insitu	Removed		C6-C12	C12-C28	C28-C35	Total					
SP #1	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	12.8
SP #2	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	608
SP #2	10/30/2006	X		1-1.5'	-	-	-	-	-	-	-	-	553
SP #2	2/28/2007	X		2'-2.5	-	-	-	-	-	-	-	-	189
SP #3	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	124
SP #4	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	589
SP #4	10/30/2006	X		1-1.5'									214
SP #5	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	701
SP #5	10/30/2006	X		1-1.5'	-	-	-	-	-	-	-	-	514
SP #5	2/28/2007	X		2'-2.5'	-	-	-	-	-	-	-	-	243
SP- West Wall (North)	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	-	-	-	-	8.07
SP- West Wall (South)	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	-	-	-	-	143
SP- West Wall (Middle)	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	78.8
SP- East Wall (North)	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	-	-	-	-	287
SP- East Wall (South)	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	-	-	-	-	<5.00
SP- East Wall (Middle)	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	22.6
SP- North Wall	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	5.4
SP- South Wall	10/30/2006	X		-	<10.0	<10.0	<10.0	<10.0	<0.0250	<0.0250	<0.0250	<0.0250	<5.00

(-) Not Analyzed Depth - BEB (below excavation bottom)

Table 3
COG Operating
JalMat Well #7 - Flowline Leak
Confirmation Sampling
Lea County, New Mexico

Sample ID	Date Sampled	Soil Status		Sample Depth (BEB)	TPH (mg/kg)				Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
		Insitu	Removed		C6-C12	C12-C28	C28-C35	Total					
SP #6	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	-	-	-	-	760
SP #6	8/14/2007	X		2'-2.5'	-	-	-	-	-	-	-	-	53.2
SP #7	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	-	-	-	-	609
SP #7	8/14/2007	X		2'-2.5'	-	-	-	-	-	-	-	-	85.1
SP #8	10/30/2006	X		0-1.0'	<10.0	28.4	<10.0	28.4	<0.0250	<0.0250	<0.0250	<0.0250	161
SP #9	10/30/2006	X		0-1.0'	<10.0	85.7	<10.0	85.7	<0.0250	<0.0250	<0.0250	<0.0250	214
SP #10	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	-	-	-	-	455
SP #10	8/14/2007	X		2'-2.5'	-	-	-	-	-	-	-	-	85.1
SP #11	10/30/2006	X		0-1.0'	<10.0	37.2	<10.0	37.2	<0.0250	<0.0250	<0.0250	<0.0250	10.7
SP #12	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	-	-	-	-	724
SP #12	10/30/2006	X		1-1.5'	-	-	-	-	-	-	-	-	664
SP #12	2/28/2007	X		2'-2.5'	-	-	-	-	-	-	-	-	228
SP #13	10/30/2006	X		0-1.0'	<10.0	<10.0	<10.0	<10.0	-	-	-	-	9.8
SS #4 (AH-4)	10/26/2006	X		0-1.0'	35.5	270	25.9	331	-	-	-	-	-
SS #5 (AH-5)	10/26/2006		X	0-1.0'	268	2920	142	3,330	-	-	-	-	-
SS #5 (AH-5)	2/28/2007	X		0-1.0'	24.8	632	75.5	733	-	-	-	-	-
SS #7 (AH-7)	10/26/2006		X	0-1.0'	15.8	928	74.5	1,020	-	-	-	-	-
SS #7 (AH-7)	2/28/2007	X		0-1.0'	7.29	313	49.5	369.79	-	-	-	-	-

APPENDIX A

Water Well Data
Average Depth to Groundwater (ft)
COG Operating - Jalmat Yates Unit # 7

24 South 35 East

6	5	4	3	2	1
7	8	9	10 **300**	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

24 South 36 East

6	5	4 **165**	3	2	1
7	8	9	10	11	12
18	17	16	15 **312**	14	13
19	20	21	22	23 **160**	24
30	29	28	27	26	25
31	32	33 **54** **53**	34	35	36

24 South 37 East

6	5 **111** **106**	4	3	2	1
7 **119**	8 **90**	9	10 **120**	11 **64**	12
18 **124**	17	16 **67**	15	14	13
19	20	21 **69**	22	23 **94**	24 **100**
30	29	28 **70**	27 **41**	26	25 **89** **90**
31	32	33	34 **55**	35	36

25 South 35 East

6	5 **165**	4	3 **108**	2	1
7	8	9	10	11	12
18 **230**	17	16	15	14	13
19	20	21 **218**	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

25 South 36 East

6 **295**	5	4	3	2	1
7	8	9	10 **180**	11	12
18	17	16	15 **120**	14	13 SITE
19	20	21	22	23 **53.7**	24
30	29	28	27	26	25
31	32	33	34	35	36

25 South 37 East

6	5	4	3	2	1 **60**
7	8	9	10 **50**	11	12
18 **51**	17 **62**	16	15 59.2	14	13 **73** **81**
19 **44** **62**	20 **65** **34**	21	22 **26**	23	24 **255**
30	29 **219**	28	27	26 **75**	25 **55**
31	32	33	34	35 **185**	36

26 South 35 East

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

26 South 36 East

6	5	4	3	2	1
7	8	9 **173**	10	11	12
18	17	16	15	14	13
19	20	21	22	23 **151**	24
30	29	28	27	26	25
31	32	33	34	35	36

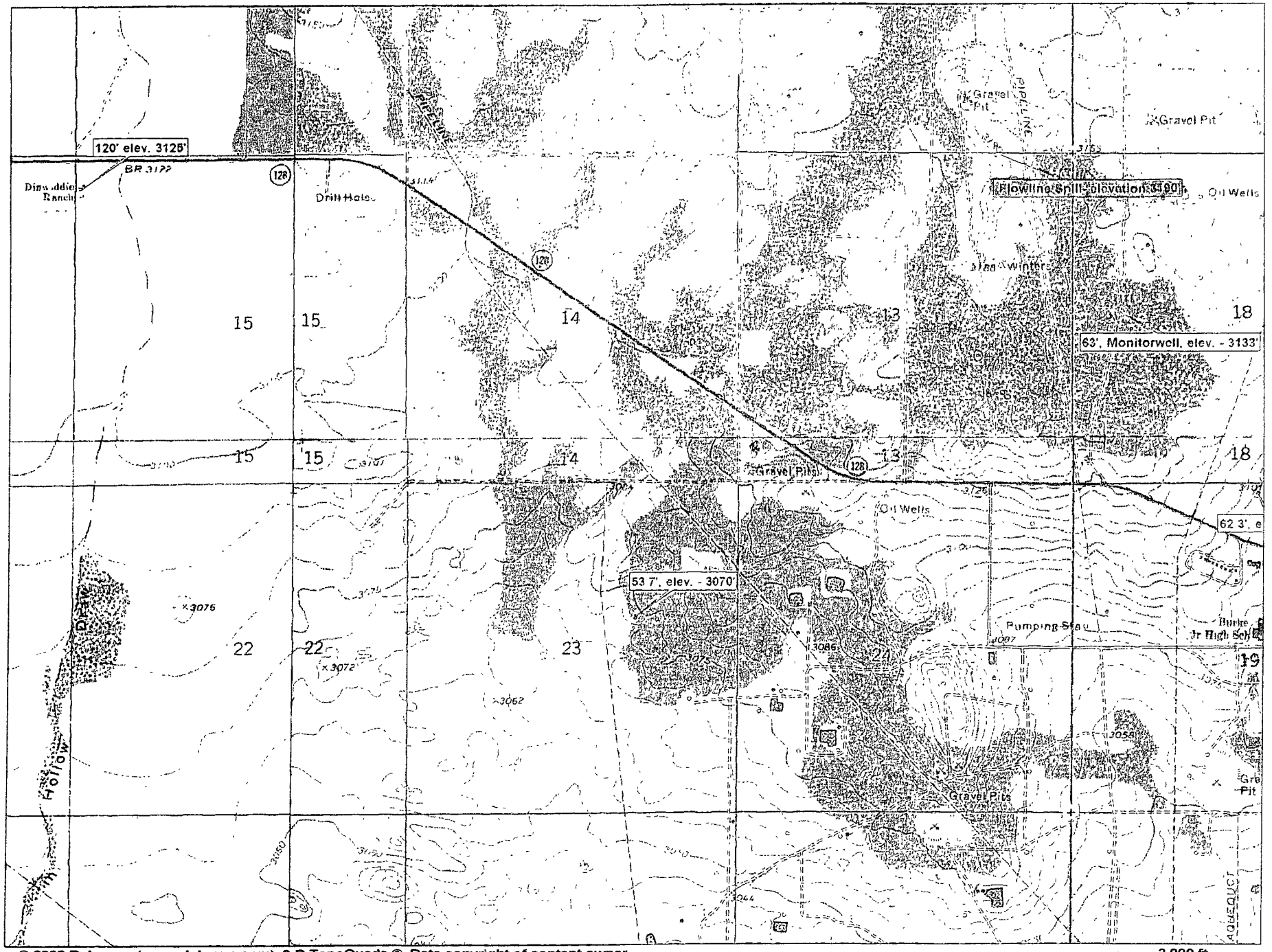
26 South 37 East

6	5	4	3	2	1
7 **196**	8	9 **85**	10	11	12 **97**
18	17	16	15	14 **95**	13
19 **185**	20	21	22	23	24
30	29 **86**	28	27 **140**	26	25
31	32	33	34	35	36

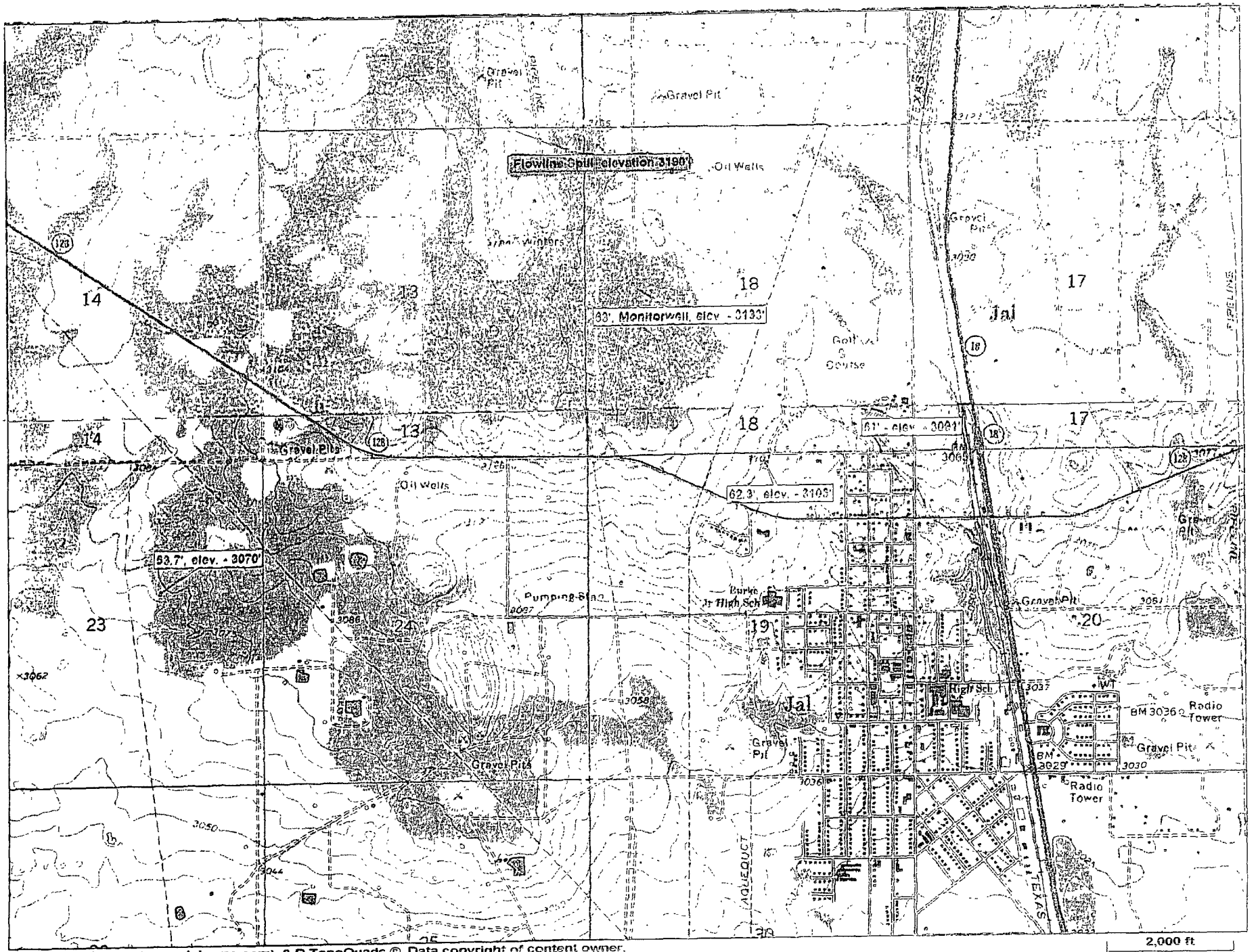
88 New Mexico State Engineers Well Reports

105 USGS Well Reports

90 Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
Geology and Groundwater Resources of Eddy County, NM (Report 3)



Scale: 1 : 25,000 Map Rotation: 0° Magnetic Declination: 8.7°E



Scale: 1 : 25,000 Map Rotation: 0° Magnetic Declination: 8.6°E

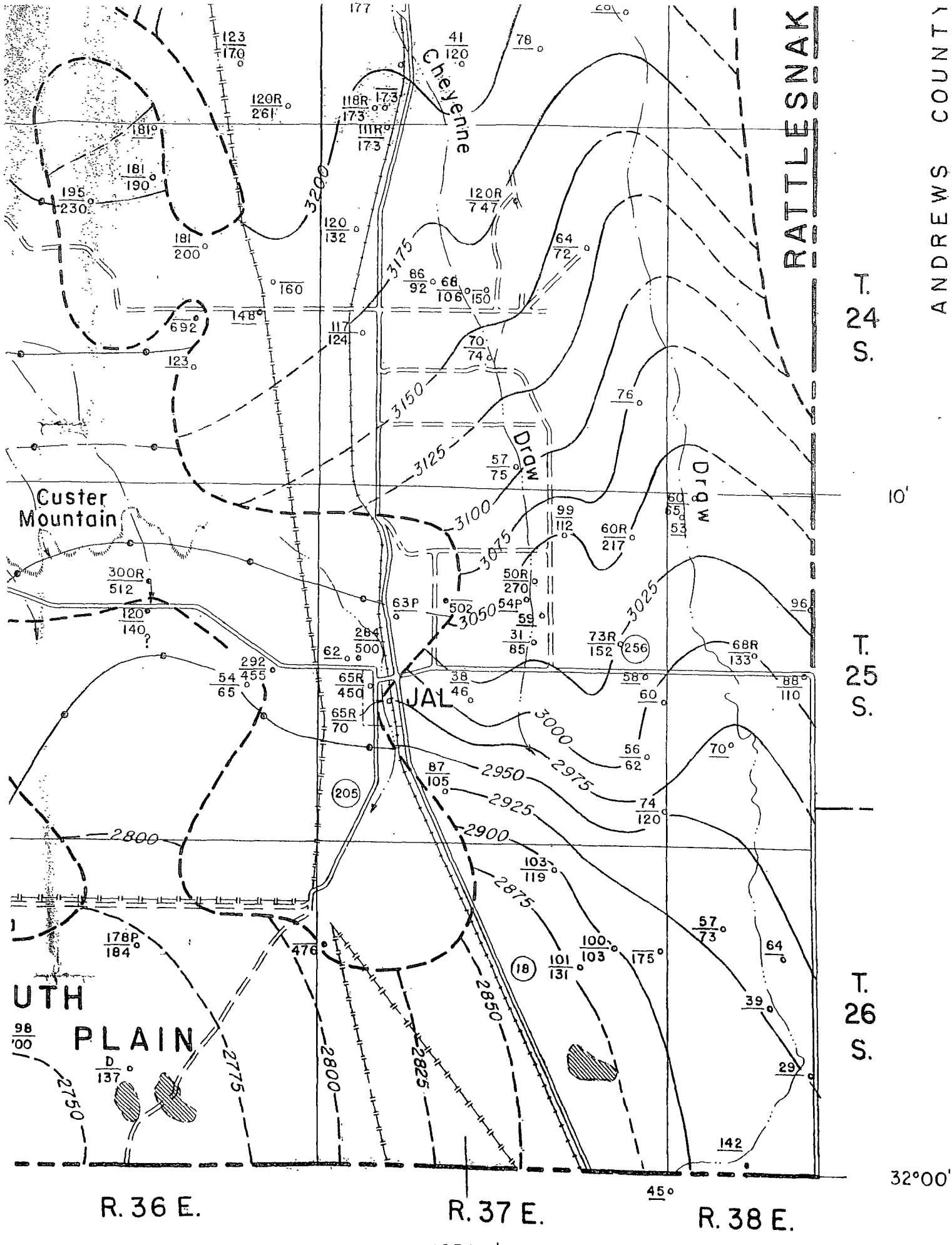

Cheyenne
RATTLESNAK
Draw
Draw
Custer Mountain
JAL
UTH PLAIN
3200
3175
3150
3125
3100
3075
3050
3025
3000
2975
2950
2925
2900
2875
2850
2825
2800
2775
2750
T. 24 S.
T. 25 S.
T. 26 S.
R. 36 E.
R. 37 E.
R. 38 E.
ANDREWS COUNTY
10'
32°00'
103°10'
WINKLER COUNTY
Compiled by Alfred Clebsch, Jr.,

TABLE 6 RECORDS OF WELLS IN SOUTHERN LEA COUNTY, N. MEX. (continued)

Location No.	Owner	Aquifer	Depth of well (feet)	Altitude of well (feet)	Water level: Depth below land surface (feet)	Water level: Date measured	Year completed	Surface diameter of well	Method of lift	Use of water	Remarks
24.36.35.122	do	Tr	250M	3,410	223.9	3-29-53	—	6	Lw	S	—
24.36.30.311	do	Tr	250±M	3,320	199.6	10-27-53	—	6	Lw	S	—
24.36.3.111	—	To	—	3,400	181.1	3-12-53	—	7½	N	N	—
3.333	Charles Whitten	To(?)	190±M	3,390	181.1	3-12-53	—	11½	N	N	—
9.333	do	To	230	3,395	195.0	5- 6-53	1948	7	N	N	—
25.31.1	Humble Oil Co	To	160	—	—	—	1941	—	—	—	WBZ sand, 138-158 feet. EY 10 gpm
24.36.25.222	Canmex Oil Co.	To	200	3,370	186.5	3-12-53	1957	7	Lw	D	—
22.220	Continental Oil Co.	Tr	692	3,360	—	—	—	8½	Li	D	A. H. Meyers "A" well 1. Intake set at about 475 feet. Maximum yield 6 gpm.
23.222	—	To	—	3,365	167.9	3- 6-53	—	6½	Lw	I	Measurement made inside pipe column.
27.221	J. R. Wilson	To	—	3,320	122.9	3- 6-53	—	10	N	N	—
24.37.5.111	EPNG	To	173	3,275	111	9- 6-52	1952	10¾	Te	In,D	Jal Plant 4, well 6.
7.231	Fowler Hair	To	192M	3,300	163.9	3- 6-53	—	6½	N	N	—
30.123	Tenny Production Co.	Tr	747	3,260	220	2- -53	1953	—	Li	In	EY 42 gpm Chemical analysis in table 8.
24.210	Fowler Hair	To(?)	72M	3,205	36.5	3- 3-53	—	5	N	N	—
24.37.26.342	—	To	106M	3,295	67.7	3-11-53	—	9	N	N	—
26.423	Humble Oil Co	To	650	3,260	—	—	1951	6¾	Te	D	Fowler-Ellenburger Camp well 1. WBZ 90 150 feet
17.422	Fowler Hair	To	92M	3,260	66.5	3- 6-53	—	7½	N	N	—
19.254	—	To	120M	3,290	107.4	3- 5-53	—	10	Lw	S	—
21.444	Dollarhide Water Co	To	78M	3,200	69.6	5- 2-53	—	7½	N	N	—
25.322	Fowler Hair	To	—	3,256	76.1	3- 3-53	—	6½	Lw	D,S	—
36.320	Plains Production Co	To	75±M	3,260	56.8	3- 2-53	—	12	N	N	—
25 33.20.443	—	Tr	—	3,395	200-250	8-18-58	—	6	Lw	D,S	—
31.244	Nick Ritz	Tr	320	3,400	257.5	7-26-54	—	8	Lw	S	—
25.36.1.132	Madera Ranch	Tr	300+	3,305	231.0	4-15-53	—	6	N	N	—

25.36.15.242	—	Tr	168	3,335	166.9	7-25-54	—	10	Lw	S	—
25.35.10.223	Georgia Bryant	To	85M	3,160	76.9	4- 2-53	—	9	Lw	S	—
21.122	—	Tr	—	3,250	175.3	4- 2-53	—	8½	N	N	—
25.36.10.313	W. D. Dinwiddie	Tr	512	3,150	300	—	—	—	Lw	S	—
15.111	do.	Tr(?)	140	3,125	120.2	3- -53	1951	—	N	N	—
25.234	—	Qal	65M	3,070	38.7	3-30-53	—	6½	Lw	S	—
20.112	Humble Oil Co.	Tr	455	3,115	292.4	4-15-53	—	—	N	N	—
25.37.1.340	Pure Oil Co.	To	217	3,108	60	—	—	20	Te	In,D	—
2.332	Richmond Drilling Co.	To	112M	3,100	98.8	3-29-53	—	7	Lw	D	—
9.333	Standolind Oil Co.	Tr	502	3,100	—	—	1938	—	Lw	D	WBZ 470-502 feet.
10.412	EPNG	To	270	3,120	50	12-20-49	1949	12	Te	In,D	Jal Plant 3, well 2.
10.431	M. B. Owens	To	—	3,100	56.5	2-26-53	—	7½	Lw	S	MWP
15.312a	City of Jal	To	152	3,080	73	6- -54	1954	12	Te	P	New city well. EY 750 gpm. Chemical analysis in table 8.
25.37.15.221	J. M. Owens	To	—	3,100	59.2	2-26-53	—	—	Ti	In	EY 30 gpm. PR.
15.223	Sun Oil Co.	To	—	3,090	—	—	—	—	Lw	D	Chemical analysis in table 8.
15.411	—	Qal	95M	3,070	31.1	2-26-53	—	6½	N	N	—
17.114	—	Qal	—	3,065	62.8	3- 5-53	—	—	Lw	S	MWP
19.211	—	To	—	3,068	62.3	5-30-55	—	6	Je	D	—
19.221	City of Jal	Tr	500	3,110	204.0	11-11-54	1948	10	N	N	Chemical analysis in table 8.
19.240	do.	Tr	450	3,040	65	1942	—	—	—	—	Old public-supply well. WBZ 70-450 feet. EY (1942) 50 gpm. Chemical analysis in table 8.
20.310	do.	Qal	70	3,035	65	1-18-42	—	6×6 ft.	—	—	Dug. WBZ "clayey sand" 65-70 feet. EY 50 gpm. Chemical analysis in table 8.
25.37.20.413	EPNG	Tr	419	—	—	—	—	10¾	Je	In,D	Jal General Camp well 1.
21.411	G. B. Haddeld	To	66M	3,050	36.2	2-12-53	—	6	Lw	S	EY 1 gpm.
24.211	—	To	—	3,071	50.4	2-12-53	—	6	N	N	—
24.422	—	To	—	3,050	60.2	2-12-53	—	8	N	N	—
25.411	—	To	62M	3,055	56.4	2-12-53	—	6	N	N	—
33.114	Olsen Oil Co.	Qal	105	3,000	67.4	2-16-53	—	12	N	N	—
36.244	—	To	120	3,055	74.2	2-13-53	—	10	N	N	—
25.38.6.122	Fowler Hair	To	65M	3,100	60.5	3- 3-53	—	6½	Lw	S	—
6.134	—	To	—	3,095	53.1	2-25-53	—	5	N	N	Cased shothole.
9.343	—	To	—	3,130	95.7	2-25-53	—	6½	Lw	D,S	EY 30 gpm.

TABLE 6. RECORDS OF WELLS IN SOUTHERN LEA COUNTY, N. MEX. (continued)

Location No.	Owner	Aquifer	Depth of well (feet)	Altitude of well (feet)	Water level: Depth below land surface (feet)	Water level: Date measured	Year completed	Surface diameter of wells	Method of lift	Use of water	Remarks
25.38 19.342	Pure Oil Co.	To(?)	133	3,061	68	1952	—	—	—	In	Dollarhide Gasoline Plant well 2
21.121	Tom Linebury	To	110	3,103	87.7	2-12-53	—	7	Lw	S	—
29.131	—	Qal	—	3,040	69.9	2-15-53	—	6	Lw	N	—
26.32.21.322	Battle Ax Ranch	Tr(?)	253	3,140	180	7-23-54	—	—	Lt	D,S	—
26.33.3.444	W. D. Dinwiddie	Qal	180	3,315	102 8	7-23-54	—	6	N	N	—
3.444a	do.	Qal	—	3,315	—	—	—	6(?)	Lw	S	Chemical analysis in table 8. Located 50 feet west of 26 33 3.444.
9.443	—	Qal(?)	—	3,280	106 6	7-26-54	—	—	Lw	S	—
22 433	Battle Ax Ranch	Qal	200(?)	3,270	79.7	7-26-54	—	6	Lw	S	—
26.34 6.213	—	Tr	360	3,330	141.9	7-23-54	—	8	Lw	S	—
26 35.13 222	—	Qal	—	2,990	229.1	12-12 58	—	7	Lw	S	Chemical analysis in table 8
26.36.9.440	Frank Antheys	Qal	184M	2,940	177 8	12-12-58	—	7	Lw	D,S	MWP
18.311	City of Jal	Qal	559	2,981	220 8	3-17-60	1960	24	Te(?)	P	Yield 453 gpm. Gravel packed. WBZ 275-300, 400-465, 500-530 feet
19.233	do	Qal	700	2,950	198.0	—	1960	24	Te(?)	P	Yield 408 gpm. Gravel packed. WBZ 270-280, 400-480, 550-600, 670-680 feet
21.443	—	—	137(?)	2,900	Dry	12-11-58	—	11	N	N	—
26 37.2.133	Clyde Cooper	Qal(?)	119	3,000	103.4	2-16-53	1937	8	Lw	S	—
7.331	EPNG	Tr	476	2,960	—	—	1937	8⅝	Te	In,D	Jal Plant 1, well 1.
12.314	—	Qal	—	3,010	102 3	2-16-53	—	9½	N	N	—
12.331	—	Qal	103 ± M	3,000	99 9	2-17-53	—	3	N	N	Cased shothole
12.441	Humble Oil Co	Qal	175	—	—	—	1944	—	—	—	WBZ 125-150 feet. EY 68 gpm.
14 122	—	Qal	131M	2,985	100 6	2-17-53	—	3	N	N	Cased shothole.
26.38.7.244	Tom Linebury	Qal	73	3,000	57.1	2-24-53	—	8½	N	N	—
8.444	do.	Qal	66	3,000	64 5	2-24-53	—	6½	Lw	S	—
17.414	do.	Qal	—	2,975	39.4	2-24-53	—	5½	Lw	S	—
21.344	do	Qal	—	2,955	29.0	2-13-53	—	3	N	N	Cased shothole
32 141	do	Tr(?)	—	2,950	142 4	2-13-53	—	26	N	N	—

TABLE 7. RECORDS OF SELECTED WELLS IN TEXAS ADJACENT TO SOUTHERN LEA COUNTY, N. MEX.
Explanations of symbols are included in the headnotes of Table 6.

Location No.	Owner	Aquifer	Depth of well (feet)	Altitude of well (feet)	Water level: Depth below land surface (feet)	Water level: Date measured	Year completed	Surface diameter of wells	Method of lift	Use of water	Remarks
Gaines County Tex.											
A-12.25.341	—	To	50(?)	3,545	40.8	12- 9-53	—	6	Lw	N	—
A-28.3.413	Greenwood	—	—	3,485	35.1	12- 9-53	—	—	Lw	S	—
Andrews County, Tex.											
A-29.17.320	H. O. Sims	To(?)	82	3,510	79.4	7-28-40	—	—	Lw	S	—
A-39.4.420	do.	To	81	3,478	72.4	10- 9-53	—	6½	Lw	S	—
A-39.14.111	Humble Oil Co.	—	215	3,410	Dry	—	—	—	—	—	—
A-40.16.330	M. L. Goins	To	80	3,305	74.1	10-15-53	—	—	Lw	D,S	—
Winkler County, Tex.											
C-22.6	Tom Linebury	Qal	—	2,940	45.0	2-13-53	—	6	N	N	—

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 35E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ◉ Domestic
◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

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AVERAGE DEPTH OF WATER REPORT 03/08/2006

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
C	25S	35E	05				1	165	165	165
C	25S	35E	18				1	230	230	230
C	25S	35E	21				2	205	230	218

Record Count: 4

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

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AVERAGE DEPTH OF WATER REPORT 03/08/2006

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg

No Records found, try again

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POD Reports and Downloads

Township: 25S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic
◉ All

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AVERAGE DEPTH OF WATER REPORT 03/08/2006

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	25S	37E	19				9	27	63	44
CP	25S	37E	20				6	23	60	34
CP	25S	37E	29				5	187	250	219
CP	25S	37E	35				1	185	185	185

Record Count: 21

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Township: 25S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

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POD / SURFACE DATA REPORT 03/08/2006

DB File Nbr	Use	(acre ft per annum) Diversion	Owner	POD Number	(qua (qua
CP 00120	COM	31.2	CHAPARRAL SERVICES, INC.	CP 00120	
CP 00121	COM	15.6	CHAPARRAL SERVICES, INC.	CP 00121	
CP 00124	COM	31.2	CHAPARRAL SERVICES, INC.	CP 00124	
CP 00211	DOM	0	J. M. OWEN	CP 00211 DCL	
CP 00216	DOM	0	J. M. OWEN	CP 00216 DCL	
CP 00217	DOM	0	J. M. OWEN	CP 00217 DCL	
CP 00219	DOM	0	J. M. OWEN	CP 00219 DCL	
CP 00299	DOM	0	J. J. SMITH	CP 00299 DCL	
CP 00300	STK	0	J. J. SMITH	CP 00300 DCL	
CP 00387	DOM	3	PAUL S. BALLINGER	CP 00387 1	
				CP 00387 REPAR 1	
				CP 00387 REPAR 2	
CP 00388	DOM	0	JAKE MC KOWEN	CP 00388 EXP	
CP 00425	COM	.70	PAUL PRATHER P AND S BRINE SAL	CP 00425	
CP 00428	DOM	3	ANNICE KATHLEEN BUTTER	CP 00428	
CP 00429	DOM	3	HOMER E. MOLDER	CP 00429	
CP 00444	DOM	3	D. C. BUFFINGTON	CP 00444	
CP 00460	DOM	3	E. W. RUSCHE	CP 00460	
CP 00461	DOM	0	GOERGE L. BUCKLES COMPANY	CP 00461 DCL	
CP 00487	DOM	3	L. L. REED	CP 00487	
CP 00506	DOM	3	CHARLES D. TAFF	CP 00506	
CP 00507	SAN	3	UNION TEX PETE CO.	CP 00507	
CP 00515	DOM	3	JOHN SHROYER	CP 00515	
CP 00518	DOM	0	V.B. BROCK	CP 00518 EXP	
CP 00526	DOM	0	A.D. KEMP	CP 00526 EXP	
CP 00533	DOM	3	A.D. KEMP	CP 00533	
CP 00534	DOM	3	DAN COX	CP 00534	
CP 00541	DOM	3	BILLY W. MOSLEY	CP 00541	
CP 00557	DOM	3	LUCILLE BOCK WEBB	CP 00557	
CP 00565	DOM	3	SAM R. BEAIRD	CP 00565	
CP 00607	DOM	3	RAYMOND F. GRAY	CP 00607	

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Township: 24S Range: 35E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ◉ Non-Domestic ○ Domestic
◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

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AVERAGE DEPTH OF WATER REPORT 03/08/2006

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	24S	35E	10				1	300	300	300

Record Count: 1

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 24S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	24S	36E	04				3	155	178	165
CP	24S	36E	15				2	173	450	312
CP	24S	36E	20				1	97	97	97
CP	24S	36E	23				1	160	160	160
CP	24S	36E	33				1	53	53	53

Record Count: 8

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 24S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	24S	37E	05				1	106	106	106
CP	24S	37E	08				1	90	90	90
CP	24S	37E	23				1	94	94	94
CP	24S	37E	24				1	100	100	100
CP	24S	37E	25				1	90	90	90
CP	24S	37E	28				1	70	70	70

Record Count: 6

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 26S Range: 35E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ◉ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 26S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic
◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 26S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ◉ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg

No Records found, try again

CP 00460	DOM	3	E. W. RUSCHE	CP 00460	Shallow	25S	37E	19	2	1	3
CP 00461	DOM	0	GOERGE L. BUCKLES COMPANY	CP 00461 DCL		25S	37E	10	4	3	2
CP 00487	DOM	3	L. L. REED	CP 00487	Shallow	25S	37E	29	1	2	
CP 00506	DOM	3	CHARLES D. TAFF	CP 00506		25S	37E	29	2		
CP 00507	SAN	3	UNION TEX PETE CO.	CP 00507		25S	37E	05	4	2	
CP 00515	DOM	3	JOHN SHROYER	CP 00515	Shallow	25S	37E	19	2	4	3
CP 00518	DOM	0	V.B. BROCK	CP 00518 EXP		25S	37E	19	1	2	4
CP 00526	DOM	0	A.D. KEMP	CP 00526 EXP		25S	37E	19	1	4	4
CP 00533	DOM	3	A.D. KEMP	CP 00533	Shallow	25S	37E	19	1	4	4
CP 00534	DOM	3	DAN COX	CP 00534	Shallow	25S	37E	19	2	4	1
CP 00541	DOM	3	BILLY W. MOSLEY	CP 00541	Shallow	25S	37E	19	2	2	4
CP 00557	DOM	3	LUCILLE BOCK WEBB	CP 00557	Shallow	25S	37E	20	3	3	3
CP 00565	DOM	3	SAM R. BEAIRD	CP 00565		25S	37E	19	1	2	3
CP 00607	DOM	3	RAYMOND F. GRAY	CP 00607	Shallow	25S	37E	19	1	2	2
CP 00608	DOM	3	FLOYD MCCUNE MATHIS	CP 00608		25S	37E	19	1	1	1
CP 00619	DOM	3	JOHN T. SWINFORD	CP 00619	Shallow	25S	37E	20	3	1	
CP 00620	DOM	3	D. E. BAILEY	CP 00620	Shallow	25S	37E	20	1	3	3
CP 00638	DOM	3	DONALD R. TRICE	CP 00638	Shallow	25S	37E	29	1	1	
CP 00661	DOM	3	D. E. BAILEY	CP 00661	Shallow	25S	37E	20	1	3	3
CP 00710	DOM	3	S. A. SEARCY	CP 00710	Shallow	25S	37E	19	2	2	3
CP 00777	DOM	3	GUAN D. MILLER	CP 00777	Shallow	25S	37E	20	3	2	4
CP 00782	INJ	0	ARCO OIL AND GAS COMPANY	CP 00782	Shallow	25S	37E	24	1	1	2
CP 00783	INJ	0	ARCO OIL AND GAS COMPANY	CP 00783	Shallow	25S	37E	23	1	2	1
CP 00784	INJ	0	ARCO GAS AND OIL COMPANY	CP 00784	Shallow	25S	37E	23	1	4	3
CP 00844	STK	0	TRUSTEES/JAL PUBLIC LIBRARY	CP 00844		25S	37E	17	3	3	
CP 00888	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP 00888		25S	37E	18	2	2	4
CP 00889	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP 00889		25S	37E	07	3	3	2
CP 00891	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP 00891		25S	37E	18	2	2	3
CP 00892	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP 00892		25S	37E	18	2	2	3
CP 00893	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP 00893		25S	37E	18	2	2	4
CP 00894	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP 00894		25S	37E	18	2	2	4
CP 00900	POL	0	SHELL PIPELINE COMPANY LP	CP 00900	Shallow	25S	37E	32	4	3	4
CP 00901	POL	0	SHELL PIPELINE COMPANY LP	CP 00901	Shallow	25S	37E	32	4	3	4
CP 00902	POL	0	SHELL PIPELINE COMPANY LP	CP 00902	Shallow	25S	37E	32	4	3	4
CP 00903	POL	0	SHELL PIPELINE COMPANY LP	CP 00903	Shallow	25S	37E	32	4	3	4
CP 00904	POL	0	SHELL PIPELINE COMPANY LP	CP 00904	Shallow	25S	37E	32	4	3	4
CP 00905	POL	0	SHELL PIPELINE COMPANY LP	CP 00905	Shallow	25S	37E	32	4	3	4
CP 00906	POL	0	SHELL PIPELINE COMPANY LP	CP 00906	Shallow	25S	37E	32	4	3	4
CP 00909	STK	3	GEORGE WILLIS	CP 00909	Shallow	25S	37E	35	4	4	4

Record Count: 56

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

POD / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | iWATERS Menu | Help

POD / SURFACE DATA REPORT 03/08/2006

(acre ft per annum)

DB File Nbr	Use	Diversion	Owner
CP 00120	COM	31.2	CHAPARRAL SERVICES, INC.
CP 00121	COM	15.6	CHAPARRAL SERVICES, INC.
CP 00124	COM	31.2	CHAPARRAL SERVICES, INC.
CP 00211	DOM	0	J. M. OWEN
CP 00216	DOM	0	J. M. OWEN
CP 00217	DOM	0	J. M. OWEN
CP 00219	DOM	0	J. M. OWEN
CP 00299	DOM	0	J. J. SMITH
CP 00300	STK	0	J. J. SMITH
CP 00387	DOM	3	PAUL S. BALLINGER
CP 00388	DOM	0	JAKE MC KOWEN
CP 00425	COM	70	PAUL PRATHER P AND S BRINE SAL
CP 00428	DOM	3	ANNICE KATHLEEN BUTTER
CP 00429	DOM	3	HOMER E. MOLDER
CP 00444	DOM	3	D. C. BUFFINGTON

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest

POD Number	Source	Tws	Rng	Sec	q	q	q
CP 00120	Shallow	25S	37E	20	2	3	1
CP 00121	Shallow	25S	37E	20	2	4	3
CP 00124		25S	37E	20	2	4	1
CP 00211 DCL		25S	37E	21	2	4	3
CP 00216 DCL		25S	37E	22	1	2	2
CP 00217 DCL		25S	37E	10	4	3	4
CP 00219 DCL		25S	37E	10	4	3	3
CP 00299 DCL		25S	37E	03	2	4	2
CP 00300 DCL		25S	37E	03	4	2	1
CP 00387 1	Shallow	25S	37E	29	2	3	
CP 00387 REPAR 1	Shallow	25S	37E	29	2	3	
CP 00387 REPAR 2	Shallow	25S	37E	29	2	3	
CP 00388 EXP		25S	37E	19	2	2	
CP 00425	Shallow	25S	37E	16	4	4	4
CP 00428		25S	37E	20	1		
CP 00429	Shallow	25S	37E	19	2		
CP 00444	Shallow	25S	37E	19	2	2	

CP	00608	DOM	3	FLOYD MCCUNE MATHIS	CP	00608
CP	00619	DOM	3	JOHN T. SWINFORD	CP	00619
CP	00620	DOM	3	D. E. BAILEY	CP	00620
CP	00638	DOM	3	DONALD R. TRICE	CP	00638
CP	00661	DOM	3	D. E. BAILEY	CP	00661
CP	00710	DOM	3	S. A. SEARCY	CP	00710
CP	00777	DOM	3	GUAN D. MILLER	CP	00777
CP	00782	INJ	0	ARCO OIL AND GAS COMPANY	CP	00782
CP	00783	INJ	0	ARCO OIL AND GAS COMPANY	CP	00783
CP	00784	INJ	0	ARCO GAS AND OIL COMPANY	CP	00784
CP	00844	STK	0	TRUSTEES/JAL PUBLIC LIBRARY	CP	00844
CP	00888	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP	00888
CP	00889	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP	00889
CP	00891	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP	00891
CP	00892	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP	00892
CP	00893	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP	00893
CP	00894	DOM	3	CLAY & GERALDINE (JERI) OSBORN	CP	00894
CP	00900	POL	0	SHELL PIPELINE COMPANY LP	CP	00900
CP	00901	POL	0	SHELL PIPELINE COMPANY LP	CP	00901
CP	00902	POL	0	SHELL PIPELINE COMPANY LP	CP	00902
CP	00903	POL	0	SHELL PIPELINE COMPANY LP	CP	00903
CP	00904	POL	0	SHELL PIPELINE COMPANY LP	CP	00904
CP	00905	POL	0	SHELL PIPELINE COMPANY LP	CP	00905
CP	00906	POL	0	SHELL PIPELINE COMPANY LP	CP	00906
CP	00909	STK	3	GEORGE WILLIS	CP	00909

Record Count: 56

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320149103134201

Save file of selected sites to local disk for future upload

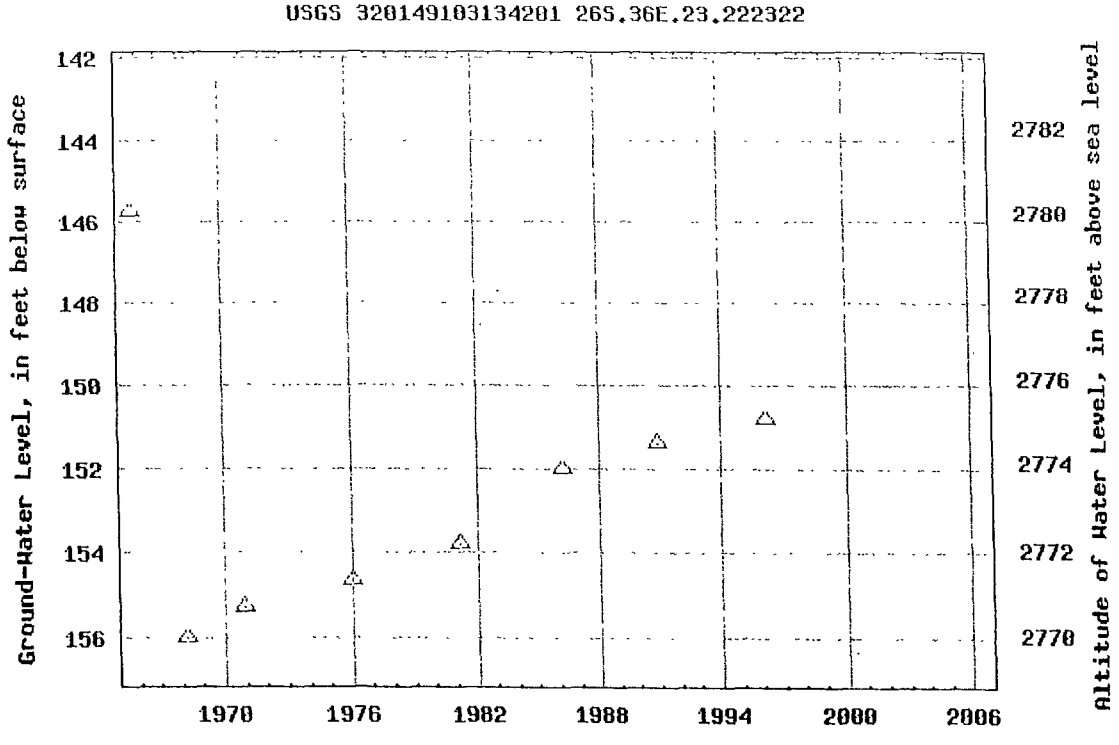
USGS 320149103134201 26S.36E.23.222322

Available data for this site | Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°01'49", Longitude 103°13'42" NAD27
Land-surface elevation 2,925.80 feet above sea level NGVD29
The depth of the well is 200 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320251103154201

Save file of selected sites to local disk for future upload

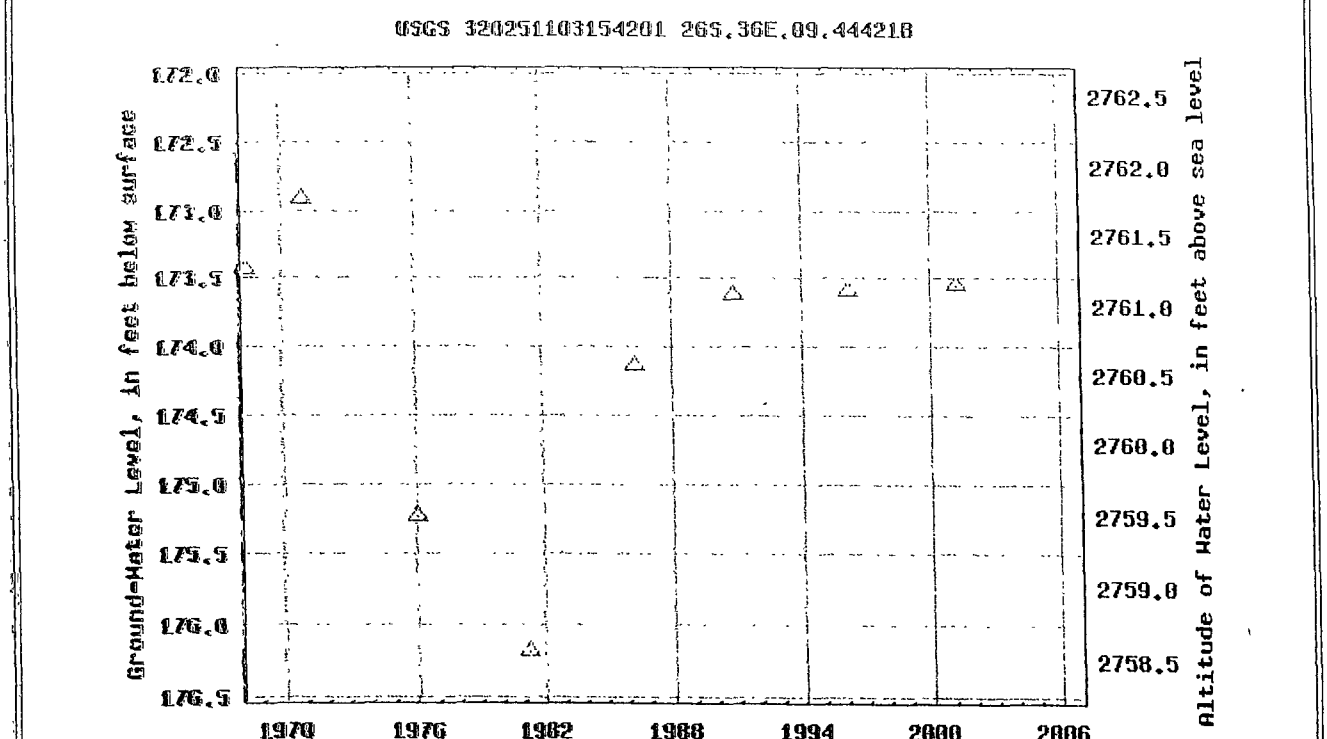
USGS 320251103154201 26S.36E.09.44421B

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°02'51", Longitude 103°15'42" NAD27
Land-surface elevation 2,934.70 feet above sea level NGVD29
The depth of the well is 200 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320042103103901

Save file of selected sites to local disk for future upload

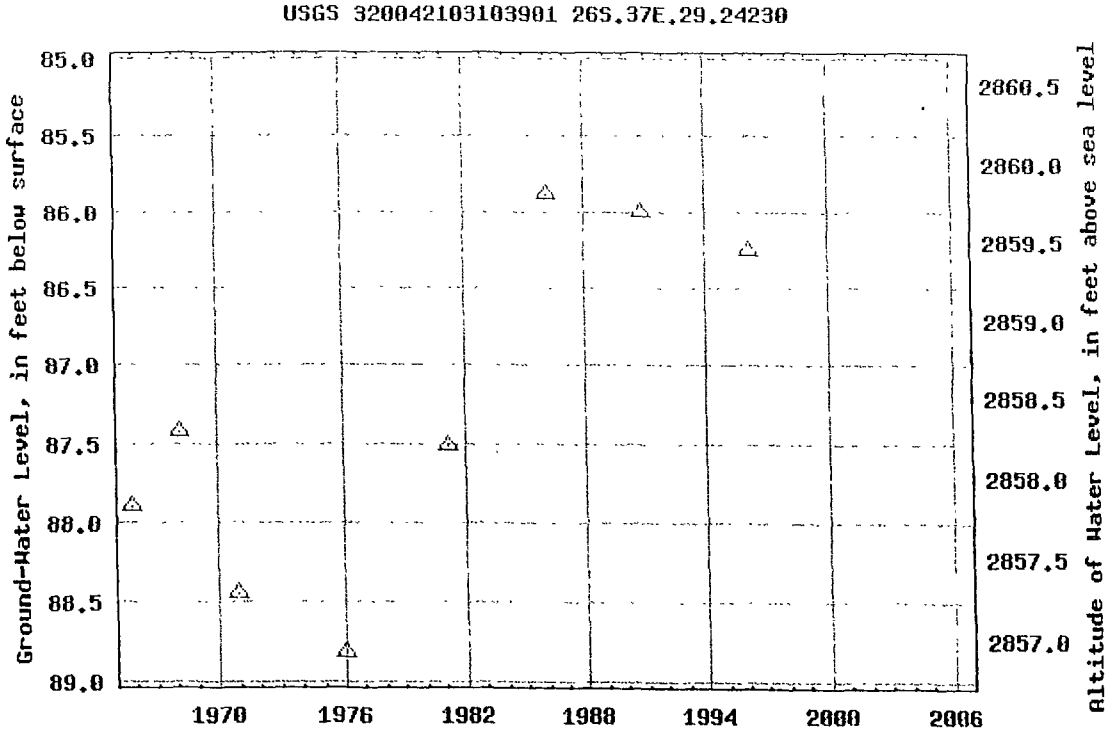
USGS 320042103103901 26S.37E.29.24230

Available data for this site Ground-water Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°00'42", Longitude 103°10'39" NAD27
Land-surface elevation 2,945.70 feet above sea level NGVD29
The depth of the well is 115 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320046103085101

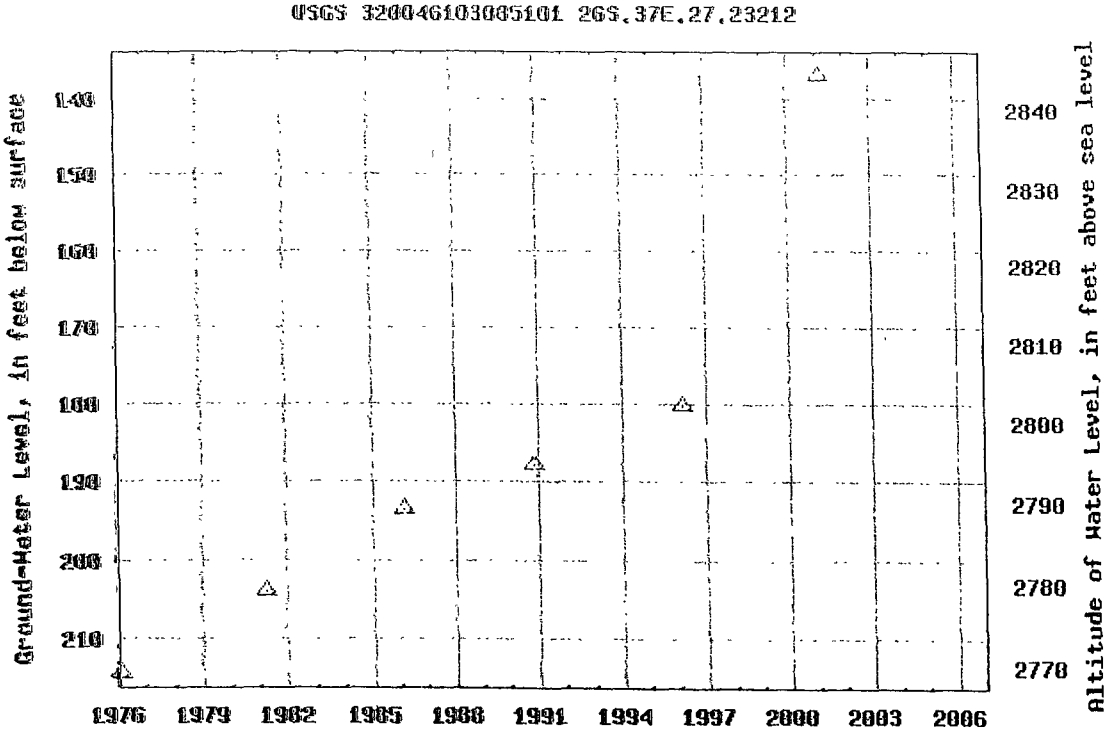
Save file of selected sites to local disk for future upload

USGS 320046103085101 26S.37E.27.23212

Available data for this site Ground-water Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°00'46", Longitude 103°08'51" NAD27
Land-surface elevation 2,982.20 feet above sea level NGVD29
The depth of the well is 525 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320104103120301

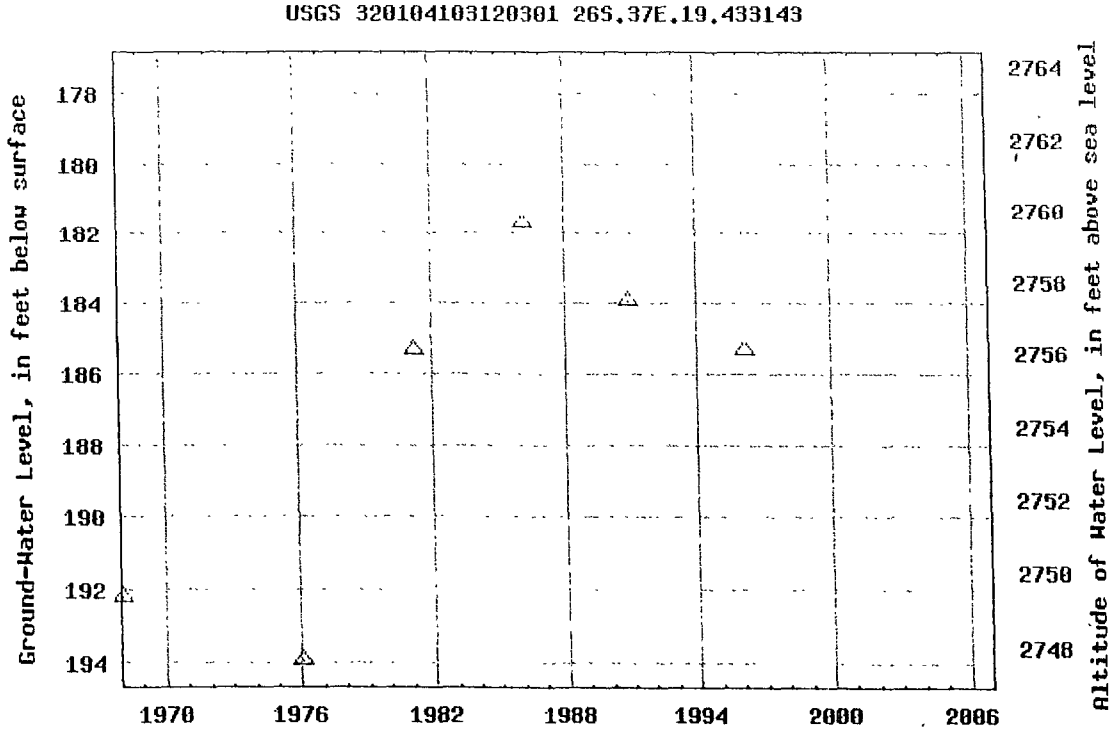
Save file of selected sites to local disk for future upload

USGS 320104103120301 26S.37E.19.433143

Available data for this site | EPA Surf your Watershed GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°01'04", Longitude 103°12'03" NAD27
Land-surface elevation 2,941.40 feet above sea level NGVD29
The depth of the well is 500 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320303103100901

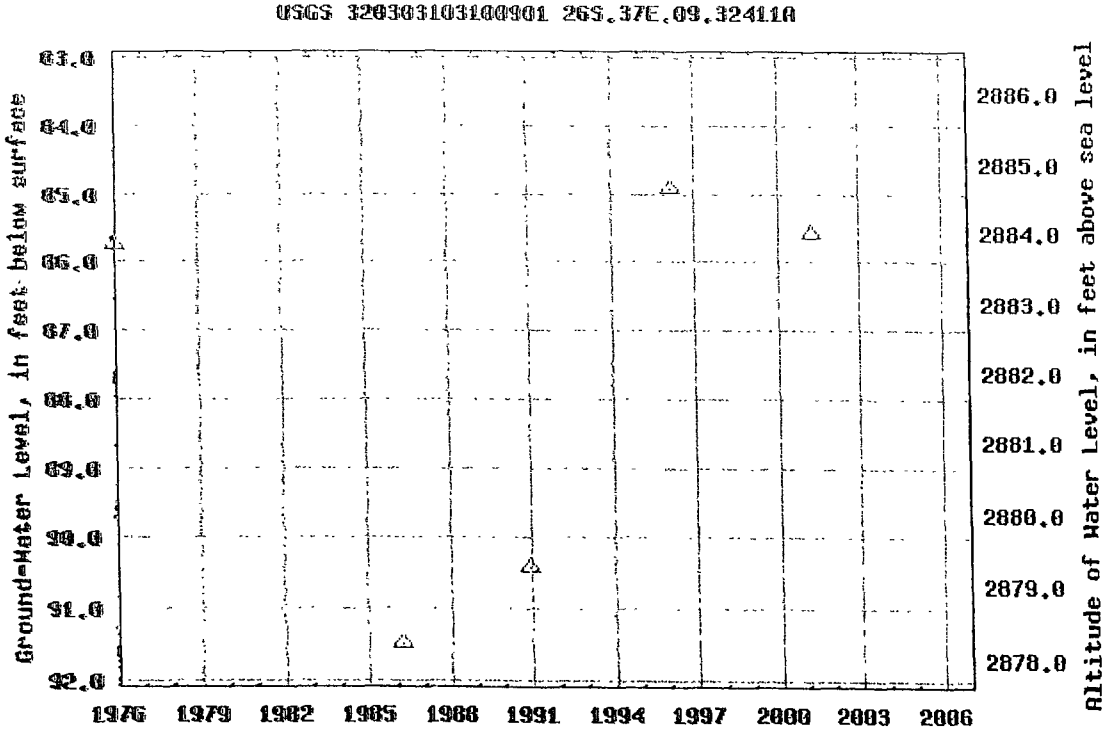
Save file of selected sites to local disk for future upload

USGS 320303103100901 26S.37E.09.32411A

Available data for this site | Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°03'03", Longitude 103°10'09" NAD27
Land-surface elevation 2,969.60 feet above sea level NGVD29
The depth of the well is 140 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = 320259103122201

Save file of selected sites to local disk for future upload

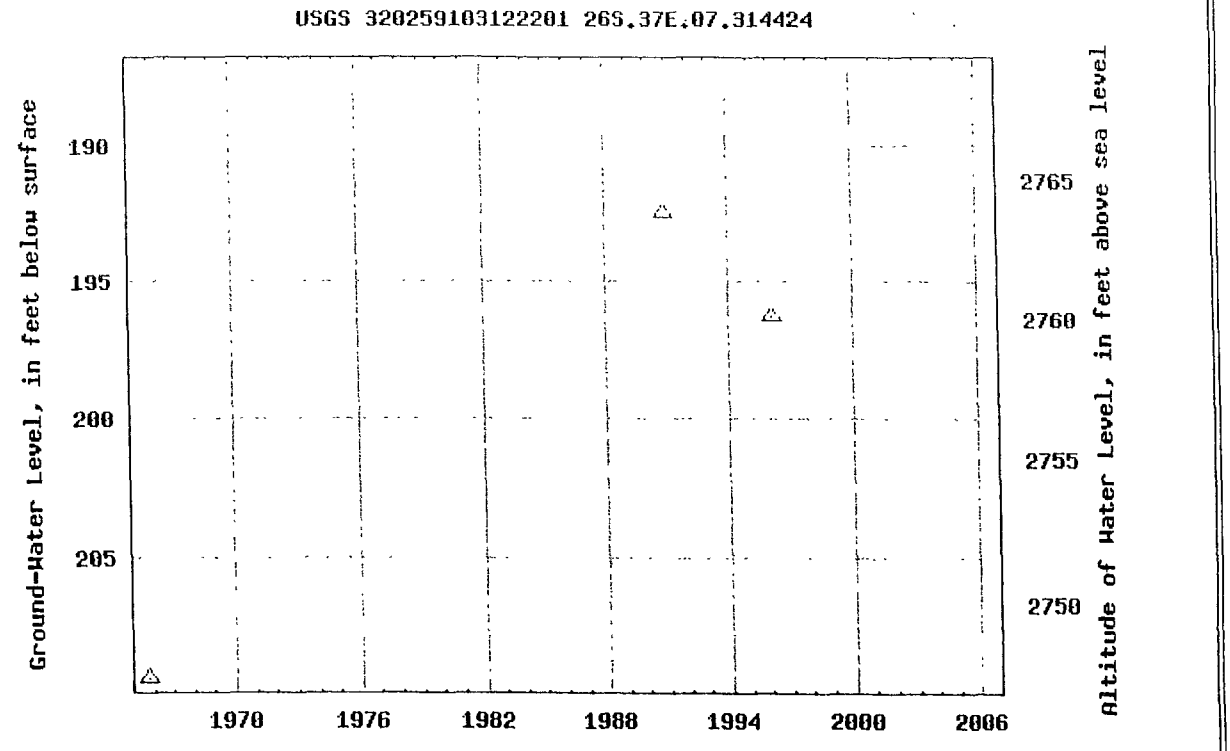
USGS 320259103122201 26S.37E.07.314424

Available data for this site Ground-water Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°02'59", Longitude 103°12'22" NAD27
Land-surface elevation 2,956.40 feet above sea level NGVD29
The depth of the well is 470 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = 320251103071401

Save file of selected sites to local disk for future upload

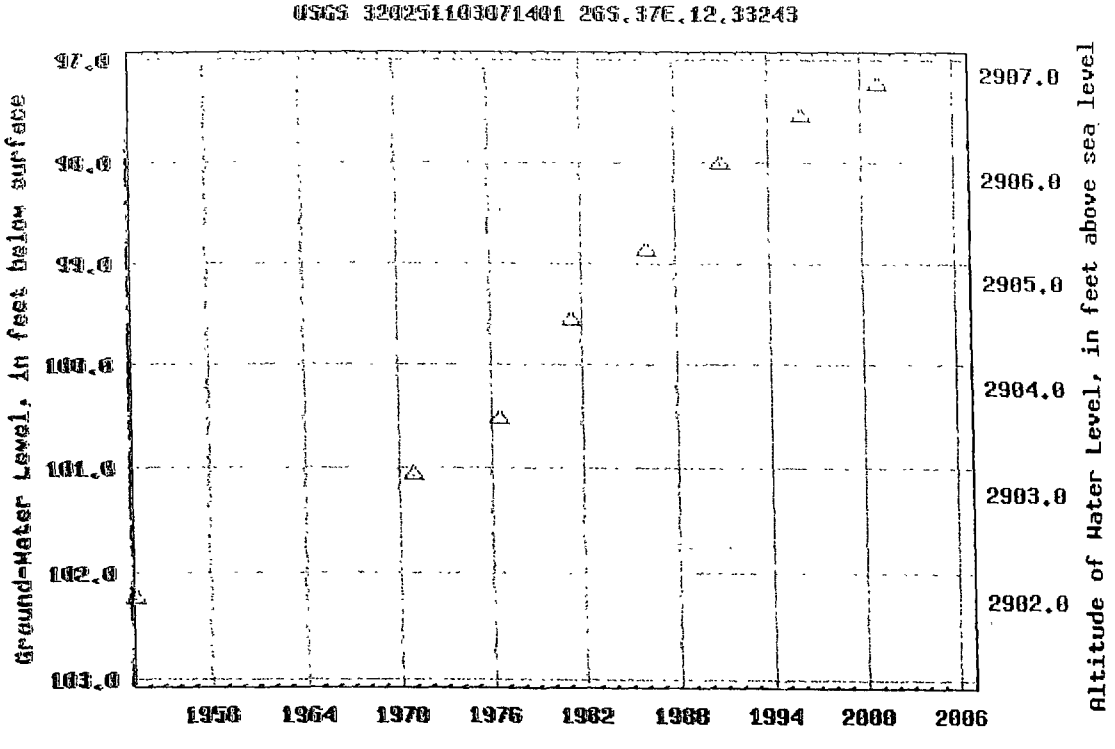
USGS 320251103071401 26S.37E.12.33243

Available data for this site Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°02'51", Longitude 103°07'14" NAD27
Land-surface elevation 3,004.20 feet above sea level NGVD29
The depth of the well is 160 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320309103080401

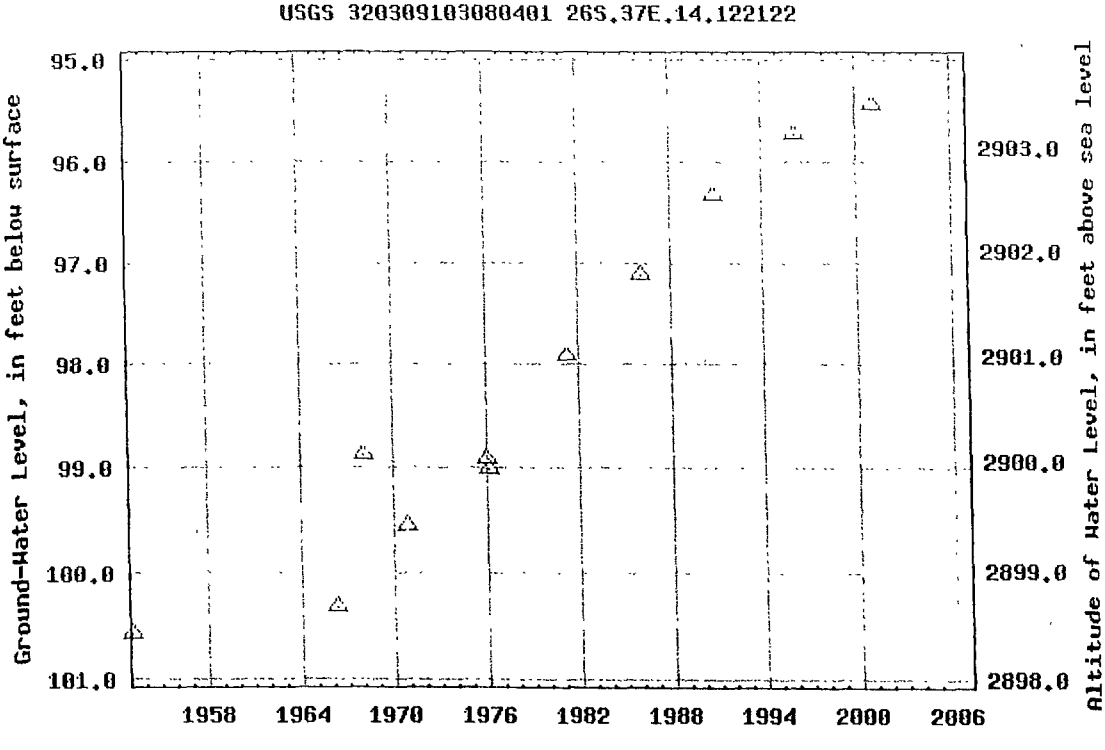
Save file of selected sites to local disk for future upload

USGS 320309103080401 26S.37E.14.122122

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code
Latitude 32°03'09", Longitude 103°08'04" NAD27
Land-surface elevation 2,998.90 feet above sea level NGVD29
The depth of the well is 131 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320918103211701

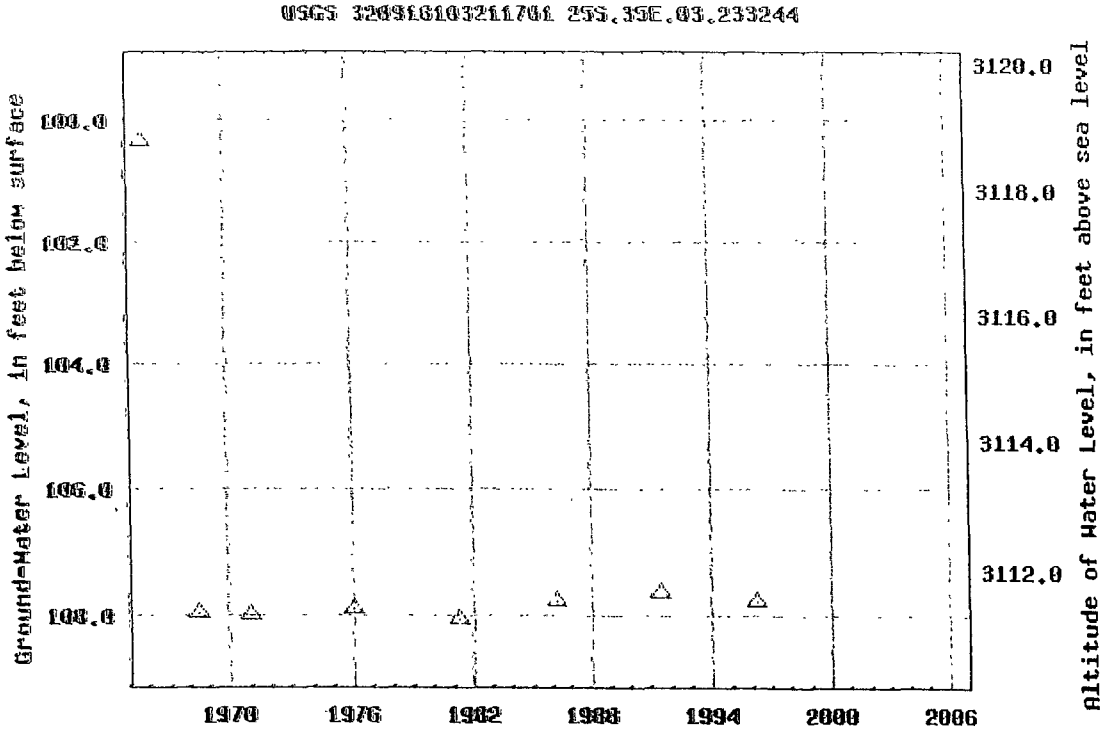
Save file of selected sites to local disk for future upload

USGS 320918103211701 25S.35E.03.233244

Available data for this site Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°09'18", Longitude 103°21'17" NAD27
Land-surface elevation 3,219.20 feet above sea level NGVD29
The depth of the well is 122 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320721103221201

Save file of selected sites to local disk for future upload

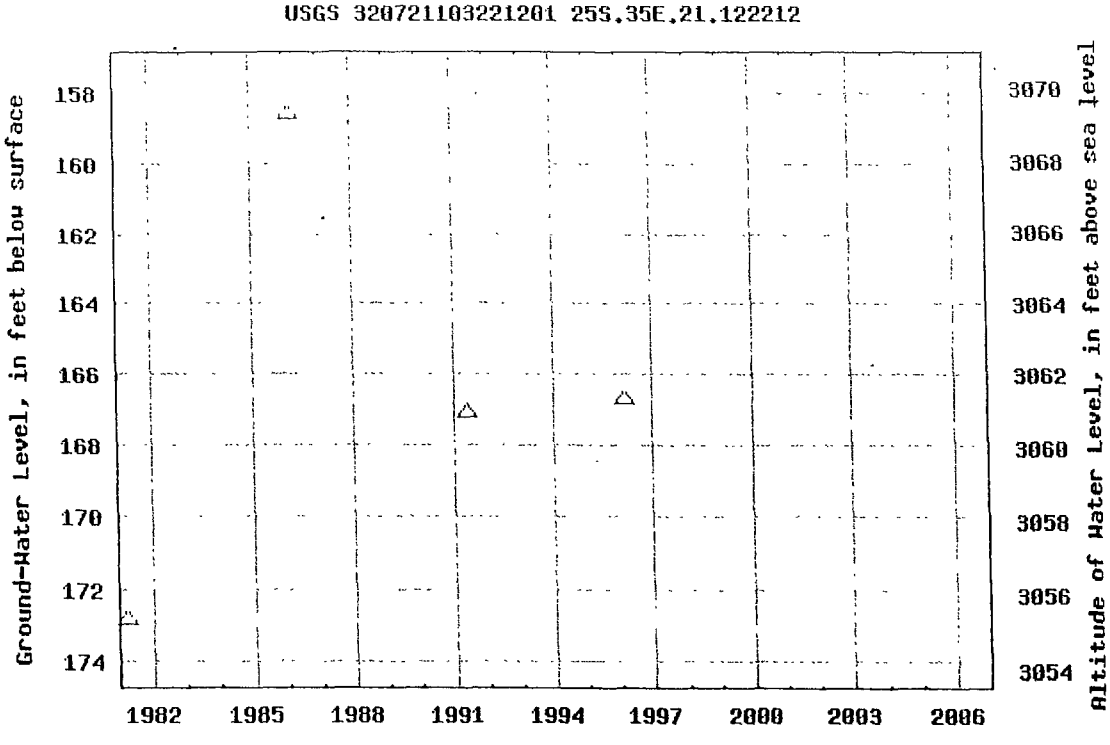
USGS 320721103221201 25S.35E.21.122212

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code
Latitude 32°07'21", Longitude 103°22'12" NAD27
Land-surface elevation 3,228.00 feet above sea level NGVD29
The depth of the well is 275 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320916103182501

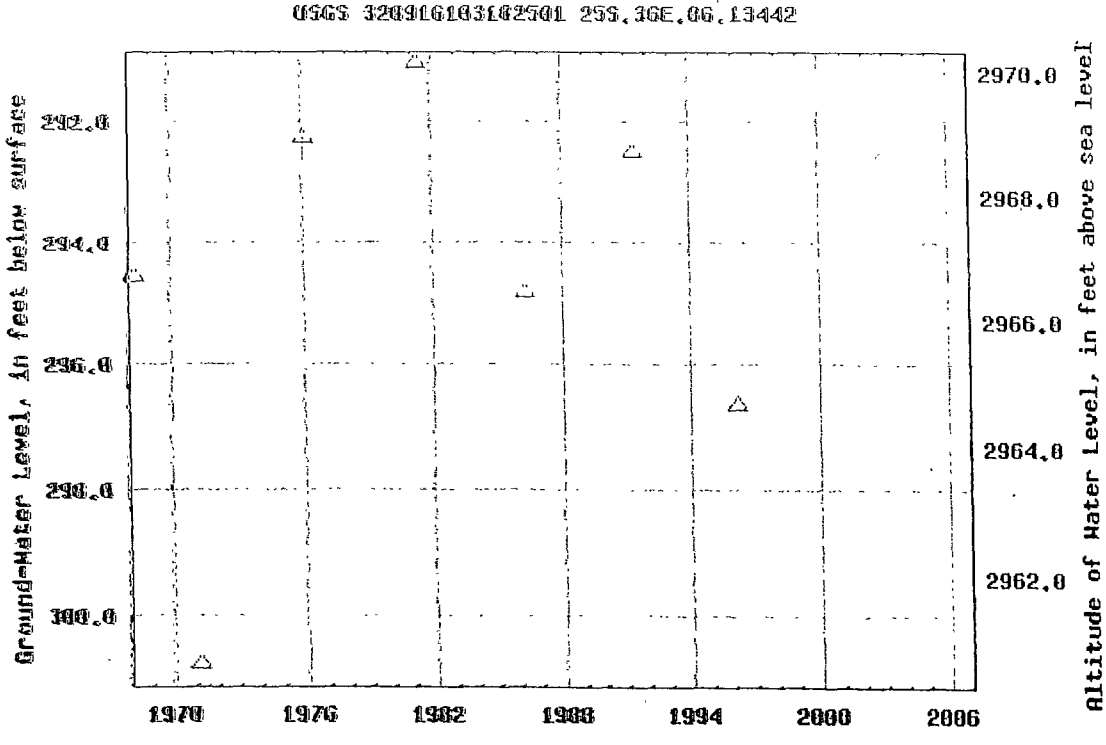
Save file of selected sites to local disk for future upload

USGS 320916103182501 25S.36E.06.13442

Available data for this site: Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°09'16", Longitude 103°18'25" NAD27
Land-surface elevation 3,261.30 feet above sea level NGVD29
The depth of the well is 605 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320813103152901

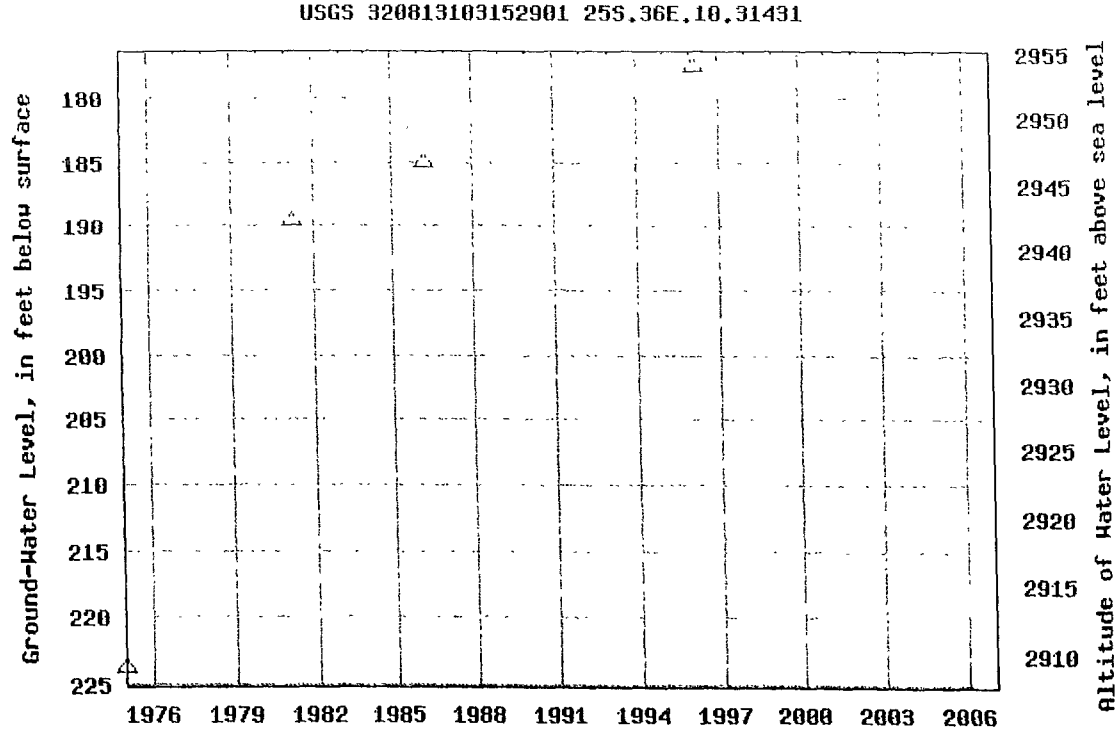
Save file of selected sites to local disk for future upload

USGS 320813103152901 25S.36E.10.31431

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°08'13", Longitude 103°15'29" NAD27
Land-surface elevation 3,132.10 feet above sea level NGVD29
The depth of the well is 512 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320639103071301

Save file of selected sites to local disk for future upload

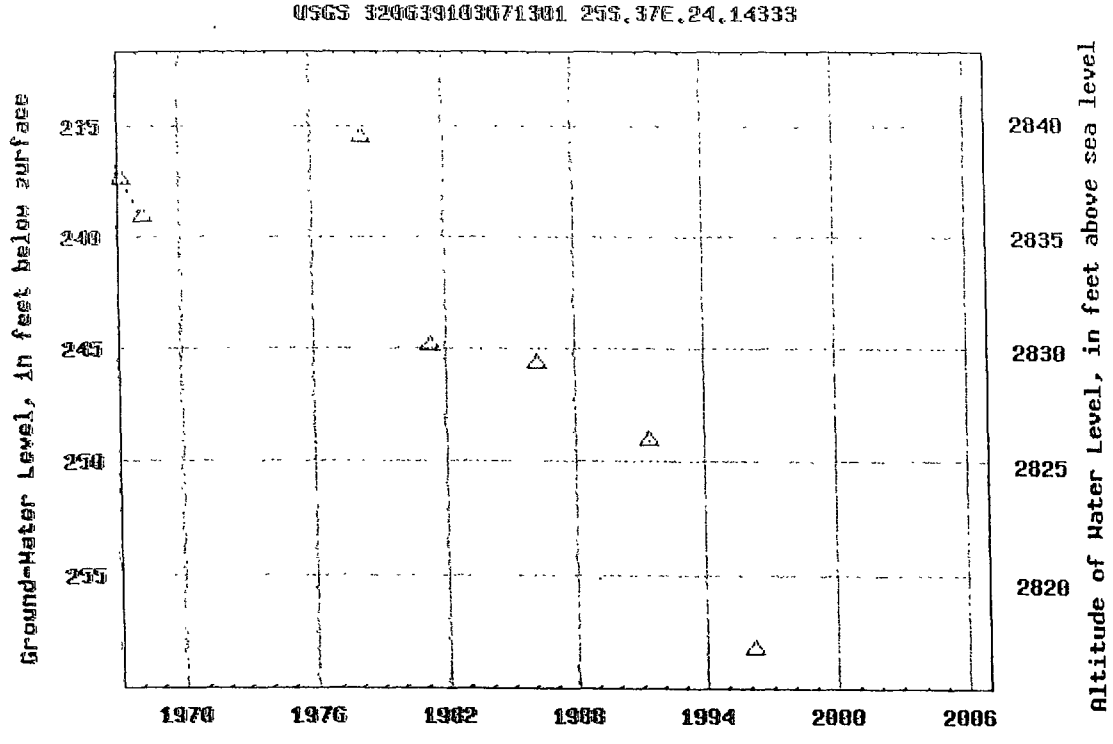
USGS 320639103071301 25S.37E.24.14333

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°06'39", Longitude 103°07'13" NAD27
Land-surface elevation 3,075.10 feet above sea level NGVD29
The depth of the well is 901 feet below land surface.
This well is completed in the RUSTLER FORMATION (312RSLR) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320651103110202

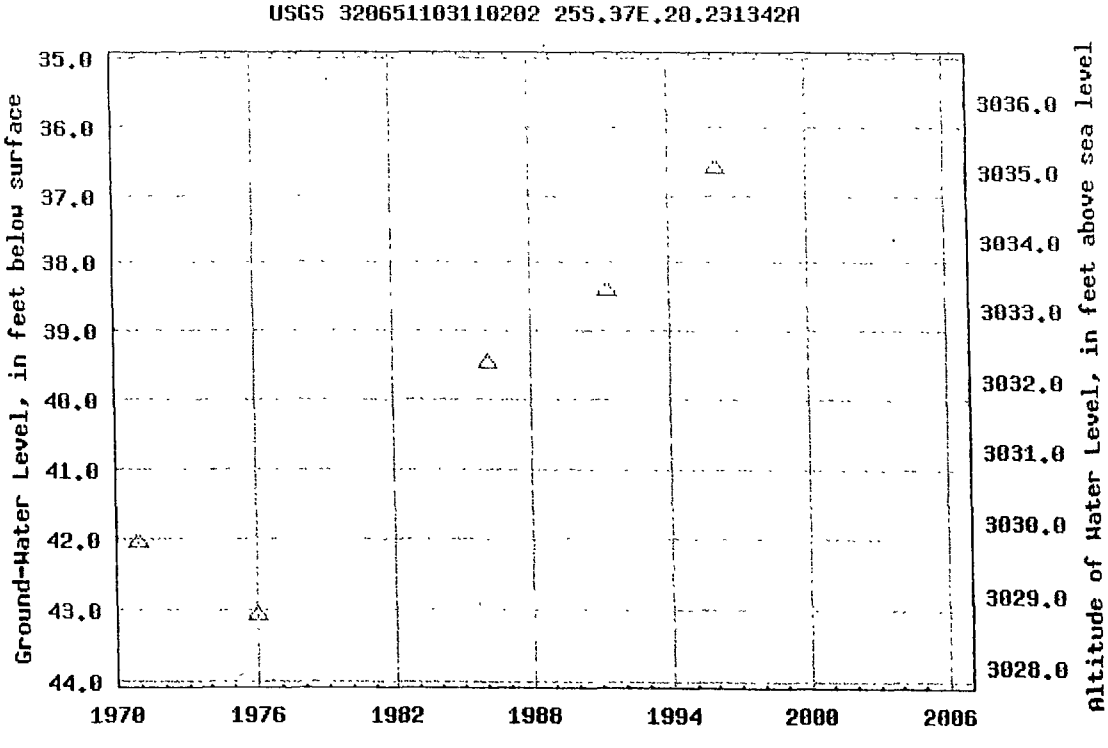
Save file of selected sites to local disk for future upload

USGS 320651103110202 25S.37E.20.231342A

Available data for this site | Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°06'51", Longitude 103°11'02" NAD27
Land-surface elevation 3,071.70 feet above sea level NGVD29
The depth of the well is 510 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320724103071502

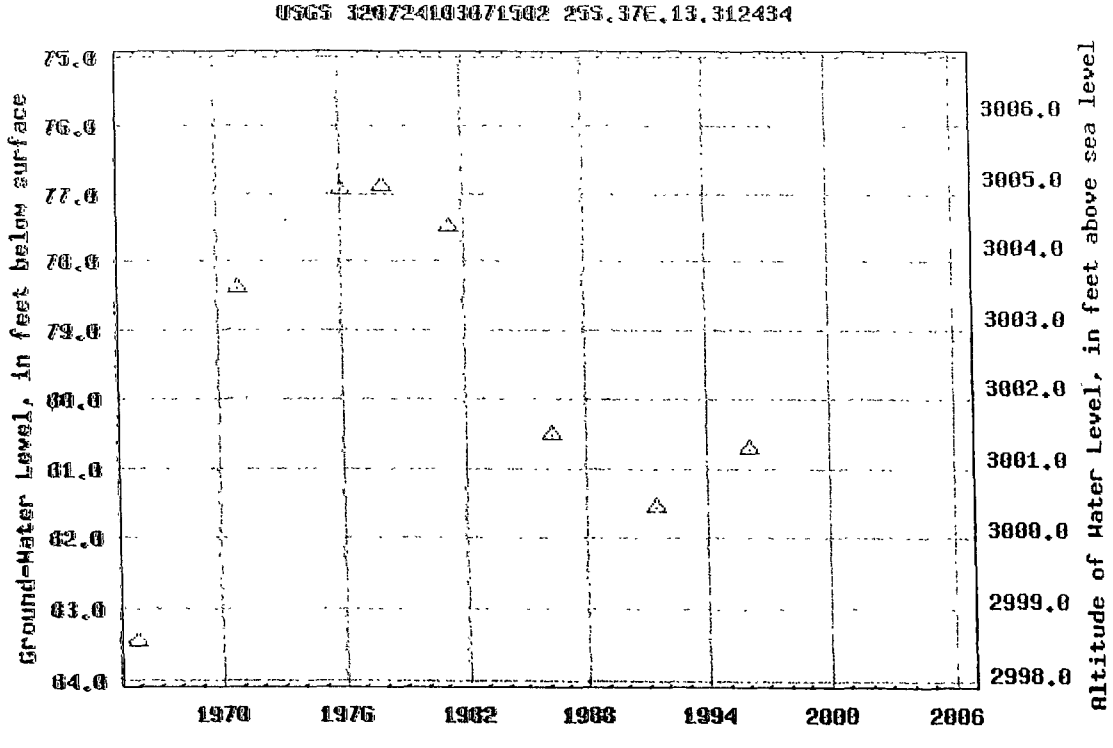
Save file of selected sites to local disk for future upload

USGS 320724103071502 25S.37E.13.312434

Available data for this site: Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'24", Longitude 103°07'15" NAD27
Land-surface elevation 3,081.80 feet above sea level NGVD29
The depth of the well is 145 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320634103083901

Save file of selected sites to local disk for future upload

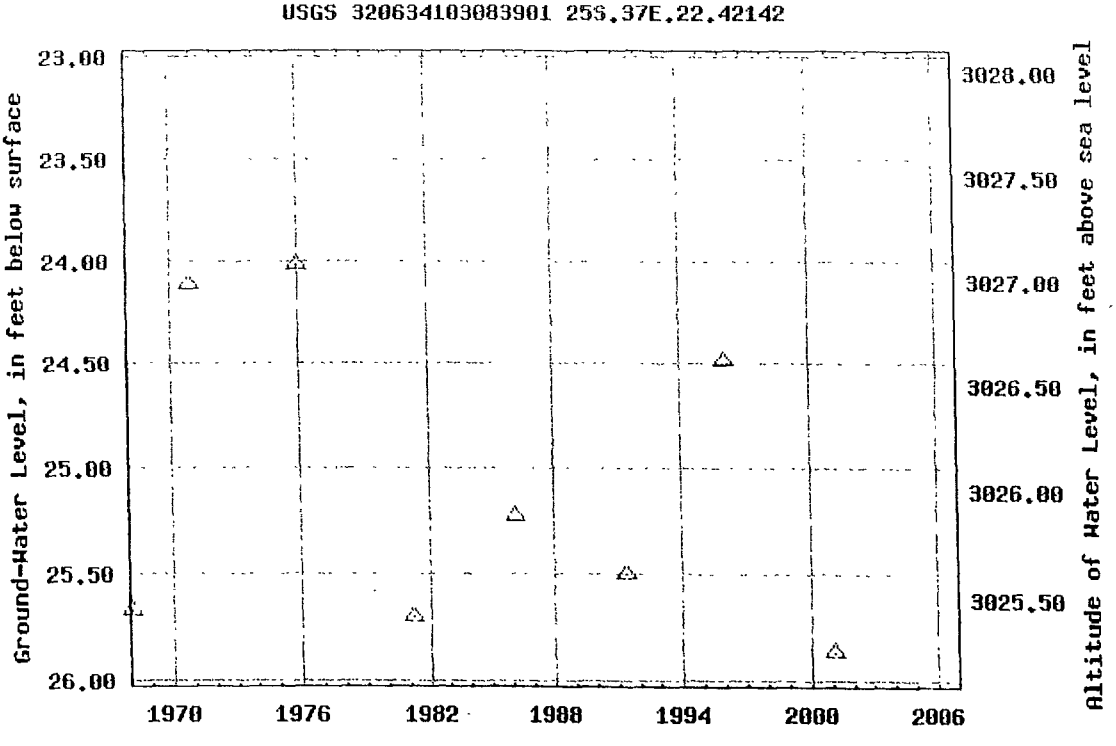
USGS 320634103083901 25S.37E.22.42142

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°06'34", Longitude 103°08'39" NAD27
Land-surface elevation 3,051.10 feet above sea level NGVD29
The depth of the well is 42 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320510103101301

Save file of selected sites to local disk for future upload

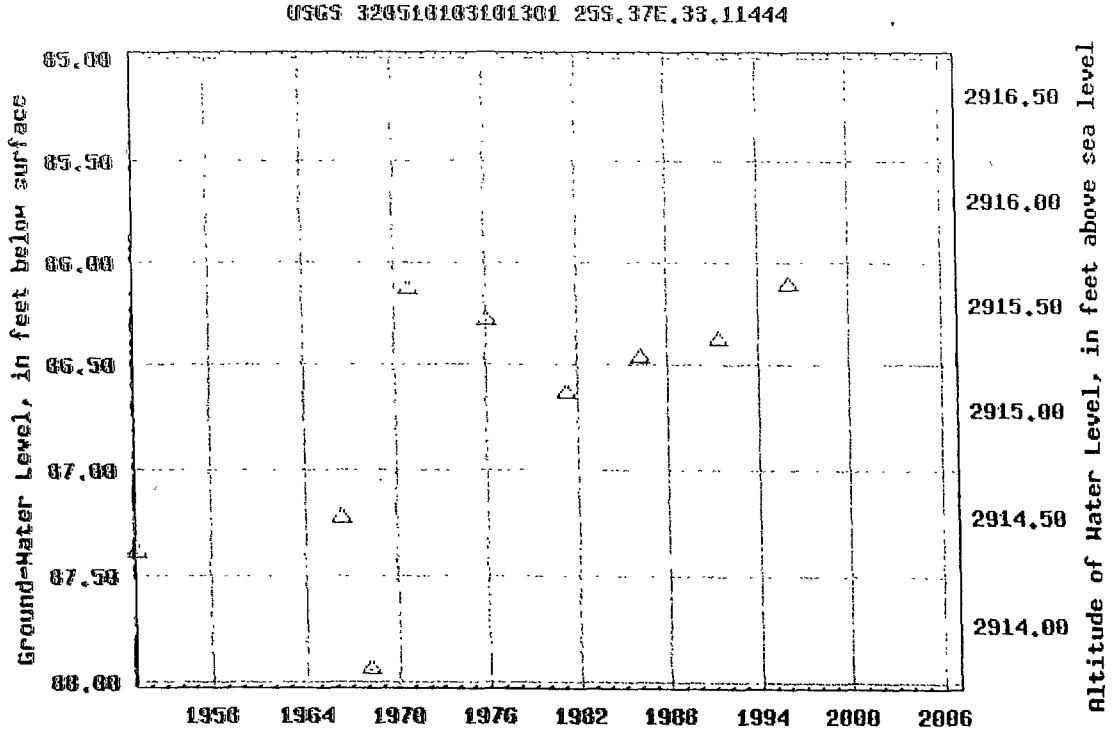
USGS 320510103101301 25S.37E.33.11444

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°05'10", Longitude 103°10'13" NAD27
Land-surface elevation 3,001.70 feet above sea level NGVD29
The depth of the well is 105 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320547103065702

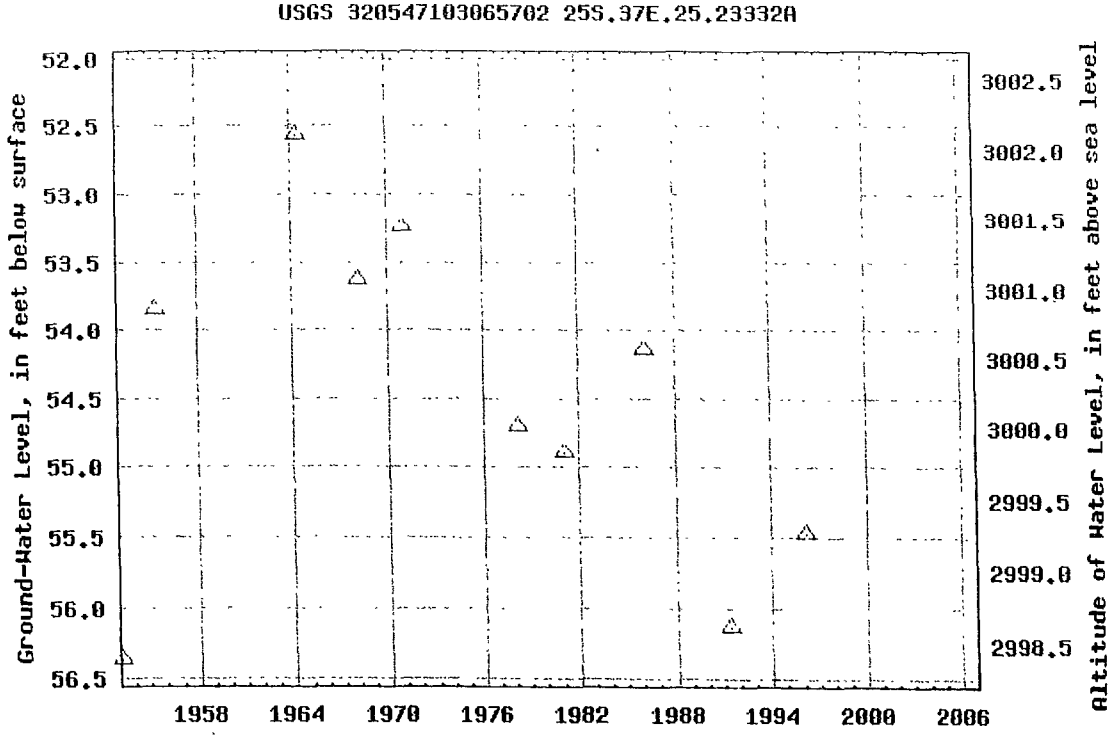
Save file of selected sites to local disk for future upload

USGS 320547103065702 25S.37E.25.23332A

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°05'47", Longitude 103°06'57" NAD27
Land-surface elevation 3,054.70 feet above sea level NGVD29
The depth of the well is 62 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320550103081001

Save file of selected sites to local disk for future upload

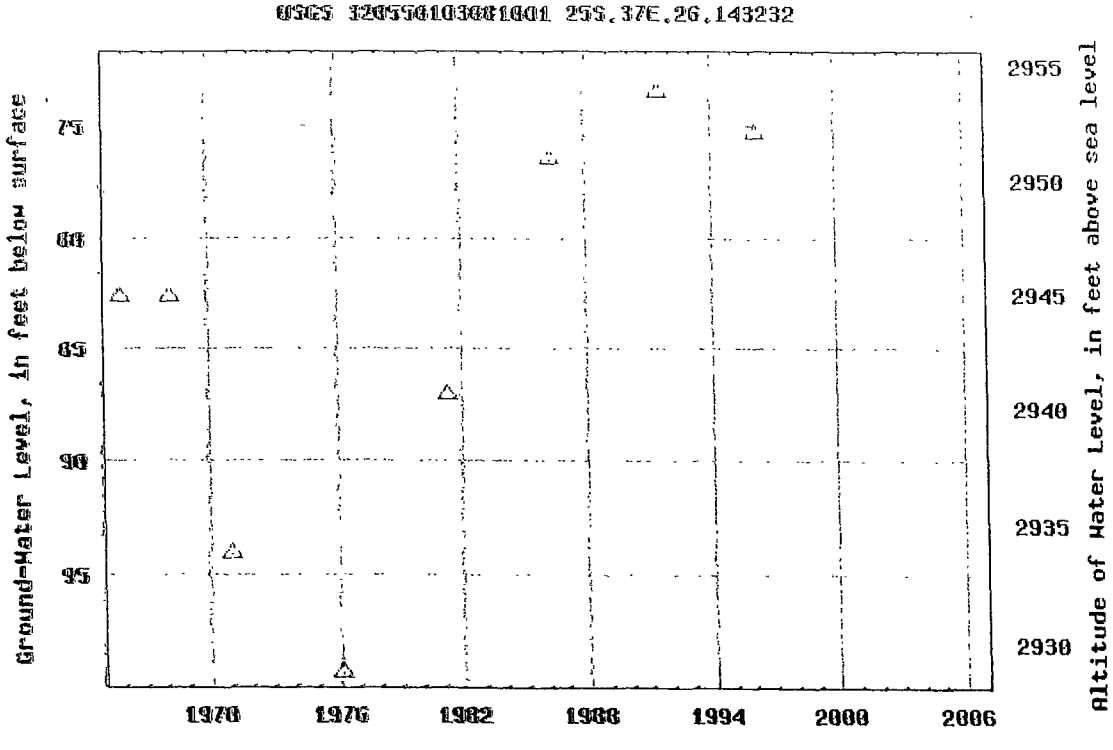
USGS 320550103081001 25S.37E.26.143232

Available data for this site Ground-water. Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°05'50", Longitude 103°08'10" NAD27
Land-surface elevation 3,027.60 feet above sea level NGVD29
The depth of the well is 106 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320730103114801

Save file of selected sites to local disk for future upload

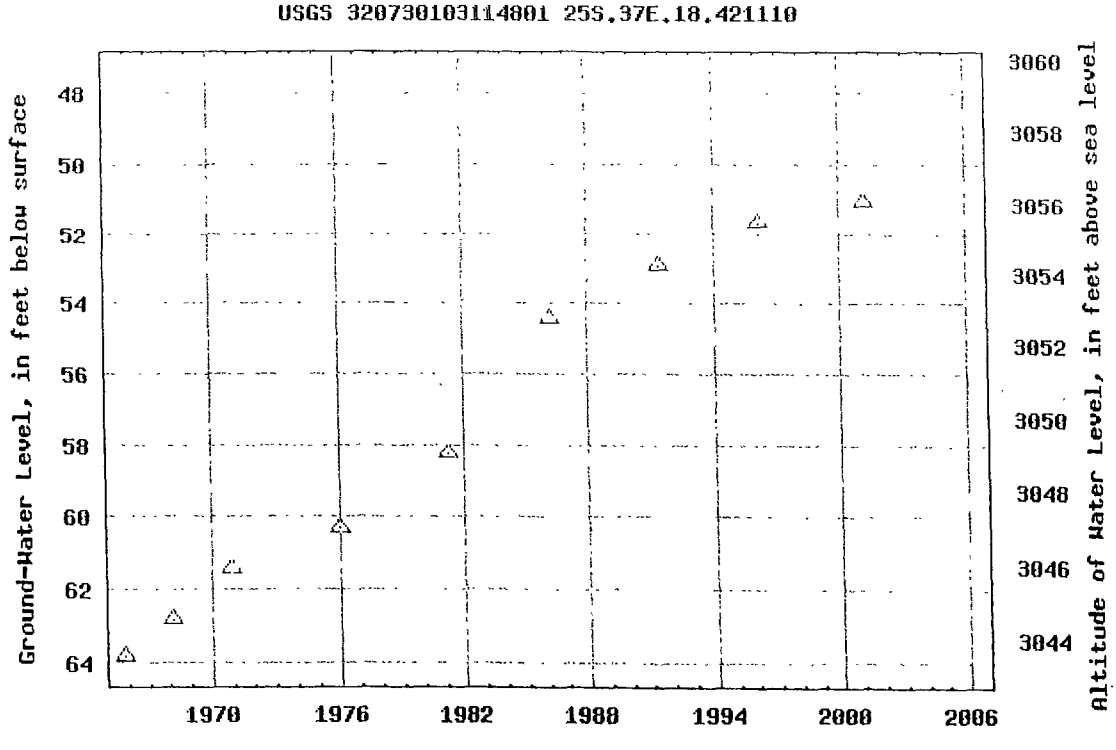
USGS 320730103114801 25S.37E.18.421110

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°07'30", Longitude 103°11'48" NAD27
Land-surface elevation 3,107.20 feet above sea level NGVD29
The depth of the well is 100 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320823103082901

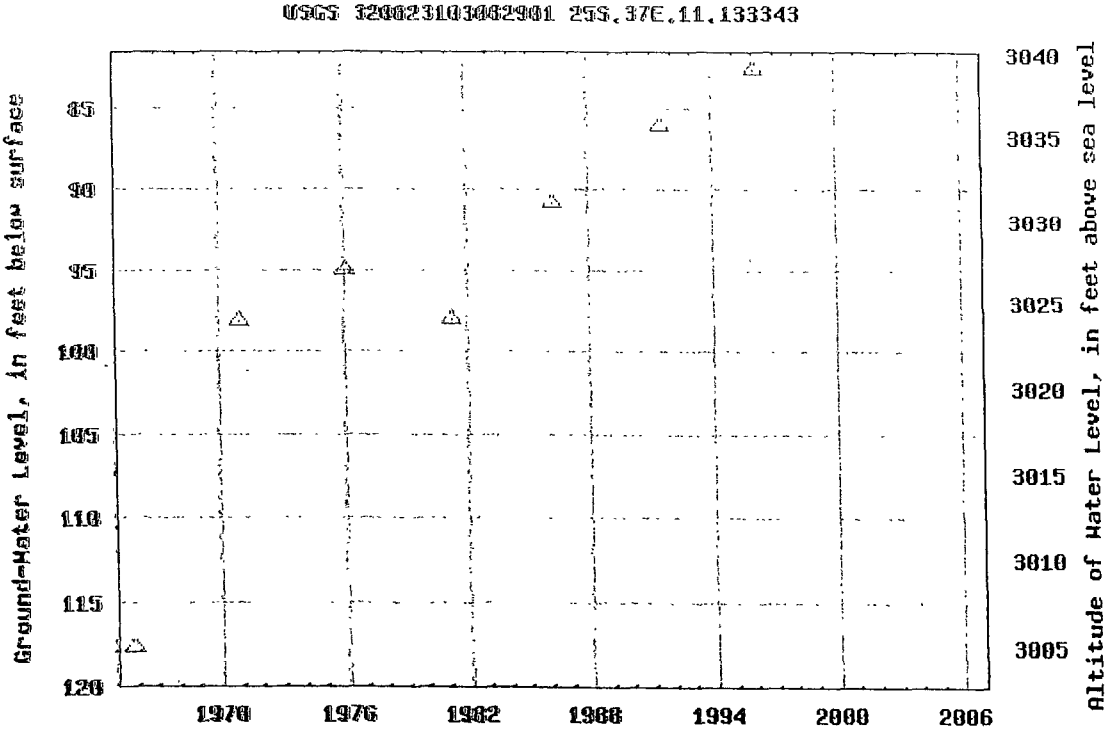
Save file of selected sites to local disk for future upload

USGS 320823103082901 25S.37E.11.133343

Available data for this site Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°08'23", Longitude 103°08'29" NAD27
Land-surface elevation 3,122.10 feet above sea level NGVD29
The depth of the well is 192 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320850103080501

Save file of selected sites to local disk for future upload

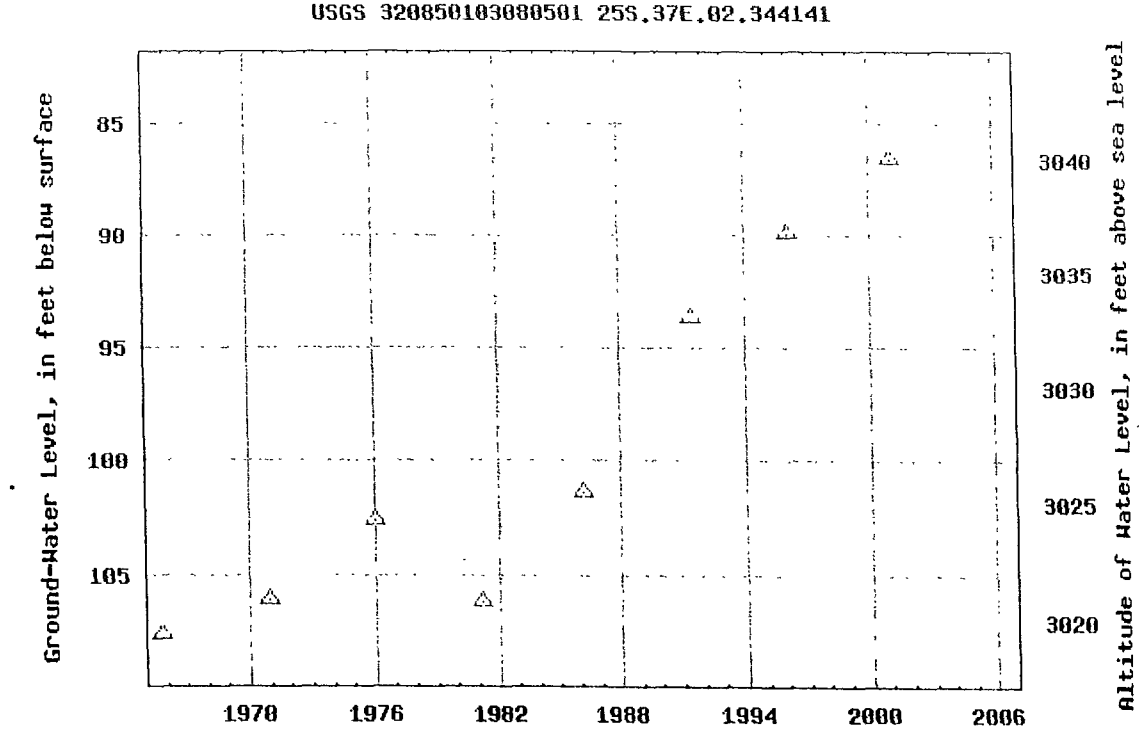
USGS 320850103080501 25S.37E.02.344141

Available data for this site Ground-water Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°08'50", Longitude 103°08'05" NAD27
Land-surface elevation 3,126.70 feet above sea level NGVD29
The depth of the well is 154 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321003103085201

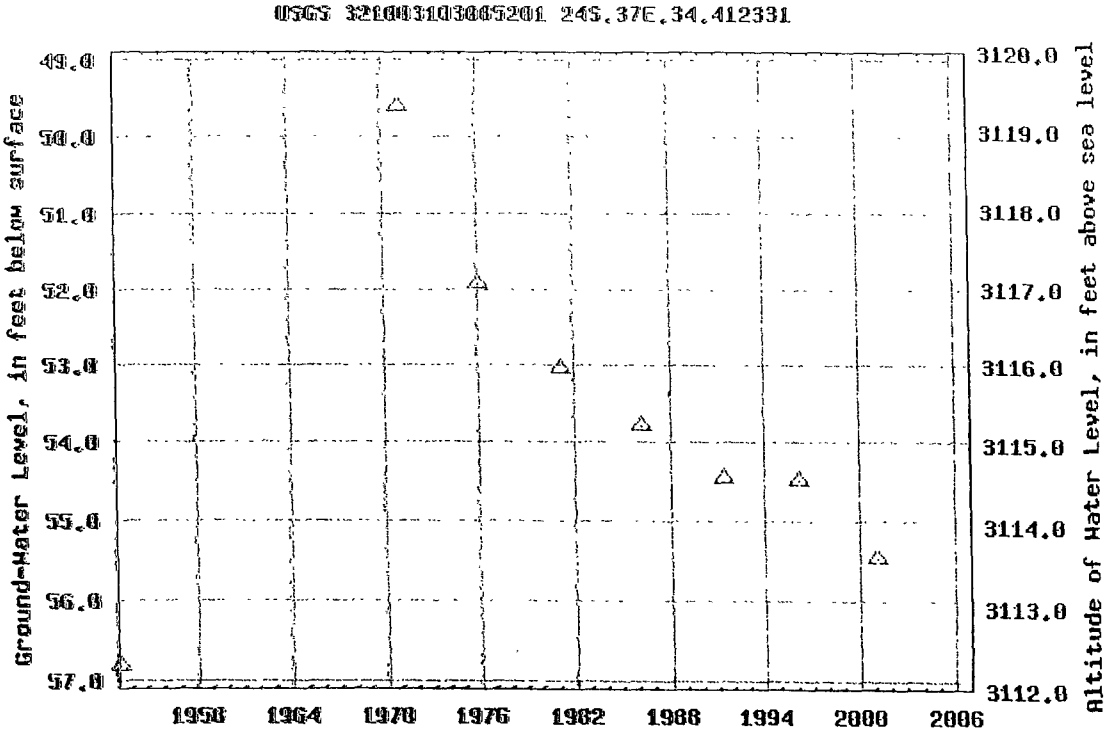
Save file of selected sites to local disk for future upload

USGS 321003103085201 24S.37E.34.412331

Available data for this site | Ground-water Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°10'03", Longitude 103°08'52" NAD27
Land-surface elevation 3,169.00 feet above sea level NGVD29
The depth of the well is 75 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321050103090301

Save file of selected sites to local disk for future upload

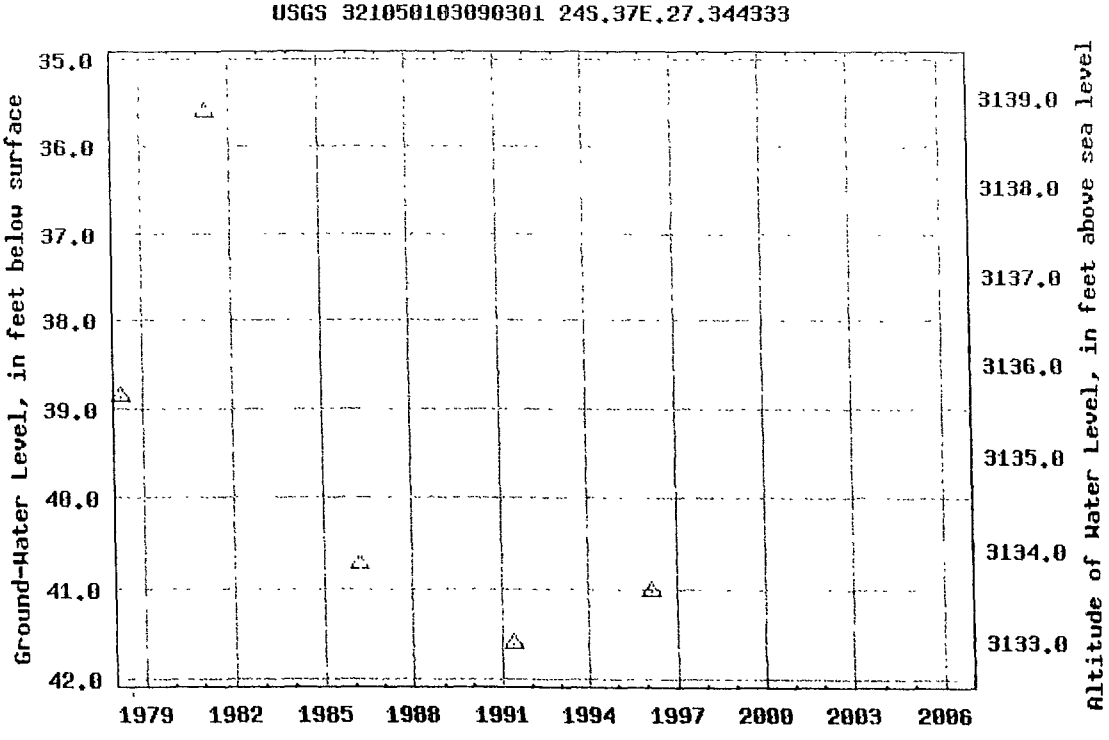
USGS 321050103090301 24S.37E.27.344333

Available data for this site Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code
Latitude 32°10'50", Longitude 103°09'03" NAD27
Land-surface elevation 3,174.50 feet above sea level NGVD29
The depth of the well is 84 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321105103064901

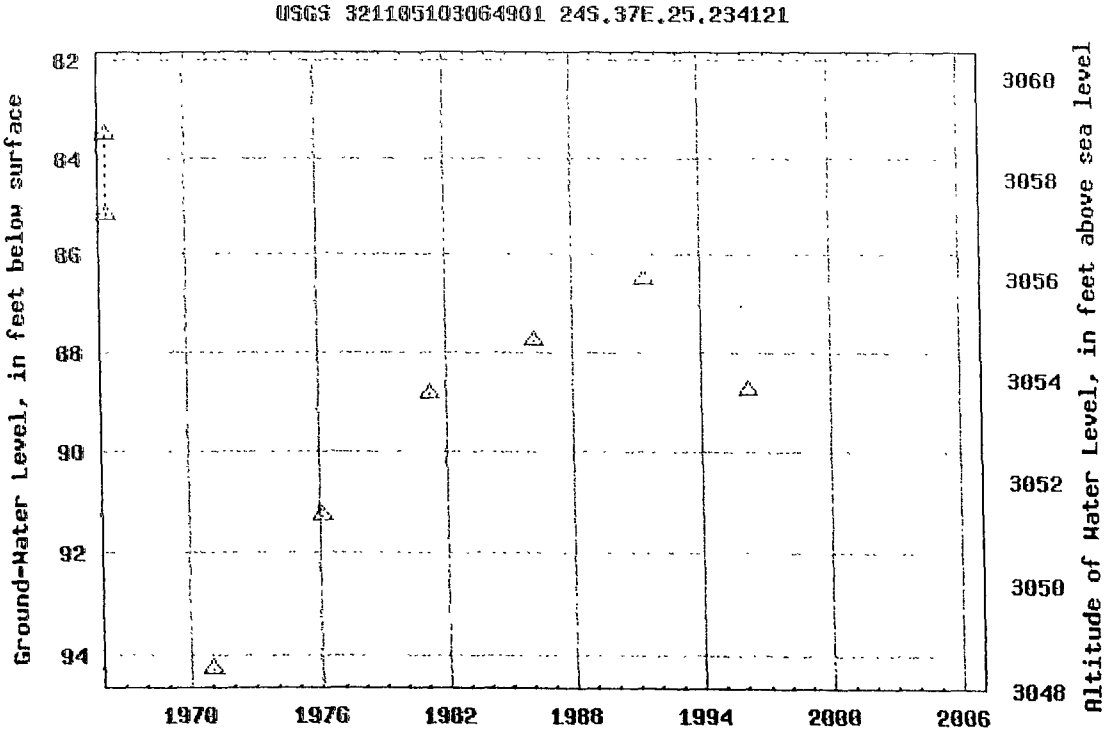
Save file of selected sites to local disk for future upload

USGS 321105103064901 24S.37E.25.234121

Available data for this site | Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°11'05", Longitude 103°06'49" NAD27
Land-surface elevation 3,142.50 feet above sea level NGVD29
The depth of the well is 135 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321125103093001

Save file of selected sites to local disk for future upload

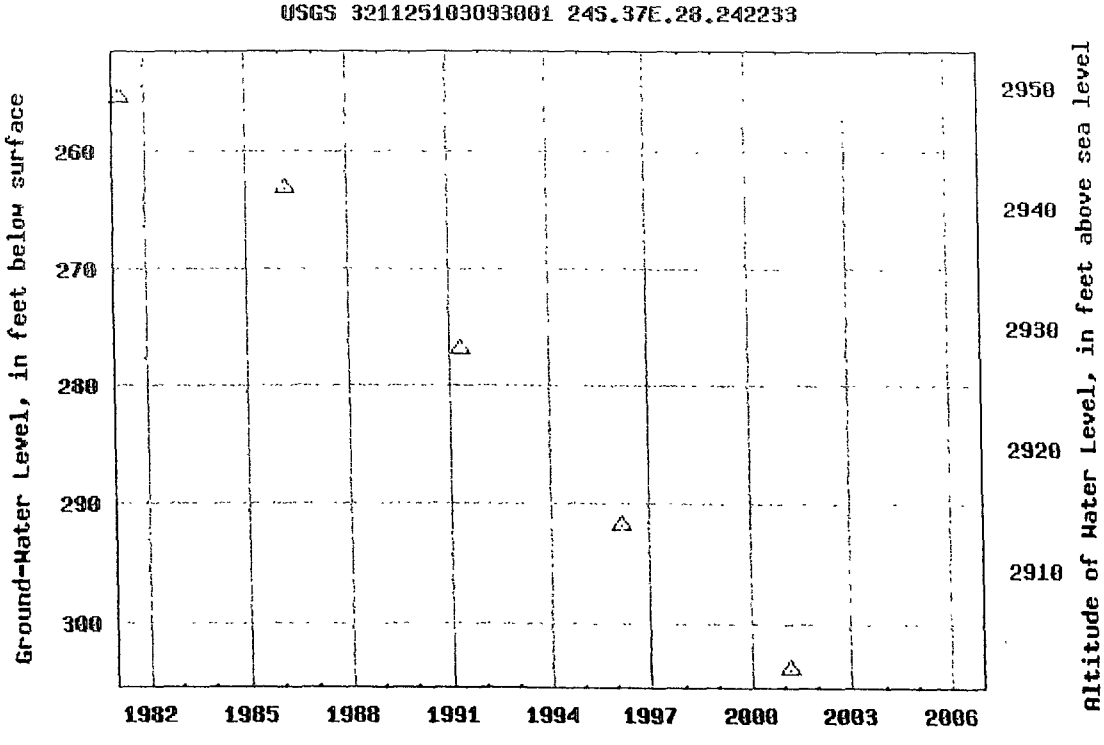
USGS 321125103093001 24S.37E.28.242233

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code
Latitude 32°11'25", Longitude 103°09'30" NAD27
Land-surface elevation 3,205.00 feet above sea level NGVD29
The depth of the well is 770 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321045103092301

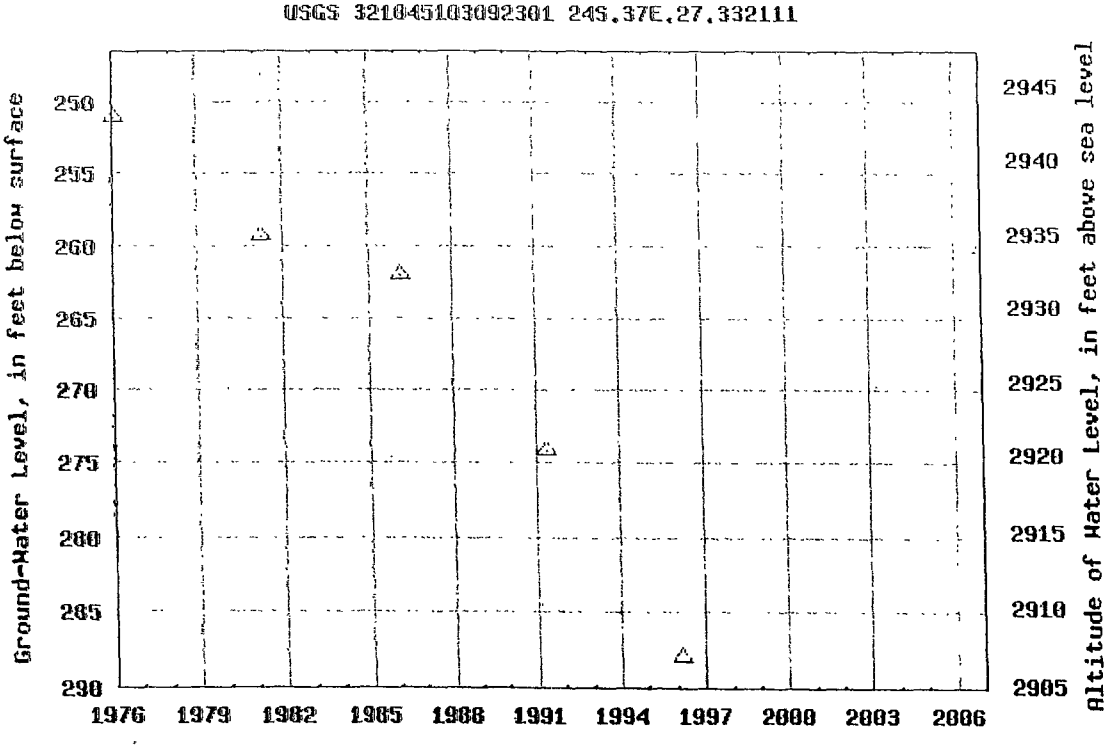
Save file of selected sites to local disk for future upload

USGS 321045103092301 24S.37E.27.332111

Available data for this site: Ground-water Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°10'45", Longitude 103°09'23" NAD27
Land-surface elevation 3,194.20 feet above sea level NGVD29
The depth of the well is 830 feet below land surface.
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321235103094701

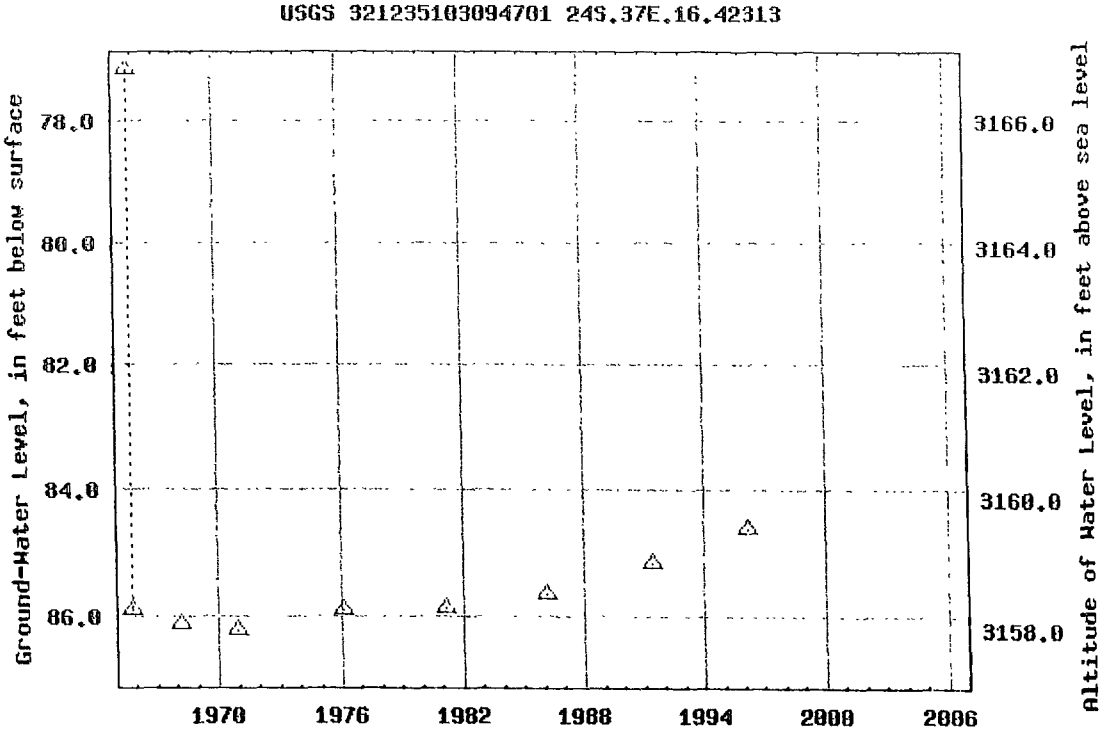
Save file of selected sites to local disk for future upload

USGS 321235103094701 24S.37E.16.42313

Available data for this site | Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°12'35", Longitude 103°09'47" NAD27
Land-surface elevation 3,244.10 feet above sea level NGVD29
The depth of the well is 150 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321312103080602

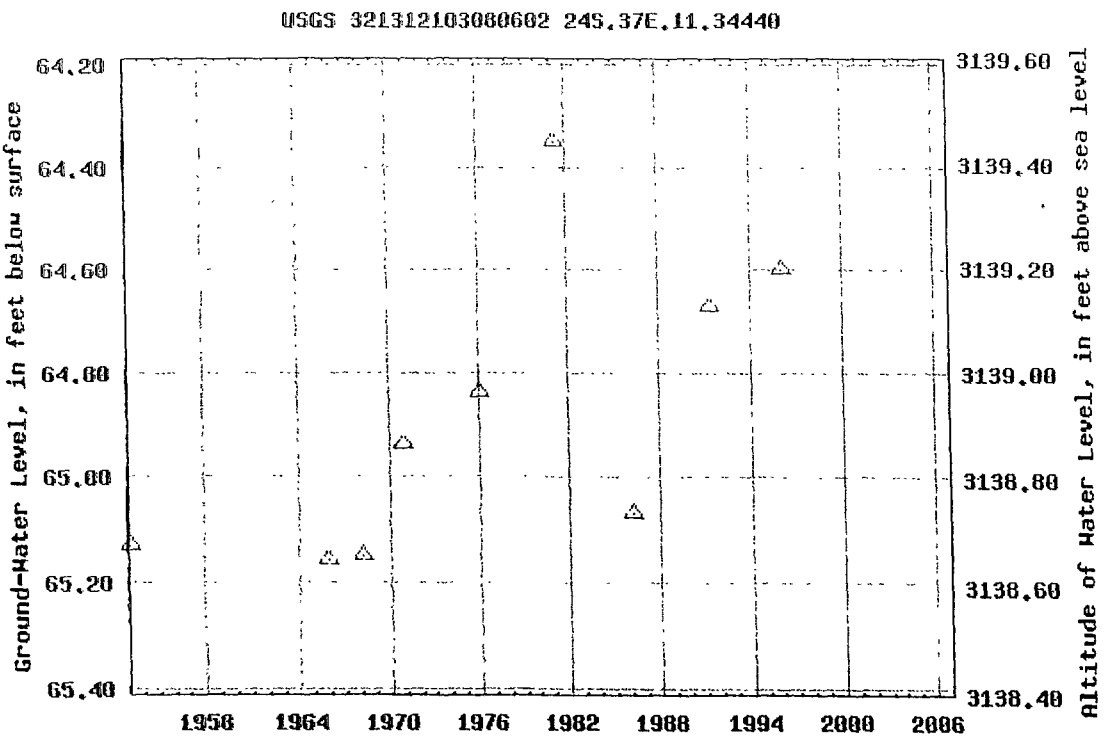
Save file of selected sites to local disk for future upload

USGS 321312103080602 24S.37E.11.34440

Available data for this site | Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°13'12", Longitude 103°08'06" NAD27
Land-surface elevation 3,203.80 feet above sea level NGVD29
The depth of the well is 80 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321219103120401

Save file of selected sites to local disk for future upload

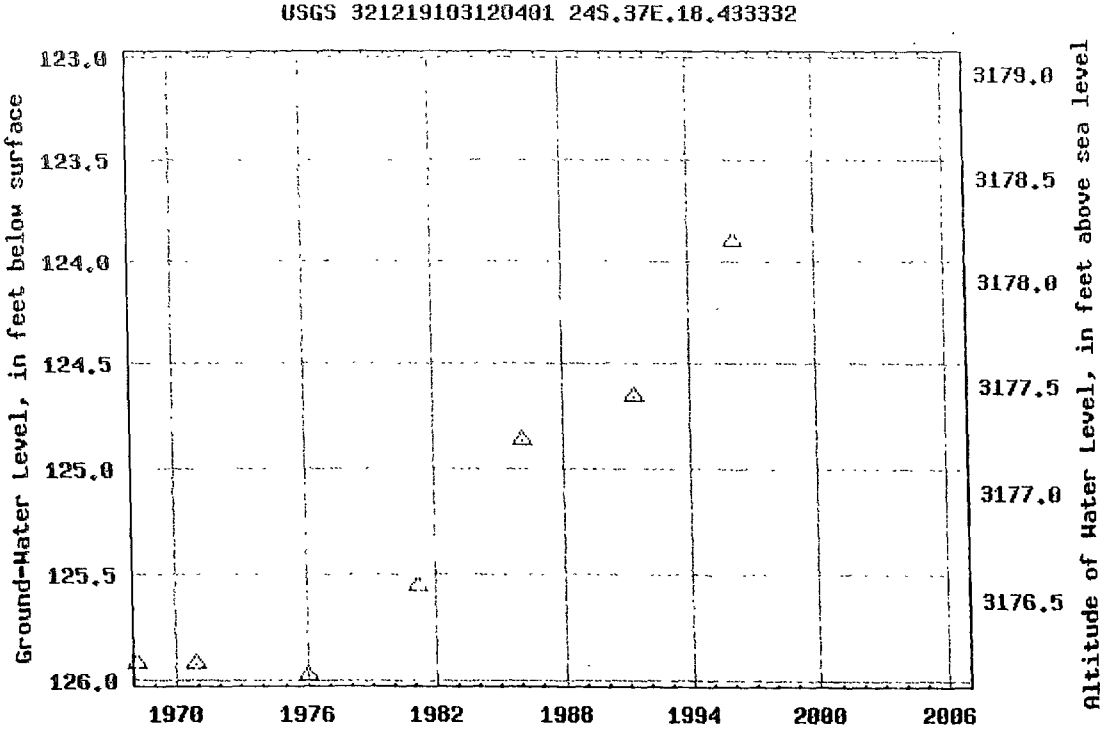
USGS 321219103120401 24S.37E.18.433332

Available data for this site | Ground-water: Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°12'19", Longitude 103°12'04" NAD27
Land-surface elevation 3,302.10 feet above sea level NGVD29
The depth of the well is 150 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321316103094001

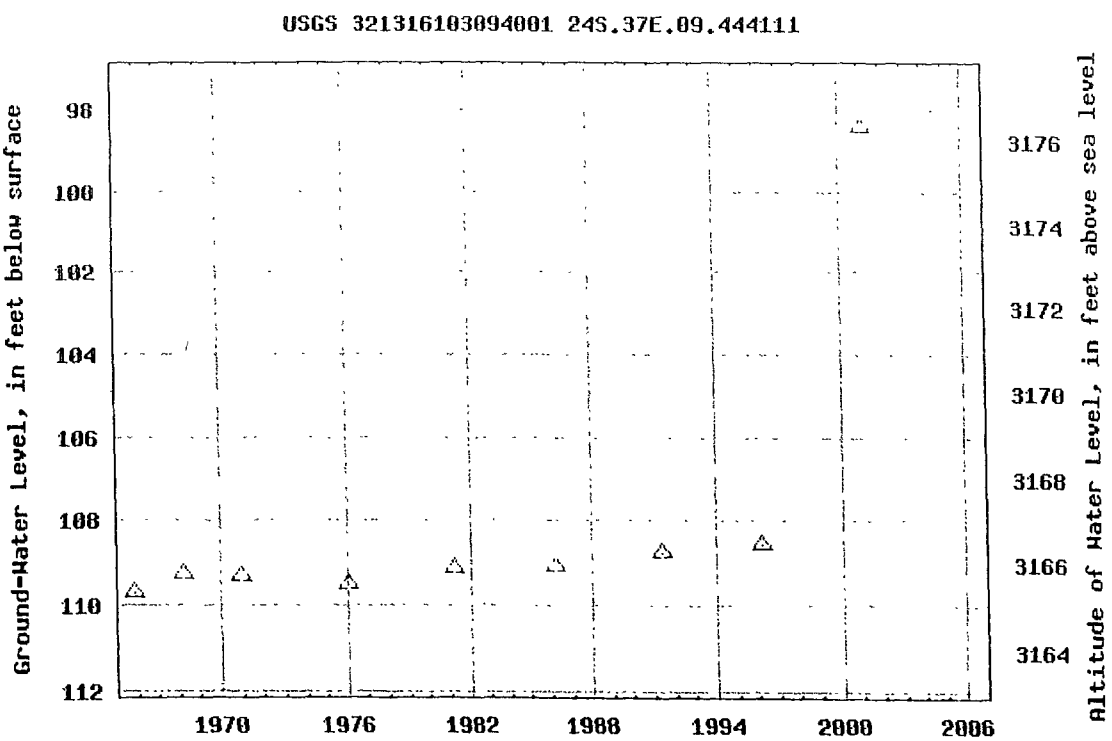
Save file of selected sites to local disk for future upload

USGS 321316103094001 24S.37E.09.444111

Available data for this site Ground-water: Levels GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°13'16", Longitude 103°09'40" NAD27
Land-surface elevation 3,274.90 feet above sea level NGVD29
The depth of the well is 160 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321319103115701

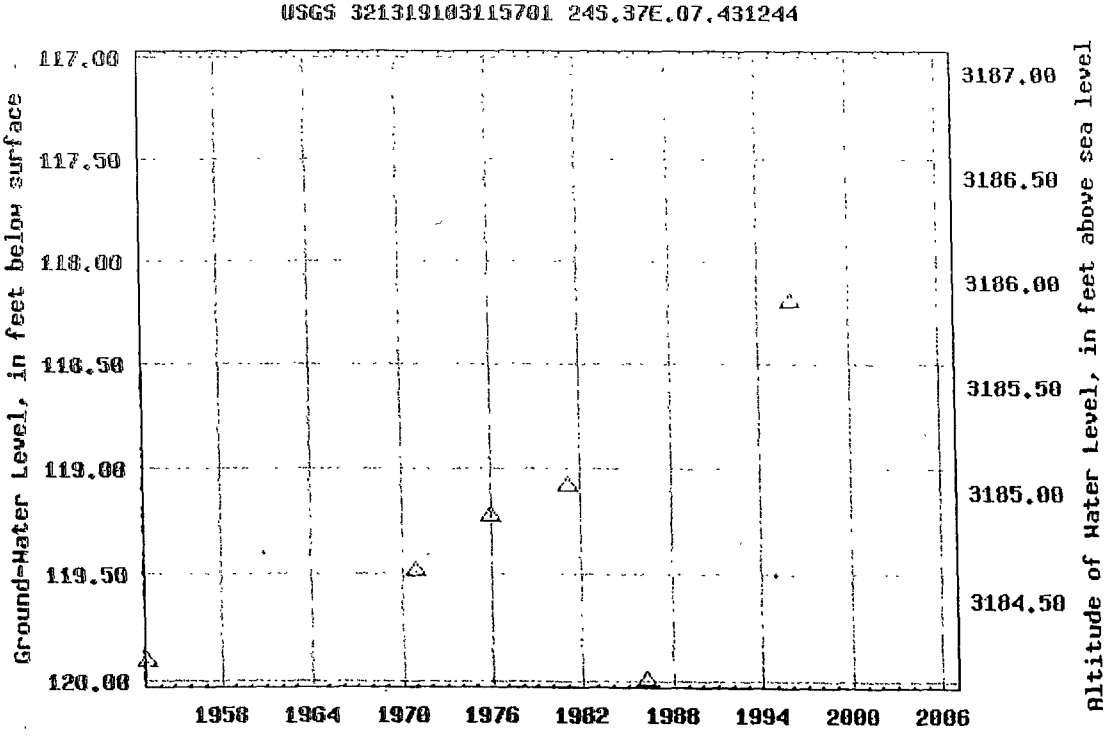
Save file of selected sites to local disk for future upload

USGS 321319103115701 24S.37E.07.431244

Available data for this site | Ground-water Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°13'19", Longitude 103°11'57" NAD27
Land-surface elevation 3,304.10 feet above sea level NGVD29
The depth of the well is 152 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water | Geographic Area: New Mexico | go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321215103134302

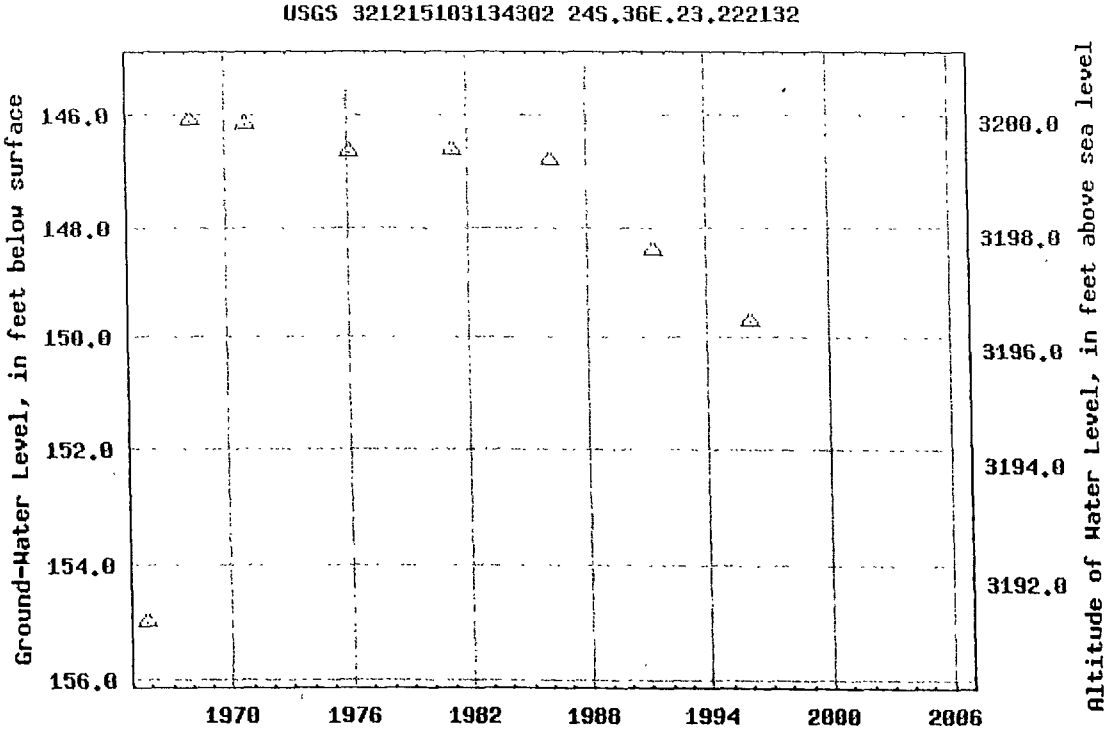
Save file of selected sites to local disk for future upload

USGS 321215103134302 24S.36E.23.222132

Available data for this site | Ground-water Levels | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°12'15", Longitude 103°13'43" NAD27
Land-surface elevation 3,346.20 feet above sea level NGVD29
The depth of the well is 170 feet below land surface.
This well is completed in the OGALLALA FORMATION (121OGLL) local aquifer.

Output formats
- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

Water Resources

Data Category: Ground Water Geographic Area: New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 321024103162901

Save file of selected sites to local disk for future upload

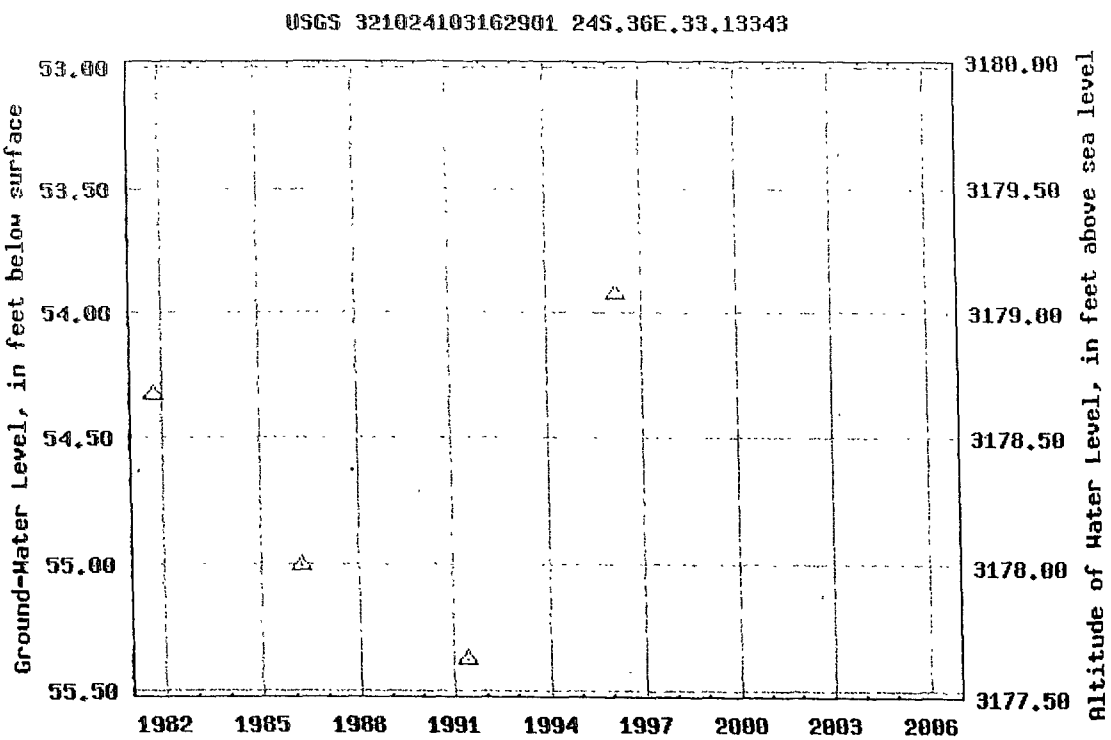
USGS 321024103162901 24S.36E.33.13343

Available data for this site Ground-water Levels GO

Lea County, New Mexico
Hydrologic Unit Code
Latitude 32°10'24", Longitude 103°16'29" NAD27
Land-surface elevation 3,233.00 feet above sea level NGVD29
The depth of the well is 75 feet below land surface.
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

Output formats

- Table of data
- Tab-separated data
- Graph of data
- Reselect period



Breaks in the plot represent a gap of at least one calendar year between two consecutive points.

APPENDIX B

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: COG/ Jalmat #7 Well Flow Line Leak

Project Number: 2737

Location: Lea County, NM

Lab Order Number: 6J31010

Report Date: 11/07/06

Highlander Environmental Corp
1910 N Big Spring St
Midland TX, 79705

Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager. Ike Tavarez

Fax (432) 682-3946

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-#1 (0-1 0) BEB Bottom 7 0'	6J31010-01	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#2 (0-1 0) BEB Bottom 14 0'	6J31010-02	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#3 (0-1 0) BEB Bottom 7 0'	6J31010-04	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#4 (0-1 0) BEB Bottom 4 0'	6J31010-05	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#5 (0-1 0) BEB Bottom 7 0'	6J31010-07	Soil	10/30/06 00.00	10-31-2006 14 20
SP-#6 (0-1 0) BEB Bottom 3 0'	6J31010-09	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#7 (0-1 0) BEB Bottom 2 5'	6J31010-10	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#8 (0-1 0) BEB Bottom 2 0'	6J31010-11	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#9 (0-1 0) BEB Bottom 1 0'	6J31010-12	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#10 (0-1 0) BEB Bottom 1 0'	6J31010-13	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#11 (0-1 0) BEB Bottom 2 0'	6J31010-14	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#12 (0-1 0) BEB Bottom 3 0'	6J31010-15	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#13 (0-1 0) BEB Bottom 2 5'	6J31010-17	Soil	10/30/06 00 00	10-31-2006 14 20

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#1 (0-1.0) BEB Bottom 7.0' (6J31010-01) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60105	11/01/06	11/02/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*86.2 %*	*80-120*		"	"	"	"	
Surrogate. 4-Bromofluorobenzene		*107 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60109	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate. 1-Chlorooctane		*75.4 %*	*70-130*		"	"	"	"	
Surrogate 1-Chlorooctadecane		*70 2 %*	*70-130*		"	"	"	"	
SP-#2 (0-1.0) BEB Bottom 14.0' (6J31010-02) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60105	11/01/06	11/02/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate. a,a,a-Trifluorotoluene		*83 0 %*	*80-120*		"	"	"	"	
Surrogate. 4-Bromofluorobenzene		*93.0 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60109	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*75.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70 6 %*	*70-130*		"	"	"	"	
SP-#3 (0-1.0) BEB Bottom 7.0' (6J31010-04) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60303	11/03/06	11/06/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate. a,a,a-Trifluorotoluene		*103 %*	*80-120*		"	"	"	"	
Surrogate 4-Bromofluorobenzene		*101 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60109	11/01/06	11/02/06	EPA 8015M	

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Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#3 (0-1.0) BEB Bottom 7.0' (6J31010-04) Soil									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EK60109	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*79.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70.0 %*	*70-130*		"	"	"	"	
SP-#4 (0-1.0) BEB Bottom 4.0' (6J31010-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK60303	11/03/06	11/06/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*101 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.0 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK60109	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*76.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71.2 %*	*70-130*		"	"	"	"	
SP-#5 (0-1.0) BEB Bottom 7.0' (6J31010-07) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK60303	11/03/06	11/06/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*104 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK60109	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*76.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70.4 %*	*70-130*		"	"	"	"	

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Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager Ike Tavarez

Fax (432) 682-3946

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#6 (0-1.0) BEB Bottom 3.0' (6J31010-09) Soil									
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate. 1-Chlorooctane		*74 0 %*	*70-130*		"	"	"	"	
Surrogate· 1-Chlorooctadecane		*70.4 %*	*70-130*		"	"	"	"	
SP-#7 (0-1.0) BEB Bottom 2.5' (6J31010-10) Soil									
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*75.6 %*	*70-130*		"	"	"	"	
Surrogate· 1-Chlorooctadecane		*70 6 %*	*70-130*		"	"	"	"	
SP-#8 (0-1.0) BEB Bottom 2.0' (6J31010-11) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60303	11/06/06	11/06/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*99.8 %*	*80-120*		"	"	"	"	
Surrogate· 4-Bromofluorobenzene		*100 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	**28.4**	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	**28.4**	10 0	"	"	"	"	"	"	
Surrogate. 1-Chlorooctane		*82.8 %*	*70-130*		"	"	"	"	
Surrogate 1-Chlorooctadecane		*75 2 %*	*70-130*		"	"	"	"	

Highlander Environmental Corp
1910 N Big Spring St
Midland TX, 79705

Project: COG/ Jalmat #7 Well Flow Line Leak
Project Number: 2737
Project Manager: Ike Tavarez

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#9 (0-1.0) BEB Bottom 1.0' (6J31010-12) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60303	11/06/06	11/06/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*100 %*	*80-120*		"	"	"	"	
Surrogate. 4-Bromofluorobenzene		*108 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	**85.7**	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [8.60]**	10 0	"	"	"	"	"	"	J
Total Hydrocarbons	**85.7**	10 0	"	"	"	"	"	"	
Surrogate. 1-Chlorooctane		*86 0 %*	*70-130*		"	"	"	"	
Surrogate. 1-Chlorooctadecane		*76.6 %*	*70-130*		"	"	"	"	
SP-#10 (0-1.0) BEB Bottom 1.0' (6J31010-13) Soil									
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*81 2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71.2 %*	*70-130*		"	"	"	"	
SP-#11 (0-1.0) BEB Bottom 2.0' (6J31010-14) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60303	11/06/06	11/06/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*97.0 %*	*80-120*		"	"	"	"	
Surrogate. 4-Bromofluorobenzene		*92.5 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	**37.2**	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [6.34]**	10 0	"	"	"	"	"	"	J
Total Hydrocarbons	**37.2**	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*84 4 %*	*70-130*		"	"	"	"	
Surrogate· 1-Chlorooctadecane		*75.0 %*	*70-130*		"	"	"	"	

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager. Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#12 (0-1.0) BEB Bottom 3.0' (6J31010-15) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*83.4 %*	*70-130*		"	"	"	"	
Surrogate. 1-Chlorooctadecane		*74.4 %*	*70-130*		"	"	"	"	
SP-#13 (0-1.0) BEB Bottom 2.5' (6J31010-17) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*77.4 %*	*70-130*		"	"	"	"	
Surrogate· 1-Chlorooctadecane		*70.4 %*	*70-130*		"	"	"	"	

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Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#1 (0-1.0) BEB Bottom 7.0' (6J31010-01) Soil									
Chloride	**12.8**	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**2.3**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#2 (0-1.0) BEB Bottom 14.0' (6J31010-02) Soil									
Chloride	**608**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**2.7**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#3 (0-1.0) BEB Bottom 7.0' (6J31010-04) Soil									
Chloride	**124**	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**4.4**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#4 (0-1.0) BEB Bottom 4.0' (6J31010-05) Soil									
Chloride	**589**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**4.9**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#5 (0-1.0) BEB Bottom 7.0' (6J31010-07) Soil									
Chloride	**701**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**8.0**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#6 (0-1.0) BEB Bottom 3.0' (6J31010-09) Soil									
Chloride	**760**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**6.7**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#7 (0-1.0) BEB Bottom 2.5' (6J31010-10) Soil									
Chloride	**609**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**6.1**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#8 (0-1.0) BEB Bottom 2.0' (6J31010-11) Soil									
Chloride	**161**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**5.4**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	

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Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#9 (0-1.0) BEB Bottom 1.0' (6J31010-12) Soil									
Chloride	**214**	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**6.1**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP-#10 (0-1.0) BEB Bottom 1.0' (6J31010-13) Soil									
Chloride	**455**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**8.9**	0 1	%	1	EK60229	10/31/06	11/02/06	% calculation	
SP-#11 (0-1.0) BEB Bottom 2.0' (6J31010-14) Soil									
Chloride	**10.7**	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**6.2**	0 1	%	1	EK60229	10/31/06	11/02/06	% calculation	
SP-#12 (0-1.0) BEB Bottom 3.0' (6J31010-15) Soil									
Chloride	**724**	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**5.7**	0 1	%	1	EK60229	10/31/06	11/02/06	% calculation	
SP-#13 (0-1.0) BEB Bottom 2.5' (6J31010-17) Soil									
Chloride	**9.80**	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	**4.9**	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60105 - EPA 5030C (GC)										
Blank (EK60105-BLK1)				Prepared & Analyzed 11/01/06						
Benzene	ND	0 0250	mg/kg wet							
Toluene	ND	0 0250	"							
Ethylbenzene	ND	0 0250	"							
Xylene (p/m)	ND	0 0250	"							
Xylene (o)	ND	0 0250	"							
Surrogate a,a,a-Trifluorotoluene	*33.0*		*ug kg*	*40 0*		*82 5*	*80-120*			
Surrogate 4-Bromofluorobenzene	*37.2*		*"*	*40 0*		*93 0*	*80-120*			
LCS (EK60105-BS1)				Prepared & Analyzed 11/01/06						
Benzene	1 45	0 0250	mg/kg wet	1 25		116	80-120			
Toluene	1 40	0 0250	"	1 25		112	80-120			
Ethylbenzene	1 27	0 0250	"	1 25		102	80-120			
Xylene (p/m)	2 95	0 0250	"	2 50		118	80-120			
Xylene (o)	1 19	0 0250	"	1 25		95 2	80-120			
Surrogate a,a,a-Trifluorotoluene	*36 7*		*ug kg*	*40 0*		*91 8*	*80-120*			
Surrogate 4-Bromofluorobenzene	*35 3*		*"*	*40 0*		*88 2*	*80-120*			
Calibration Check (EK60105-CCV1)				Prepared 11/01/06 Analyzed 11/02/06						
Benzene	53 8		ug/kg	50 0		108	80-120			
Toluene	48 7		"	50 0		97 4	80-120			
Ethylbenzene	47 7		"	50 0		95 4	80-120			
Xylene (p/m)	97 2		"	100		97 2	80-120			
Xylene (o)	40 6		"	50 0		81 2	80-120			
Surrogate a,a,a-Trifluorotoluene	*36 8*		*"*	*40 0*		*92 0*	*80-120*			
Surrogate 4-Bromofluorobenzene	*35 1*		*"*	*40 0*		*87 8*	*80-120*			
Matrix Spike (EK60105-MS1)	**Source: 6J27009-05**			Prepared 11/01/06 Analyzed 11/02/06						
Benzene	1 46	0 0250	mg/kg dry	1 41	ND	104	80-120			
Toluene	1 45	0 0250	"	1 41	ND	103	80-120			
Ethylbenzene	1 47	0 0250	"	1 41	ND	104	80-120			
Xylene (p/m)	3 09	0 0250	"	2 81	ND	110	80-120			
Xylene (o)	1 26	0.0250	"	1 41	ND	89 4	80-120			
Surrogate a,a,a-Trifluorotoluene	*32 5*		*ug kg*	*40 0*		*81 2*	*80-120*			
Surrogate 4-Bromofluorobenzene	*40 0*		*"*	*40 0*		*100*	*80-120*			

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Project COG/ Jalmat #7 Well Flow Line Leak
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Project Manager Ike Tavarez

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60105 - EPA 5030C (GC)										
Matrix Spike Dup (EK60105-MSD1)	**Source: 6J27009-05**			Prepared 11/01/06 Analyzed 11/02/06						
Benzene	1 52	0 0250	mg/kg dry	1 41	ND	108	80-120	3 77	20	
Toluene	1 46	0 0250	"	1 41	ND	104	80-120	0 966	20	
Ethylbenzene	1.44	0 0250	"	1 41	ND	102	80-120	1 94	20	
Xylene (p/m)	3 04	0 0250	"	2 81	ND	108	80-120	1 83	20	
Xylene (o)	1 20	0 0250	"	1 41	ND	85 1	80-120	4 93	20	
Surrogate a,a,a-Trifluorotoluene	*32 3*		*ug/kg*	*40 0*		*80 8*	*80-120*			
Surrogate 4-Bromofluorobenzene	*39 7*		*"*	*40 0*		*99.2*	*80-120*			
Batch EK60109 - Solvent Extraction (GC)										
Blank (EK60109-BLK1)				Prepared & Analyzed 11/01/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	*44 4*		*mg/kg*	*50 0*		*88 8*	*70-130*			
Surrogate 1-Chlorooctadecane	*41 3*		*"*	*50 0*		*82 6*	*70-130*			
LCS (EK60109-BS1)				Prepared & Analyzed 11/01/06						
Carbon Ranges C6-C12	468	10 0	mg/kg wet	500		93 6	75-125			
Carbon Ranges C12-C28	442	10 0	"	500		88 4	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	910	10 0	"	1000		91 0	75-125			
Surrogate: 1-Chlorooctane	*56 9*		*mg/kg*	*50 0*		*114*	*70-130*			
Surrogate 1-Chlorooctadecane	*42 5*		*"*	*50 0*		*85 0*	*70-130*			
Calibration Check (EK60109-CCV1)				Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	205		mg/kg	250		82 0	80-120			
Carbon Ranges C12-C28	231		"	250		92 4	80-120			
Total Hydrocarbons	435		"	500		87.0	80-120			
Surrogate 1-Chlorooctane	*45 5*		*"*	*50.0*		*91 0*	*70-130*			
Surrogate 1-Chlorooctadecane	*37 4*		*"*	*50 0*		*74 8*	*70-130*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60109 - Solvent Extraction (GC)										
Matrix Spike (EK60109-MS1)	**Source: 6J30014-03**			Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	512	10 0	mg/kg dry	576	ND	88 9	75-125			
Carbon Ranges C12-C28	486	10 0	"	576	ND	84 4	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125			
Total Hydrocarbons	998	10 0	"	1150	ND	86 8	75-125			
Surrogate 1-Chlorooctane	*50 8*		*mg/kg*	*50 0*		*102*	*70-130*			
Surrogate 1-Chlorooctadecane	*38 7*		"	*50 0*		*77 4*	*70-130*			
Matrix Spike Dup (EK60109-MSD1)	**Source: 6J30014-03**			Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	524	10 0	mg/kg dry	576	ND	91 0	75-125	2 32	20	
Carbon Ranges C12-C28	498	10 0	"	576	ND	86 5	75-125	2 44	20	
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125		20	
Total Hydrocarbons	1020	10 0	"	1150	ND	88 7	75-125	2 18	20	
Surrogate 1-Chlorooctane	*53 4*		*mg/kg*	*50.0*		*107*	*70-130*			
Surrogate 1-Chlorooctadecane	*39 1*		"	*50 0*		*78 2*	*70-130*			
Batch EK60110 - Solvent Extraction (GC)										
Blank (EK60110-BLK1)				Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	*46 2*		*mg/kg*	*50 0*		*92 4*	*70-130*			
Surrogate 1-Chlorooctadecane	*42 7*		"	*50 0*		*85 4*	*70-130*			
LCS (EK60110-BS1)				Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	486	10 0	mg/kg wet	500		97 2	75-125			
Carbon Ranges C12-C28	452	10 0	"	500		90 4	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	938	10 0	"	1000		93 8	75-125			
Surrogate 1-Chlorooctane	*58 7*		*mg/kg*	*50 0*		*117*	*70-130*			
Surrogate 1-Chlorooctadecane	*44 1*		"	*50 0*		*88 2*	*70-130*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60110 - Solvent Extraction (GC)										
Calibration Check (EK60110-CCV1)				Prepared 11/01/06 Analyzed. 11/02/06						
Carbon Ranges C6-C12	204		mg/kg	250		81 6	80-120			
Carbon Ranges C12-C28	269		"	250		108	80-120			
Total Hydrocarbons	472		"	500		94 4	80-120			
Surrogate 1-Chlorooctane	*46 3*		"	*50 0*		*92 6*	*70-130*			
Surrogate 1-Chlorooctadecane	*37 0*		"	*50 0*		*74 0*	*70-130*			
Matrix Spike (EK60110-MS1)	**Source: 6J31010-09**			Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	481	10 0	mg/kg dry	536	ND	89 7	75-125			
Carbon Ranges C12-C28	452	10 0	"	536	ND	84 3	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125			
Total Hydrocarbons	933	10 0	"	1070	ND	87 2	75-125			
Surrogate 1-Chlorooctane	*51 0*		*mg/kg*	*50 0*		*102*	*70-130*			
Surrogate 1-Chlorooctadecane	*39 1*		"	*50 0*		*78 2*	*70-130*			
Matrix Spike Dup (EK60110-MSD1)	**Source: 6J31010-09**			Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	478	10 0	mg/kg dry	536	ND	89 2	75-125	0 626	20	
Carbon Ranges C12-C28	462	10 0	"	536	ND	86 2	75-125	2 19	20	
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125		20	
Total Hydrocarbons	940	10 0	"	1070	ND	87 9	75-125	0 747	20	
Surrogate 1-Chlorooctane	*48 5*		*mg kg*	*50.0*		*97 0*	*70-130*			
Surrogate 1-Chloroactadecane	*35 0*		"	*50 0*		*70 0*	*70-130*			
Batch EK60303 - EPA 5030C (GC)										
Blank (EK60303-BLK1)				Prepared 11/03/06 Analyzed 11/06/06						
Benzene	ND	0 0250	mg/kg wet							
Toluene	ND	0 0250	"							
Ethylbenzene	ND	0 0250	"							
Xylene (p/m)	ND	0 0250	"							
Xylene (o)	ND	0.0250	"							
Surrogate a,a,a-Trifluorotoluene	*38 4*		*ug/kg*	*40 0*		*96 0*	*80-120*			
Surrogate 4-Bromofluorobenzene	*39 2*		"	*40 0*		*98 0*	*80-120*			

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Project Number. 2737
Project Manager Ike Tavarez

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60303 - EPA 5030C (GC)										
LCS (EK60303-BS1)				Prepared 11/03/06 Analyzed 11/06/06						
Benzene	1 41	0 0250	mg/kg wet	1 25		113	80-120			
Toluene	1 43	0 0250	"	1 25		114	80-120			
Ethylbenzene	1 50	0 0250	"	1 25		120	80-120			
Xylene (p/m)	2 91	0 0250	"	2 50		116	80-120			
Xylene (o)	1 40	0 0250	"	1 25		112	80-120			
Surrogate a,a,a-Trifluorotoluene	*41 3*		*ug/kg*	*40 0*		*103*	*80-120*			
Surrogate 4-Bromofluorobenzene	*46 5*		"	*40 0*		*116*	*80-120*			
Calibration Check (EK60303-CCV1)				Prepared 11/03/06 Analyzed 11/07/06						
Benzene	59 8		ug/kg	50 0		120	80-120			
Toluene	53 5		"	50 0		107	80-120			
Ethylbenzene	55 9		"	50 0		112	80-120			
Xylene (p/m)	102		"	100		102	80-120			
Xylene (o)	50 2		"	50 0		100	80-120			
Surrogate a,a,a-Trifluorotoluene	*44 5*		"	*40 0*		*111*	*80-120*			
Surrogate 4-Bromofluorobenzene	*37 5*		"	*40 0*		*93 8*	*80-120*			
Matrix Spike (EK60303-MS1)	**Source: 6K01013-01**			Prepared 11/03/06 Analyzed 11/07/06						
Benzene	1 58	0 0250	mg/kg dry	1 33	ND	119	80-120			
Toluene	1 42	0 0250	"	1 33	ND	107	80-120			
Ethylbenzene	1 37	0 0250	"	1 33	ND	103	80-120			
Xylene (p/m)	2 79	0 0250	"	2 66	ND	105	80-120			
Xylene (o)	1 27	0 0250	"	1 33	ND	95 5	80-120			
Surrogate a,a,a-Trifluorotoluene	*40 6*		*ug/kg*	*40 0*		*102*	*80-120*			
Surrogate 4-Bromofluorobenzene	*44 0*		"	*40 0*		*110*	*80-120*			
Matrix Spike Dup (EK60303-MSD1)	**Source: 6K01013-01**			Prepared 11/03/06 Analyzed 11/07/06						
Benzene	1 51	0 0250	mg/kg dry	1 33	ND	114	80-120	4 29	20	
Toluene	1 38	0 0250	"	1 33	ND	104	80-120	2 84	20	
Ethylbenzene	1 33	0 0250	"	1 33	ND	100	80-120	2 96	20	
Xylene (p/m)	2 85	0 0250	"	2 66	ND	107	80-120	1.89	20	
Xylene (o)	1 32	0 0250	"	1 33	ND	99 2	80-120	3 80	20	
Surrogate a,a,a-Trifluorotoluene	*42 0*		*ug/kg*	*40 0*		*105*	*80-120*			
Surrogate 4-Bromofluorobenzene	*41 7*		"	*40 0*		*104*	*80-120*			

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60103 - Water Extraction										
Blank (EK60103-BLK1)				Prepared 11/01/06 Analyzed 11/03/06						
Chloride	ND	0 500	mg/kg							
LCS (EK60103-BS1)				Prepared 11/01/06 Analyzed 11/03/06						
Chloride	10 9	0 500	mg/kg	10 0		109	80-120			
Calibration Check (EK60103-CCV1)				Prepared 11/01/06 Analyzed 11/03/06						
Chloride	11 0		mg/L	10 0		110	80-120			
Duplicate (EK60103-DUP1)		**Source: 6J31002-05**		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	2290	50 0	mg/kg		2270			0 877	20	
Duplicate (EK60103-DUP2)		**Source: 6J31010-13**		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	458	10 0	mg/kg		455			0 657	20	
Matrix Spike (EK60103-MS1)		**Source: 6J31002-05**		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	3390	50 0	mg/kg	1000	2270	112	80-120			
Matrix Spike (EK60103-MS2)		**Source: 6J31010-13**		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	693	10 0	mg/kg	200	455	119	80-120			
Batch EK60229 - General Preparation (Prep)										
Blank (EK60229-BLK1)				Prepared 10/31/06 Analyzed 11/01/06						
% Solids	100		%							
Duplicate (EK60229-DUP1)		**Source: 6J31009-01**		Prepared 10/31/06 Analyzed 11/01/06						
% Solids	92 0		%		92 2			0 217	20	

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Midland TX, 79705	Project Manager Ike Tavarez	

Notes and Definitions

J	Detected but below the Reporting Limit, therefore, result is an estimated concentration (CLP J-Flag)
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 11/7/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
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Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

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PAGE: 1 OF: 2

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2737

PROJECT NAME: COG - Jal Mat #7 well flow line leak Lea County, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	BTEX 8020/602	TPH 418.1 (8015 MOD.) TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	BCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
0531010 01	10/30/06		S		X	SP-#1 (0-1.0) BEB Bottom 7.0'	1				X		X		X											X			
02			S		X	SP-#2 (0-1.0) BEB Bottom 14.0'	1				X		X		X											X			
03			S		X	SP-#2 (1-1.5') BEB Bottom 14.0'	1				X		Hold																
04			S		X	SP-#3 (0-1.0') BEB Bottom 7.0'	1				X		X		X											X			
05			S		X	SP-#4 (0-1.0') BEB Bottom 4.0'	1				X		X		X											X			
06			S		X	SP-#4 (1-1.5') BEB Bottom 4.0'	1				X		Hold																
07			S		X	SP-#5 (0-1.0') BEB Bottom 7.0'	1				X		X		X											X			
08			S		X	SP-#5 (1-1.5') BEB Bottom 7.0'	1				X		Hold																
09			S		X	SP-#6 (0-1.0') BEB Bottom 3.0'	1				X		X		X											X			
10			S		X	SP-#7 (0-1.0') BEB Bottom 2.5'	1				X		X		X											X			

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Date: 10/31/06 Time: 2:20

RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) Ray Taylor / Kofi Harrison Date: 10/30/06 Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: ELT

ADDRESS:

CITY: Odessa STATE: Texas ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: 10/31/06 TIME: 2:20

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: Iced @ 28 4.0 w/labels

MATRIX: W-Water A-Air SD-Solid S-Soil SL-Sludge O-Other

REMARKS: SP #6 → #13 Run (4) BTEX w/ highest TPH

Please fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Environmental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

(MARTIN 11/2

Analysis Request and Chain of Custody Record

PAGE: 2 OF: 2

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 Fax (432) 682-3946

ANALYSIS REQUEST (Circle or Specify Method No.)

CLIENT NAME: COG
SITE MANAGER: Ike Tavarez
PROJECT NO.: 2737
PROJECT NAME: COG-Sal Mat #7 Well flow line leak Lea County, NM

LAB I.D. NUMBER 5100	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 (8015 MOD.) TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, (Chloride)	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
-11	10/30/06		S		X	SP-#8 (0-1.0') BEB Bottom 2.0'	1				X		X		X											✓			
12			S		X	SP-#9 (0-1.0') BEB Bottom 1.0'	1				X		X		X											✓			
13			S		X	SP-#10 (0-1.0') BEB Bottom 1.0'	1				X				X											✓			
14			S		X	SP-#11 (0-1.0') BEB Bottom 2.0'	1				X		X		X											✓			
15			S		X	SP-#12 (0-1.0') BEB Bottom 3.0'	1				X				X											✓			
16			S		X	SP-#12 (1-1.5') BEB Bottom 3.0'	1				X				[illegible]											[illegible]			
17			S		X	SP-#13 (0-1.0') BEB Bottom 2.5'	1				X				X											✓			

RELINQUISHED BY: (Signature) [signature] Date: 10/31/06 Time: 2:20
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: ELT
ADDRESS:
CITY: Odessa STATE: Texas ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) [signature]
DATE: 10/31/06 TIME: 2:20

SAMPLED BY: (Print & Sign) Ray Taylor / Holt Harrison Date: 10/30/06 Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #
(HAND DELIVERED) UPS OTHER:
HIGHLANDER CONTACT PERSON: Ike Tavarez
Results by:
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:
MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other
REMARKS:

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Environmental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Highlander

Date/ Time: 10/31/08 2:20

Lab ID # : 10.31.10

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	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	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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: COG/ Jalmat #7 Well Flow Line Leak

Project Number: 2737

Location: Lea County, NM

Lab Order Number: 6K13008

Report Date: 11/16/06

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N. Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP-#2 (1-1 5') BEB Bottom 14 0'	6K13008-01	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#4 (1-1 5') BEB Bottom 4.0'	6K13008-02	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#5 (1-1.5') BEB Bottom 7 0'	6K13008-03	Soil	10/30/06 00 00	10-31-2006 14 20
SP-#12 (1-1 5') BEB Bottom 3 0'	6K13008-04	Soil	10/30/06 00 00	10-31-2006 14 20

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP-#2 (1-1.5') BEB Bottom 14.0' (6K13008-01) Soil									
Chloride	**553**	10 0	mg/kg	20	EK61508	11/15/06	11/15/06	EPA 300 0	
SP-#4 (1-1.5') BEB Bottom 4.0' (6K13008-02) Soil									
Chloride	**214**	5 00	mg/kg	10	EK61508	11/15/06	11/15/06	EPA 300 0	
SP-#5 (1-1.5') BEB Bottom 7.0' (6K13008-03) Soil									
Chloride	**514**	10 0	mg/kg	20	EK61508	11/15/06	11/15/06	EPA 300 0	
SP-#12 (1-1.5') BEB Bottom 3.0' (6K13008-04) Soil									
Chloride	**664**	10 0	mg/kg	20	EK61508	11/15/06	11/15/06	EPA 300 0	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp
1910 N. Big Spring St
Midland TX, 79705

Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager Ike Tavarez

Fax (432) 682-3946

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK61508 - Water Extraction										
Blank (EK61508-BLK1)				Prepared & Analyzed 11/15/06						
Chloride	ND	0 500	mg/kg							
LCS (EK61508-BS1)				Prepared & Analyzed 11/15/06						
Chloride	10 1	0 500	mg/kg	10 0		101	80-120			
Calibration Check (EK61508-CCV1)				Prepared & Analyzed 11/15/06						
Chloride	10 5		mg/L	10 0		105	80-120			
Duplicate (EK61508-DUP1)		**Source: 6K13008-01**		Prepared & Analyzed 11/15/06						
Chloride	561	10 0	mg/kg		553			1 44	20	
Duplicate (EK61508-DUP2)		**Source: 6K14009-01**		Prepared & Analyzed 11/15/06						
Chloride	1910	40 0	mg/kg		1870			2 12	20	
Matrix Spike (EK61508-MS1)		**Source: 6K13008-01**		Prepared & Analyzed 11/15/06						
Chloride	769	10 0	mg/kg	200	553	108	80-120			
Matrix Spike (EK61508-MS2)		**Source: 6K14009-01**		Prepared & Analyzed 11/15/06						
Chloride	2830	40 0	mg/kg	800	1870	120	80-120			

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager: Ike Tavarez	

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 11/16/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2737

PROJECT NAME: COG - Jal Mat #7 well flow line leak
Lea County, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
6K B008												
6L 21016												
-11	10/30/06		S		X	SP-#8 (0-1.0') BEB Bottom 2.0'	1				X	
12			S		X	SP-#9 (0-1.0') BEB Bottom 1.0'	1				X	
13			S		X	SP-#10 (0-1.0') BEB Bottom 1.0'	1				X	
14			S		X	SP-#11 (0-1.0') BEB Bottom 2.0'	1				X	
15			S		X	SP-#12 (0-1.0') BEB Bottom 3.0'	1				X	
16A 16			S		X	SP-#12 (1-1.5') BEB Bottom 3.0'	1				X	
17			S		X	SP-#13 (0-1.0') BEB Bottom 2.5'	1				X	

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8020/602	MTBE 8020/602	TPH 418.1 (8015 MOD. TX1005)	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
X		X											X			
X		X											X			
		X											X			
X		X											X			
		X											X	X		
		X	X										X	X		
		X											X			

RELINQUISHED BY: (Signature) Date: 10/31/06 Time: 2:20

RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:

RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) Ray Taylor / Kelli Harrison Date: 10/30/06 Time:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

RECEIVING LABORATORY: ELT
ADDRESS:
CITY: Odessa STATE: Texas ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature)
DATE: 10/31/06 TIME: 2:20

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:

MATRIX: W-Water A-Air SD-Solid (S-Soil) SL-Sludge O-Other

REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy

COPY

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

ient: Highlander

ate/ Time: 10/31/10 2:20

ab ID #: ~~1031010~~ 0K13008

itials: CK

COPY

Sample Receipt Checklist

					Client Initials
1	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	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

Jeanne McMurrey

From: "Tim Reed" <treed@hec-enviro.com>
To: '"Jeanne McMurrey" <jeanne@elabtexas.com>
Sent: Monday, November 13, 2006 9:34 AM
Subject: RE: Report #6J31010 COG/ Jal Mat #7 (complete)

November 13, 2006

Jeanne Mc Murrey
Environmental Labs of Texas
Lab Order Number 6J31010
COG Jalmat #7
Project Number 2737

Jeanne:

Please analyze the following additional samples for chloride:

SP-#2 (1-1.5')
SP-#4 (1-1.5')
SP-#5 (1-1.5')
SP-#12 (1-1.5')

Thank you,

Tim Reed, P.G.
Vice President
Highlander Environmental Corp.
office - (432) 682-4559
fax - (432) 682-3946
cell - (432) 557-4680

-----Original Message-----
From: Jeanne McMurrey [mailto:jeanne@elabtexas.com]
Sent: Tuesday, November 07, 2006 5:25 PM
To: Tim Reed; Ike Tavarez
Subject: Re: Report #6J31010 COG/ Jal Mat #7 (complete)

Jeanne McMurrey
Environmental Lab of Texas I, Ltd.
12600 West I-20 East
Odessa, Texas 79765
432-563-1800

--

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: COG/ Jalmat #7 Well Flow Line Leak

Project Number: 2737

Location: Lea County, NM

Lab Order Number: 6J31011

Report Date: 11/08/06

Highlander Environmental Corp
1910 N. Big Spring St
Midland TX, 79705

Project: COG/ Jalmat #7 Well Flow Line Leak
Project Number: 2737
Project Manager: Ike Tavarez

Fax (432) 682-3946

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP- West Side Wall North	6J31011-01	Soil	10/30/06 00 00	10-31-2006 14 20
SP- West Side Wall South	6J31011-02	Soil	10/30/06 00 00	10-31-2006 14 20
SP- West Side Wall Middle	6J31011-03	Soil	10/30/06 00 00	10-31-2006 14 20
SP- East Side Wall North	6J31011-04	Soil	10/30/06 00 00	10-31-2006 14 20
SP- East Side Wall South	6J31011-05	Soil	10/30/06 00 00	10-31-2006 14 20
SP- East Side Wall Middle	6J31011-06	Soil	10/30/06 00 00	10-31-2006 14 20
SP- North Side Wall	6J31011-07	Soil	10/30/06 00 00	10-31-2006 14 20
SP- South Side Wall	6J31011-08	Soil	10/30/06 00 00	10-31-2006 14 20

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP- West Side Wall North (6J31011-01) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*84.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*75.6 %*	*70-130*		"	"	"	"	
SP- West Side Wall South (6J31011-02) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*86.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*76.8 %*	*70-130*		"	"	"	"	
SP- West Side Wall Middle (6J31011-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EK60303	11/06/06	11/06/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*92.5 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*82.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71.8 %*	*70-130*		"	"	"	"	

Highlander Environmental Corp.	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP- East Side Wall North (6J31011-04) Soil									
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate· 1-Chlorooctane		*73 6 %*	*70-130*		"	"	"	"	
Surrogate· 1-Chlorooctadecane		*70.4 %*	*70-130*		"	"	"	"	
SP- East Side Wall South (6J31011-05) Soil									
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate. 1-Chlorooctane		*81 8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71 2 %*	*70-130*		"	"	"	"	
SP- East Side Wall Middle (6J31011-06) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60303	11/06/06	11/06/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate. a,a,a-Trifluorotoluene		*99.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*114 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate· 1-Chlorooctane		*75.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70 0 %*	*70-130*		"	"	"	"	

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Highlander Environmental Corp
1910 N Big Spring St
Midland TX, 79705

Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager Ike Tavarez

Fax (432) 682-3946

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP- North Side Wall (6J31011-07) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60303	11/06/06	11/06/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate 4-Bromofluorobenzene		*104 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*77.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70.2 %*	*70-130*		"	"	"	"	
SP- South Side Wall (6J31011-08) Soil									
Benzene	ND	0 0250	mg/kg dry	25	EK60303	11/06/06	11/06/06	EPA 8021B	
Toluene	ND	0 0250	"	"	"	"	"	"	
Ethylbenzene	ND	0 0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0 0250	"	"	"	"	"	"	
Xylene (o)	ND	0 0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*100 %*	*80-120*		"	"	"	"	
Surrogate 4-Bromofluorobenzene		*106 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10 0	mg/kg dry	1	EK60110	11/01/06	11/02/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10 0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10 0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10 0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*76 8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*71 6 %*	*70-130*		"	"	"	"	

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP- West Side Wall North (6J31011-01) Soil									
Chloride	8.07	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	5.4	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP- West Side Wall South (6J31011-02) Soil									
Chloride	143	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	6.2	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP- West Side Wall Middle (6J31011-03) Soil									
Chloride	78.8	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	5.7	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP- East Side Wall North (6J31011-04) Soil									
Chloride	287	10 0	mg/kg	20	EK60103	11/01/06	11/03/06	EPA 300 0	
% Moisture	3.3	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP- East Side Wall South (6J31011-05) Soil									
Chloride	J [2.36]	5 00	mg/kg	10	EK60103	11/01/06	11/03/06	EPA 300 0	J
% Moisture	4.7	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP- East Side Wall Middle (6J31011-06) Soil									
Chloride	22.6	5 00	mg/kg	10	EK60501	11/05/06	11/05/06	EPA 300 0	
% Moisture	1.1	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP- North Side Wall (6J31011-07) Soil									
Chloride	5.40	5 00	mg/kg	10	EK60501	11/05/06	11/05/06	EPA 300.0	
% Moisture	5.8	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	
SP- South Side Wall (6J31011-08) Soil									
Chloride	J [4.00]	5.00	mg/kg	10	EK60501	11/05/06	11/05/06	EPA 300 0	J
% Moisture	4.8	0 1	%	1	EK60229	10/31/06	11/01/06	% calculation	

Highlander Environmental Corp
1910 N Big Spring St
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Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager Ike Tavarez

Fax (432) 682-3946

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60110 - Solvent Extraction (GC)										
Blank (EK60110-BLK1)				Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	*46 2*		*mg kg*	*50 0*		*92 4*	*70-130*			
Surrogate 1-Chlorooctadecane	*42 7*		"	*50 0*		*85 4*	*70-130*			
LCS (EK60110-BS1)				Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	486	10 0	mg/kg wet	500		97.2	75-125			
Carbon Ranges C12-C28	452	10 0	"	500		90 4	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	938	10 0	"	1000		93.8	75-125			
Surrogate. 1-Chlorooctane	*58 7*		*mg kg*	*50 0*		*117*	*70-130*			
Surrogate 1-Chlorooctadecane	*44.1*		"	*50 0*		*88 2*	*70-130*			
Calibration Check (EK60110-CCV1)				Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	204		mg/kg	250		81 6	80-120			
Carbon Ranges C12-C28	269		"	250		108	80-120			
Total Hydrocarbons	472		"	500		94 4	80-120			
Surrogate 1-Chlorooctane	*46 3*		"	*50 0*		*92 6*	*70-130*			
Surrogate 1-Chlorooctadecane	*37.0*		"	*50 0*		*74 0*	*70-130*			
Matrix Spike (EK60110-MS1)	**Source: 6J31010-09**			Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	481	10 0	mg/kg dry	536	ND	89 7	75-125			
Carbon Ranges C12-C28	452	10 0	"	536	ND	84 3	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125			
Total Hydrocarbons	933	10 0	"	1070	ND	87.2	75-125			
Surrogate. 1-Chlorooctane	*51 0*		*mg kg*	*50 0*		*102*	*70-130*			
Surrogate 1-Chlorooctadecane	*39 1*		"	*50 0*		*78 2*	*70-130*			

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60110 - Solvent Extraction (GC)										
Matrix Spike Dup (EK60110-MSD1)	**Source: 6J31010-09**			Prepared 11/01/06 Analyzed 11/02/06						
Carbon Ranges C6-C12	478	10 0	mg/kg dry	536	ND	89 2	75-125	0 626	20	
Carbon Ranges C12-C28	462	10 0	"	536	ND	86 2	75-125	2 19	20	
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125		20	
Total Hydrocarbons	940	10 0	"	1070	ND	87 9	75-125	0 747	20	
Surrogate. 1-Chlorooctane	*48 5*		*mg/kg*	*50 0*		*97 0*	*70-130*			
Surrogate 1-Chlorooctadecane	*35 0*		*"*	*50 0*		*70 0*	*70-130*			
Batch EK60303 - EPA 5030C (GC)										
Blank (EK60303-BLK1)				Prepared 11/03/06 Analyzed 11/06/06						
Benzene	ND	0 0250	mg/kg wet							
Toluene	ND	0 0250	"							
Ethylbenzene	ND	0 0250	"							
Xylene (p/m)	ND	0 0250	"							
Xylene (o)	ND	0 0250	"							
Surrogate a,a,a-Trifluorotoluene	*38 4*		*ug kg*	*40 0*		*96 0*	*80-120*			
Surrogate 4-Bromofluorobenzene	*39 2*		*"*	*40 0*		*98 0*	*80-120*			
LCS (EK60303-BS1)				Prepared 11/03/06 Analyzed 11/06/06						
Benzene	1 41	0 0250	mg/kg wet	1 25		113	80-120			
Toluene	1 43	0 0250	"	1 25		114	80-120			
Ethylbenzene	1 50	0 0250	"	1 25		120	80-120			
Xylene (p/m)	2 91	0 0250	"	2 50		116	80-120			
Xylene (o)	1 40	0 0250	"	1 25		112	80-120			
Surrogate. a,a,a-Trifluorotoluene	*41 3*		*ug kg*	*40 0*		*103*	*80-120*			
Surrogate 4-Bromofluorobenzene	*46 5*		*"*	*40.0*		*116*	*80-120*			

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1910 N Big Spring St
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Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager Ike Tavarez

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60303 - EPA 5030C (GC)										
Calibration Check (EK60303-CCV1)				Prepared 11/03/06 Analyzed 11/07/06						
Benzene	59 8		ug/kg	50 0		120	80-120			
Toluene	53 5		"	50 0		107	80-120			
Ethylbenzene	55 9		"	50 0		112	80-120			
Xylene (p/m)	102		"	100		102	80-120			
Xylene (o)	50 2		"	50 0		100	80-120			
Surrogate a,a,a-Trifluorotoluene	*44.5*		"	*40 0*		*111*	*80-120*			
Surrogate 4-Bromofluorobenzene	*37 5*		"	*40 0*		*93 8*	*80-120*			
Matrix Spike (EK60303-MS1)	**Source: 6K01013-01**			Prepared 11/03/06 Analyzed 11/07/06						
Benzene	1 58	0 0250	mg/kg dry	1 33	ND	119	80-120			
Toluene	1 42	0 0250	"	1 33	ND	107	80-120			
Ethylbenzene	1 37	0 0250	"	1 33	ND	103	80-120			
Xylene (p/m)	2 79	0 0250	"	2 66	ND	105	80-120			
Xylene (o)	1 27	0 0250	"	1 33	ND	95 5	80-120			
Surrogate a,a,a-Trifluorotoluene	*40 6*		*ug kg*	*40 0*		*102*	*80-120*			
Surrogate 4-Bromofluorobenzene	*44 0*		"	*40 0*		*110*	*80-120*			
Matrix Spike Dup (EK60303-MSD1)	**Source: 6K01013-01**			Prepared 11/03/06 Analyzed 11/07/06						
Benzene	1 51	0 0250	mg/kg dry	1 33	ND	114	80-120	4 29	20	
Toluene	1 38	0 0250	"	1 33	ND	104	80-120	2 84	20	
Ethylbenzene	1 33	0 0250	"	1 33	ND	100	80-120	2 96	20	
Xylene (p/m)	2 85	0 0250	"	2 66	ND	107	80-120	1 89	20	
Xylene (o)	1 32	0 0250	"	1 33	ND	99 2	80-120	3 80	20	
Surrogate a,a,a-Trifluorotoluene	*42 0*		*ug kg*	*40 0*		*105*	*80-120*			
Surrogate 4-Bromofluorobenzene	*41 7*		"	*40 0*		*104*	*80-120*			

Highlander Environmental Corp
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Project COG/ Jalmat #7 Well Flow Line Leak
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Project Manager Ike Tavarez

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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60103 - Water Extraction										
Blank (EK60103-BLK1)				Prepared 11/01/06 Analyzed 11/03/06						
Chloride	ND	0 500	mg/kg							
LCS (EK60103-BS1)				Prepared 11/01/06 Analyzed 11/03/06						
Chloride	10 9	0 500	mg/kg	10 0		109	80-120			
Calibration Check (EK60103-CCV1)				Prepared 11/01/06 Analyzed 11/03/06						
Chloride	11 0		mg/L	10 0		110	80-120			
Duplicate (EK60103-DUP1)		Source: 6J31002-05		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	2290	50 0	mg/kg		2270			0 877	20	
Duplicate (EK60103-DUP2)		Source: 6J31010-13		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	458	10 0	mg/kg		455			0 657	20	
Matrix Spike (EK60103-MS1)		Source: 6J31002-05		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	3390	50 0	mg/kg	1000	2270	112	80-120			
Matrix Spike (EK60103-MS2)		Source: 6J31010-13		Prepared 11/01/06 Analyzed 11/03/06						
Chloride	693	10 0	mg/kg	200	455	119	80-120			
Batch EK60229 - General Preparation (Prep)										
Blank (EK60229-BLK1)				Prepared 10/31/06 Analyzed 11/01/06						
% Solids	100		%							
Duplicate (EK60229-DUP1)		Source: 6J31009-01		Prepared 10/31/06 Analyzed 11/01/06						
% Solids	92 0		%		92 2			0 217	20	

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
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General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EK60501 - Water Extraction										
Blank (EK60501-BLK1)				Prepared & Analyzed 11/05/06						
Chloride	ND	0 500	mg/kg							
LCS (EK60501-BS1)				Prepared & Analyzed 11/05/06						
Chloride	10 2	0 500	mg/kg	10 0		102	80-120			
Calibration Check (EK60501-CCV1)				Prepared & Analyzed 11/05/06						
Chloride	11 1		mg/L	10 0		111	80-120			
Duplicate (EK60501-DUP1)		**Source: 6J31011-06**		Prepared & Analyzed 11/05/06						
Chloride	23 3	5 00	mg/kg		22 6			3 05	20	
Duplicate (EK60501-DUP2)		**Source: 6K01010-04**		Prepared & Analyzed 11/05/06						
Chloride	1700	500	mg/kg		1800			5 71	20	
Matrix Spike (EK60501-MS1)		**Source: 6J31011-06**		Prepared & Analyzed 11/05/06						
Chloride	122	5 00	mg/kg	100	22 6	99 4	80-120			

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Midland TX, 79705	Project Manager Ike Tavarez	

Notes and Definitions

J	Detected but below the Reporting Limit, therefore, result is an estimated concentration (CLP J-Flag)
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K Tuttle Date: 11/8/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: OF:

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2737

PROJECT NAME: COG - Jal Mat #7 well flow line leak Lea County, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH (8015 MOD.) 418.1 TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RUT	GC/MS Vol. 8240/8260/624	GC/MS Semi Vol. 8270/625	PCB's 8080/608	Pest. 608/680	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
631611																													
01	10/30/06		S		X	SP - West Side Wall (North)	1				X				X											X			
02			S		X	SP - West Side Wall (South)	1				X				X											X			
03			S		X	SP - West Side Wall (Middle)	1				X		X		X											X			
04			S		X	SP - East Side Wall (North)	1				X				X											X			
05			S		X	SP - East Side Wall (South)	1				X				X											X			
06			S		X	SP - East Side Wall (Middle)	1				X		X		X											X			
07			S		X	SP - North Side Wall	1				X		X		X											X			
08			S		X	SP - South Side Wall	1				X		X		X											X			

ANALYSIS REQUEST (Circle or Specify Method No.)

RELINQUISHED BY: (Signature) Date: 10/31/06 Time: 2:30
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) Ray Taylor / Kirk Harrison Date: 10/30/06 Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED UPS OTHER:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:
HIGHLANDER CONTACT PERSON: Ike Tavarez
Results by:

RECEIVING LABORATORY: ELT
ADDRESS:
CITY: Odessa STATE: Texas ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature) Carin Kelly
DATE: 10/31/06 TIME: 2:20
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: Ambient 4.0 w/labels

MATRIX: W-Water (S-Soil) A-Air SD-Solid SL-Sludge O-Other

REMARKS: Sidewalls (Run 4 BTEX) on the highest TPH

Please fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Environmental Corp - Project Manager retains pink copy - Accounting receives Gold copy.

(X) Add BTEX 11/01

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Highlander

Date/ Time: 10/31/11 2:20

Lab ID #: 10531011

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	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	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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: COG/ Jalmat #7 Well Flow Line Leak

Project Number: 2737

Location: Lea County, NM

Lab Order Number: 7C01008

Report Date: 03/05/07

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SP#2 2'-2 5' BEB	7C01008-01	Soil	02/28/07 00 00	03-01-2007 13 20
SP#5 2'-2 5' BEB	7C01008-03	Soil	02/28/07 00 00	03-01-2007 13 20
SP#12 2'-2 5' BEB	7C01008-06	Soil	02/28/07 00 00	03-01-2007 13 20

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager: Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SP#2 2'-2.5' BEB (7C01008-01) Soil									
Chloride	**189**	10 0	mg/kg	20	EC70501	03/02/07	03/03/07	EPA 300 0	
SP#5 2'-2.5' BEB (7C01008-03) Soil									
Chloride	**243**	5 00	mg/kg	10	EC70501	03/02/07	03/03/07	EPA 300 0	
SP#12 2'-2.5' BEB (7C01008-06) Soil									
Chloride	**228**	5 00	mg/kg	10	EC70501	03/02/07	03/03/07	EPA 300 0	

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Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC70501 - General Preparation (WetChem)										
Blank (EC70501-BLK1)				Prepared 03/02/07 Analyzed 03/03/07						
Chloride	ND	0 500	mg/kg							
LCS (EC70501-BS1)				Prepared 03/02/07 Analyzed 03/03/07						
Chloride	10 8	0 500	mg/kg	10 0		108	80-120			
Calibration Check (EC70501-CCV1)				Prepared 03/02/07 Analyzed 03/03/07						
Chloride	9 59		mg/kg	10 0		95 9	80-120			
Duplicate (EC70501-DUP1)	**Source: 7B28001-01**			Prepared 03/02/07 Analyzed 03/03/07						
Chloride	304	10 0	mg/kg		304			0 00	20	
Duplicate (EC70501-DUP2)	**Source: 7C01016-01**			Prepared 03/02/07 Analyzed. 03/03/07						
Chloride	154	10 0	mg/kg		157			1 93	20	
Matrix Spike (EC70501-MS1)	**Source: 7B28001-01**			Prepared 03/02/07 Analyzed 03/03/07						
Chloride	538	10 0	mg/kg	200	304	117	80-120			
Matrix Spike (EC70501-MS2)	**Source: 7C01016-01**			Prepared 03/02/07 Analyzed 03/03/07						
Chloride	661	10 0	mg/kg	200	157	252	80-120			M1

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax: (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager. Ike Tavarez	

Notes and Definitions

M1	The MS and/or MSD were above the acceptance limits due to sample matrix interference See Blank Spike (LCS)
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Celey D Keene Date: 3/5/2007

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
La Tasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2737

PROJECT NAME: COG - Jal Mat #7 Flowline leak Lea County, NM

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD. TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8240/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chlorides	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
01	2/28/07		S		X	SP #2 2'-2.5' BEB	1				X															X			
02			S		X	SP #2 3'-3.5' BEB	1				X																		
03			S		X	SP #5 2'-2.5' BEB	1				X															X			
04			S		X	SP #5 3'-3.5' BEB	1				X																		
05			S		X	SP #5 4'-4.5' BEB	1				X																		
06			S		X	SP #12 2'-2.5' BEB	1				X															X			
07			S		X	SP #12 3'-3.5' BEB	1				X																		
08			S		X	SP #12 4'-4.5' BEB	1				X																		

H01008

RELINQUISHED BY: (Signature) — Date: 3/1/07 Time: 1:20

RECEIVED BY: (Signature) — Date: Time:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

RELINQUISHED BY: (Signature) — Date: Time:

RECEIVED BY: (Signature) — Date: Time:

SAMPLED BY: (Print & Sign) Ray Taylor / Kelt Harrison — Date: 3/1/07 Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED UPS OTHER:

RECEIVING LABORATORY: ELT

ADDRESS:

CITY: Odessa STATE: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) Joanne McAnally

DATE: 03-01-07 TIME: 1320

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.0 °C w/label

MATRIX: W-Water A-Air SD-Solid S-Soil SL-Sludge O-Other

REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Highlander

Date/ Time: 3/1/07 13:20

Lab ID # : 710|008

Initials. JL

Sample Receipt Checklist

					Client Initials
#1	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 287996

for

Highlander Environmental Corp.

Project Manager: Ike Tavarez

COG / Jalmat # 7 Well Flowline Leak

2737

18-AUG-07

12600 West I-20 East Odessa, Texas 79765

A Xenco Laboratories Company

NELAC certification numbers:
Houston, TX E871002 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

ENVIRONMENTAL LAB OF

18-AUG-07

Project Manager: **Ike Tavarez**
Highlander Environmental Corp.
1910 N. Big Spring Street
Midland, TX 79705

Reference: XENCO Report No: **287996**
COG / Jalmat # 7 Well Flowline Leak
Project Address: Lea County, NM

Ike Tavarez:

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 287996. 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. 287996 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
Odessa Laboratory Director

Certificate of Analysis Summary 287996

Highlander Environmental Corp., Midland, TX

Project Name: COG / Jalmat # 7 Well Flowline Leak

Project Id: 2737
Contact: Ike Tavarez
Project Location: Lea County, NM

Date Received in Lab: Thu Aug-16-07 09 40 am
Report Date: 18-AUG-07
Project Manager: Brent Barron, II

Analysis Requested											
	Lab Id:	287996-001		287996-003		287996-005					
	Field Id:	SP-6 (2'-2 5') BEB (3 0')		SP-7 (2'-2 5') BEB (2 5')		SP-10 (2'-2 5') BEB (1 0')					
	Depth:										
	Matrix:	SOIL		SOIL		SOIL					
	Sampled:	Aug-14-07 00:00		Aug-14-07 00 00		Aug-14-07 00:00					
Total Chloride by EPA 325.3	*Extracted:*										
	Analyzed:	Aug-17-07 16:30		Aug-17-07 16:30		Aug-17-07 16:30					
	Units/RL:	mg/kg	RL	mg/kg	RL	mg/kg	RL				
Chloride		53.2	5.00	85.1	5.00	85.1	5 00				

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America

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.

Blank Spike Recovery

Project Name: COG / Jalmat # 7 Well Flowline Leak

Work Order #: 287996 **Project ID:** 2737

Lab Batch #: 702529 **Sample:** 702529-1-BKS **Matrix:** Solid

Date Analyzed: 08/17/2007 **Date Prepared:** 08/17/2007 **Analyst:** IRO

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

Total Chloride by EPA 325.3	BLANK /BLANK SPIKE RECOVERY STUDY					
Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Chloride	ND	100	90.3	90	75-125	

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

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: COG Operating | SITE MANAGER: Ike Tavarez

PROJECT NO.: 2737 | PROJECT NAME: COG/Jalmat #7 well Flowline Leak Lea County, NM

LAB I.D NUMBER	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE IDENTIFICATION (287996)	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE	ANALYSIS REQUEST (Circle or Specify Method No.): BTEX 8021B/602	MTBE 8021B/602	TPH 418.1 8015 MOD TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC-MS Vol. 8240/8260/624	GC-MS Semi. Vol. 8270/625	PCB's 8082/608	Pest. 808/608	BOD, TSS, pH, TDS, Chlorides	Gamma Spec	Alpha Beta (Air)	PLM (Asbestos)
01	8/14/07		S		X	SP-6 (2'-2.5') BEB (3.0')	1																			X			
02	"		S		X	SP-6 (3'-3.5') BEB (3.0')	1																							
03			S		X	SP-7 (2'-2.5') BEB (2.5')	1																			X			
04			S		X	SP-7 (3'-3.5') BEB (2.5')	1																							
05			S		X	SP-10 (2'-2.5') BEB (1.0')	1																			X			
06	↓		S		X	SP-10 (3'-3.5') BEB (1.0')	1																							

RELINQUISHED BY: (Signature) Ike Tavarez — Date: 8/16/07 Time: 9:40 | RECEIVED BY: (Signature) — Date: — Time:

RELINQUISHED BY: (Signature) — Date: — Time: | RECEIVED BY: (Signature) — Date: — Time:

RELINQUISHED BY: (Signature) — Date: — Time: | RECEIVED BY: (Signature) — Date: — Time:

RECEIVING LABORATORY: ELT
ADDRESS:
CITY: Odessa STATE: TX ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) Andrea Lam
DATE: 8.16.07 TIME: 9:40

SAMPLED BY: (Print & Sign) Ray Taylor — Date: 8/14/07 Time:

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #:
HAND DELIVERED UPS OTHER:

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized. Yes No

SAMPLE CONDITION WHEN RECEIVED:

MATRIX: W-Water (S-Soil) A-Air SD-Solid SL-Sludge O-Other

REMARKS: 2.0 'C 4 07 glass w/ labels

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp - Project Manager retains pink copy - Accounting receives Gold copy

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Highlander

Date/ Time: 8 16 07 9 46

Lab ID #: 287996

Initials: GL

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	(Yes)	No	2 C °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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: COG/ Jalmat Yates Unit Well #7

Project Number: None Given

Location: None Given

Lab Order Number: 6J30001

Report Date: 11/02/06

Highlander Environmental Corp	Project COG/ Jalmat Yates Unit Well #7	Fax (432) 682-3946
1910 N Big Spring St	Project Number None Given	
Midland TX, 79705	Project Manager Ike Tavarez	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS #4	6J30001-01	Soil	10/26/06 00:00	10-30-2006 09 00
SS #5	6J30001-02	Soil	10/26/06 00 00	10-30-2006 09 00
SS #7	6J30001-03	Soil	10/26/06 00 00	10-30-2006 09 00
SS #12	6J30001-04	Soil	10/26/06 00 00	10-30-2006 09 00

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp	Project: COG/ Jalmat Yates Unit Well #7	Fax (432) 682-3946
1910 N Big Spring St	Project Number: None Given	
Midland TX, 79705	Project Manager: Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS #4 (6J30001-01) Soil									
Carbon Ranges C6-C12	**35.5**	10.0	mg/kg dry	1	EJ63105	10/30/06	10/31/06	EPA 8015M	
Carbon Ranges C12-C28	**270**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**25.9**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**331**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*79.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*76.8 %*	*70-130*		"	"	"	"	
SS #5 (6J30001-02) Soil									
Carbon Ranges C6-C12	**268**	10.0	mg/kg dry	1	EJ63105	10/30/06	10/31/06	EPA 8015M	
Carbon Ranges C12-C28	**2920**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**142**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**3330**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*87.8 %*	*70-130*		"	"	"	"	
SS #7 (6J30001-03) Soil									
Carbon Ranges C6-C12	**15.8**	10.0	mg/kg dry	1	EJ63105	10/30/06	10/31/06	EPA 8015M	
Carbon Ranges C12-C28	**928**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**74.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**1020**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*80.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*93.8 %*	*70-130*		"	"	"	"	
SS #12 (6J30001-04) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EJ63105	10/30/06	10/31/06	EPA 8015M	
Carbon Ranges C12-C28	**44.3**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**44.3**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*77.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70.2 %*	*70-130*		"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Highlander Environmental Corp	Project COG/ Jalmat Yates Unit Well #7	Fax (432) 682-3946
1910 N Big Spring St	Project Number None Given	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS #4 (6J30001-01) Soil									
% Moisture	**5.8**	0.1	%	1	EJ63101	10/30/06	10/31/06	% calculation	
SS #5 (6J30001-02) Soil									
% Moisture	**4.7**	0.1	%	1	EJ63101	10/30/06	10/31/06	% calculation	
SS #7 (6J30001-03) Soil									
% Moisture	**3.0**	0.1	%	1	EJ63101	10/30/06	10/31/06	% calculation	
SS #12 (6J30001-04) Soil									
% Moisture	**5.6**	0.1	%	1	EJ63101	10/30/06	10/31/06	% calculation	

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Highlander Environmental Corp	Project COG/ Jalmat Yates Unit Well #7	Fax (432) 682-3946
1910 N Big Spring St	Project Number None Given	
Midland TX, 79705	Project Manager Ike Tavarez	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ63105 - Solvent Extraction (GC)										
Blank (EJ63105-BLK1)				Prepared 10/30/06 Analyzed 10/31/06						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	*59 0*		*mg/kg*	*50 0*		*118*	*70-130*			
Surrogate 1-Chlorooctadecane	*55 1*		*"*	*50 0*		*110*	*70-130*			
LCS (EJ63105-BS1)				Prepared 10/30/06 Analyzed 10/31/06						
Carbon Ranges C6-C12	503	10 0	mg/kg wet	500		101	75-125			
Carbon Ranges C12-C28	470	10 0	"	500		94 0	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00			75-125			
Total Hydrocarbons	974	10 0	"	1000		97.4	75-125			
Surrogate 1-Chlorooctane	*55 6*		*mg/kg*	*50 0*		*111*	*70-130*			
Surrogate 1-Chlorooctadecane	*43 2*		*"*	*50 0*		*86 4*	*70-130*			
Calibration Check (EJ63105-CCV1)				Prepared 10/30/06 Analyzed 10/31/06						
Carbon Ranges C6-C12	471		mg/kg	500		94 2	80-120			
Carbon Ranges C12-C28	441		"	500		88 2	80-120			
Total Hydrocarbons	912		"	1000		91 2	80-120			
Surrogate. 1-Chlorooctane	*130*		*"*	*100*		*130*	*70-130*			
Surrogate 1-Chlorooctadecane	*108*		*"*	*100*		*108*	*70-130*			
Matrix Spike (EJ63105-MS1)	**Source: 6J30006-02**			Prepared 10/30/06 Analyzed. 10/31/06						
Carbon Ranges C6-C12	538	10 0	mg/kg dry	503	ND	107	75-125			
Carbon Ranges C12-C28	527	10 0	"	503	ND	105	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0 00	ND		75-125			
Total Hydrocarbons	1060	10 0	"	1010	ND	105	75-125			
Surrogate 1-Chlorooctane	*59 5*		*mg/kg*	*50 0*		*119*	*70-130*			
Surrogate 1-Chlorooctadecane	*49 0*		*"*	*50 0*		*98 0*	*70-130*			

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Highlander Environmental Corp
1910 N Big Spring St
Midland TX, 79705

Project COG/ Jalmat Yates Unit Well #7
Project Number None Given
Project Manager Ike Tavarez

Fax (432) 682-3946

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ63105 - Solvent Extraction (GC)										
Matrix Spike Dup (EJ63105-MSD1)	**Source: 6J30006-02**			Prepared: 10/30/06 Analyzed: 10/31/06						
Carbon Ranges C6-C12	445	10.0	mg/kg dry	503	ND	88.5	75-125	18.9	20	
Carbon Ranges C12-C28	435	10.0	"	503	ND	86.5	75-125	19.1	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	880	10.0	"	1010	ND	87.1	75-125	18.6	20	
Surrogate: 1-Chlorooctane	*49.6*		*mg/kg*	*50.0*		*99.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*37.8*		*"*	*50.0*		*75.6*	*70-130*			

Highlander Environmental Corp	Project COG/ Jalmat Yates Unit Well #7	Fax (432) 682-3946
1910 N Big Spring St	Project Number None Given	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ63101 - General Preparation (Prep)										
Blank (EJ63101-BLK1)				Prepared 10/30/06 Analyzed 10/31/06						
% Solids	100		%							
Duplicate (EJ63101-DUP1)		Source: 6J26007-01		Prepared 10/30/06 Analyzed 10/31/06						
% Solids	94 0		%		93 9			0 106	20	
Duplicate (EJ63101-DUP2)		Source: 6J30001-04		Prepared 10/30/06 Analyzed 10/31/06						
% Solids	94 2		%		94 4			0 212	20	
Duplicate (EJ63101-DUP3)		Source: 6J30014-01		Prepared 10/30/06 Analyzed 10/31/06						
% Solids	90 0		%		90 1			0 111	20	

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Highlander Environmental Corp	Project: COG/ Jalmat Yates Unit Well #7	Fax: (432) 682-3946
1910 N Big Spring St	Project Number None Given	
Midland TX, 79705	Project Manager Ike Tavarez	

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 11/2/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

Analysis Request and Chain of Custody Record

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

(432) 682-4559 Fax (432) 682-3946

PAGE: 1 OF: 1

CLIENT NAME: COG

SITE MANAGER: IKe Tavarez

PROJECT NO.:

PROJECT NAME: Jalmat Yates Unit Well #7

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	PRESERVATIVE METHOD: HCL	HNO3	ICE	NONE
0B6001-01	10/24/06		S		✓	SS # 4	1				✓	✓
-02	10/24/06		S		✓	SS # 5	1				✓	✓
-03	10/24/06		S		✓	SS # 7	1				✓	✓
-04	10/26/06		S		✓	SS # 12	1				✓	✓

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021B/602	MTBE 8021B/602	TPH 8015 MOD. TX1005	TPH 418.1	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC/MS Vol. 8260/8260/624	GC/MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
		✓															
		✓															
		✓															
		✓															

RELINQUISHED BY: (Signature) Date: October 30 2006 Time: 0900
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) Date: October 26 06 Time: 1700

SAMPLE SHIPPED BY: (Circle)
FEDEX BUS AIRBILL #
HAND DELIVERED UPS OTHER:

HIGHLANDER CONTACT PERSON: IKe Tavarez

Results by:

RUSH Charges Authorized: Yes No

RECEIVING LABORATORY: Environmental Lab of TX
ADDRESS:
CITY: Odessa STATE: TX ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) Jaime Mendoza
DATE: 10-30-06 TIME: 0900

SAMPLE CONDITION WHEN RECEIVED: 3.5°C 4oz glass on ice w/label no seals

MATRIX: W-Water S-Soil A-Air SL-Sludge SD-Solid O-Other

REMARKS:

Please Fill out all copies – Laboratory retains yellow copy – Return original copy to Highlander Environmental Corp. – Project Manager retains pink copy – Accounting receives Gold copy.

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Highlander

Date/ Time: 10/30/06 9:00

Lab ID #: 610300 01

Initials: CK

Sample Receipt Checklist

					Client Initials
#1	Temperature of container/ cooler?	Yes	No	3.5 °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	VOC samples have zero headspace?	~~Yes~~	No	Not Applicable	

Variance Documentation

Contact: Jeff Kindley Contacted by: Jeanne McMurrey Date/ Time: 10-30-06 @ 1110

Regarding: COC request TPH only Label request TPH + BTEX

Corrective Action Taken:

Client only wants to run TPH

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

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

A Xenco Laboratories Company

Analytical Report

Prepared for:

Ike Tavarez

Highlander Environmental Corp.

1910 N. Big Spring St.

Midland, TX 79705

Project: COG/ Jalmat #7 Well Flow Line Leak

Project Number: 2737

Location: Lea County, NM

Lab Order Number: 7C01009

Report Date: 03/08/07

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SS #5 0-1 0'	7C01009-01	Soil	02/28/07 00 00	03-01-2007 13 20
SS #7 0-1 0'	7C01009-02	Soil	02/28/07 00 00	03-01-2007 13 20

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Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number. 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS #5 0-1.0' (7C01009-01) Soil									
Carbon Ranges C6-C12	**24.8**	10.0	mg/kg dry	1	EC70207	03/02/07	03/08/07	EPA 8015M	
Carbon Ranges C12-C28	**632**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**75.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**733**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*100 %*	*70-130*		"	"	"	"	
Surrogate. 1-Chlorooctadecane		*119 %*	*70-130*		"	"	"	"	
SS #7 0-1.0' (7C01009-02) Soil									
Carbon Ranges C6-C12	**J [7.29]**	10.0	mg/kg dry	1	EC70207	03/02/07	03/08/07	EPA 8015M	J
Carbon Ranges C12-C28	**313**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**49.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate 1-Chlorooctane		*98.4 %*	*70-130*		"	"	"	"	
Surrogate 1-Chlorooctadecane		*114 %*	*70-130*		"	"	"	"	

Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
SS #5 0-1.0' (7C01009-01) Soil									
% Moisture	**5.1**	0.1	%	1	EC70806	03/07/07	03/07/07	% calculation	
SS #7 0-1.0' (7C01009-02) Soil									
% Moisture	**5.1**	0.1	%	1	EC70806	03/07/07	03/07/07	% calculation	

Highlander Environmental Corp
1910 N Big Spring St
Midland TX, 79705

Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager Ike Tavarez

Fax (432) 682-3946

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC70207 - Solvent Extraction (GC)										
Blank (EC70207-BLK1)				Prepared: 03/02/07 Analyzed 03/07/07						
Carbon Ranges C6-C12	ND	10 0	mg/kg wet							
Carbon Ranges C12-C28	ND	10 0	"							
Carbon Ranges C28-C35	ND	10 0	"							
Total Hydrocarbons	ND	10 0	"							
Surrogate 1-Chlorooctane	*50 8*		*mg/kg*	*50 0*		*102*	*70-130*			
Surrogate 1-Chlorooctadecane	*60 6*		*"*	*50 0*		*121*	*70-130*			
LCS (EC70207-BS1)				Prepared 03/02/07 Analyzed 03/07/07						
Carbon Ranges C6-C12	624	10 0	mg/kg wet	500		125	75-125			
Carbon Ranges C12-C28	544	10 0	"	500		109	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0.00			75-125			
Total Hydrocarbons	1170	10 0	"	1000		117	75-125			
Surrogate 1-Chlorooctane	*58 5*		*mg/kg*	*50 0*		*117*	*70-130*			
Surrogate 1-Chlorooctadecane	*57 9*		*"*	*50 0*		*116*	*70-130*			
Calibration Check (EC70207-CCV1)				Prepared 03/02/07 Analyzed 03/08/07						
Carbon Ranges C6-C12	232		mg/kg	250		92 8	80-120			
Carbon Ranges C12-C28	245		"	250		98 0	80-120			
Total Hydrocarbons	478		"	500		95 6	80-120			
Surrogate 1-Chlorooctane	*62 9*		*"*	*50 0*		*126*	*70-130*			
Surrogate 1-Chlorooctadecane	*62 4*		*"*	*50 0*		*125*	*70-130*			
Matrix Spike (EC70207-MS1)	**Source: 7C01009-01**			Prepared 03/02/07 Analyzed 03/08/07						
Carbon Ranges C6-C12	651	10 0	mg/kg dry	527	24 8	119	75-125			
Carbon Ranges C12-C28	1030	10 0	"	527	632	75 5	75-125			
Carbon Ranges C28-C35	ND	10 0	"	0.00	75 5		75-125			
Total Hydrocarbons	1680	10 0	"	1050	733	90 2	75-125			
Surrogate 1-Chlorooctane	*55 6*		*mg/kg*	*50 0*		*111*	*70-130*			
Surrogate 1-Chlorooctadecane	*58.6*		*"*	*50 0*		*117*	*70-130*			

Highlander Environmental Corp
1910 N Big Spring St
Midland TX, 79705

Project COG/ Jalmat #7 Well Flow Line Leak
Project Number 2737
Project Manager Ike Tavarez

Fax (432) 682-3946

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC70207 - Solvent Extraction (GC)										
Matrix Spike Dup (EC70207-MSD1)	**Source: 7C01009-01**			Prepared 03/02/07 Analyzed 03/08/07						
Carbon Ranges C6-C12	677	10.0	mg/kg dry	527	24.8	124	75-125	4.12	20	
Carbon Ranges C12-C28	1040	10.0	"	527	632	77.4	75-125	2.49	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	75.5		75-125		20	
Total Hydrocarbons	1720	10.0	"	1050	733	94.0	75-125	4.13	20	
Surrogate: 1-Chlorooctane	*58.6*		*mg/kg*	*50.0*		*117*	*70-130*			
Surrogate: 1-Chlorooctadecane	*58.9*		"	*50.0*		*118*	*70-130*			

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Highlander Environmental Corp	Project COG/ Jalmat #7 Well Flow Line Leak	Fax (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

General Chemistry Parameters by EPA / Standard Methods - Quality Control

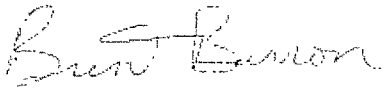
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC70806 - General Preparation (Prep)										
Blank (EC70806-BLK1)				Prepared & Analyzed 03/07/07						
% Solids	100		%							
Duplicate (EC70806-DUP1)		**Source: 7C01009-01**		Prepared & Analyzed 03/07/07						
% Solids	95 2		%		94.9			0 316	20	

Highlander Environmental Corp	Project. COG/ Jalmat #7 Well Flow Line Leak	Fax: (432) 682-3946
1910 N Big Spring St	Project Number 2737	
Midland TX, 79705	Project Manager Ike Tavarez	

Notes and Definitions

J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag)
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:  Date: 3/8/2007

Brent Barron, Laboratory Director/Corp. Technical Director
Celey D. Keene, Org. Tech Director
Raland K. Tuttle, Laboratory Consultant

James Mathis, QA/QC Officer
Jeanne Mc Murrey, Inorg. Tech Director

Analysis Request and Chain of Custody Record

PAGE: 1 OF: 1

HIGHLANDER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705
(432) 682-4559 Fax (432) 682-3946

CLIENT NAME: COG

SITE MANAGER: Ike Tavarez

PROJECT NO.: 2737

PROJECT NAME: COG - Jalmat #7 Flowline Leak
Lea County, NM

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB I.D. NUMBER	DATE	TIME	MATRIX	COMP.	GRAB	SAMPLE IDENTIFICATION	NUMBER OF CONTAINERS	FILTERED (Y/N)	HCL	HNO3	ICE	NONE	BTEX 8020/602	MTBE 8020/602	TPH 418.1 8015 MOD TX1005	PAH 8270	RCRA Metals Ag As Ba Cd Cr Pb Hg Se	TCLP Metals Ag As Ba Cd Cr Pd Hg Se	TCLP Volatiles	TCLP Semi Volatiles	RCI	GC.MS Vol. 8240/8260/624	GC.MS Semi. Vol. 8270/625	PCB's 8080/608	Pest. 808/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
nC01009 -01	2/28/07		S		X	SS #5 0-1.0'	1				X				X														
-02	2/28/07		S		X	SS #7 0-1.0'	1				X				X														

RELINQUISHED BY: (Signature) [signature] Date: 3/1/07 Time: 1:20
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RELINQUISHED BY: (Signature) Date: Time:
RECEIVED BY: (Signature) Date: Time:

RECEIVING LABORATORY: ELT
ADDRESS:
CITY: Odessa STATE: TX ZIP:
CONTACT: PHONE:

RECEIVED BY: (Signature) Jeanne McMurray
DATE: 03-01-07 TIME: 1320

SAMPLED BY: (Print & Sign) Ray Taylor / Kolt Harrison Date: 3/1/07 Time:

SAMPLE SHIPPED BY: (Circle) FEDEX BUS AIRBILL #: HAND DELIVERED (circled) UPS OTHER:

HIGHLANDER CONTACT PERSON: Ike Tavarez

Results by:

RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED: 4.0°C w/label

MATRIX: W-Water A-Air SD-Solid S-Soil (circled) SL-Sludge O-Other

REMARKS:

Please Fill out all copies - Laboratory retains yellow copy - Return original copy to Highlander Enviromental Corp. - Project Manager retains pink copy - Accounting receives Gold copy.

Environmental Lab of Texas

Variance/ Corrective Action Report- Sample Log-In

Client: Highlander

Date/ Time: 3/1/07 13:20

Lab ID # : 703007

Initials: JK

Sample Receipt Checklist

					Client Initials
#1	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

1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☒ AMENDED Initial Report ☐ Final Repor

Name of Company COG Operating LLC	Contact Phyllis Edwards
Address 550 W. Texas Ave, Ste 1300 Midland, TX 79701	Telephone No. 432-683-4340
Facility Name Jalmat Yates Unit #7	Facility Type Gas Well

Surface Owner	Mineral Owner	Lease No. 301048

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
O	12	25S	36E	990	South	1650	East	Lea

Latitude_____ Longitude_____

NATURE OF RELEASE

Type of Release produced oil & water leak	Volume of Release 6 BO & 75 BW	Volume Recovered 1 BO & 5 BW
Source of Release hole in flowline	Date and Hour of Occurrence 9/5/06 time unknown	Date and Hour of Discovery 9/5/06 apprx 3:00 PM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Left message w/ Hobbs NMOCD	
By Whom? COG employee Boyd Chesser	Date and Hour 3:00 PM 9/5/06	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Hole in flowline. Replace flow line.

Describe Area Affected and Cleanup Action Taken.*
Leak ¾ mile SE of well toward battery. Leak ran along flowline (200' x 1') to edge of lease road (4' x 30'), then crossed road (850' x 1'). Repaired flowline leak. Picked up all standing fluids that could be recovered. Raked up oily dirt & piled up to be picked up & hauled off. Highlander Environmental will assess the leak area and will begin clean-up work the week of 9-18 to 9-22. Call Boyd Chesser w/ COG @ 432-557-5379 or Ike @ Highlander Environmental @ 432-425-3878.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	OIL CONSERVATION DIVISION
Printed Name: Phyllis A. Edwards	Approved by District Supervisor:
Title: Regulatory Analyst	Approval Date: / Expiration Date:
E-mail Address: pedwards@conchoresources.com	Conditions of Approval: / Attached ☐
Date: 9/13/06 Phone: 432-685-4340	

* Attach Additional Sheets If Necessary