Highlander Environmental Corp.

Midland, Texas

October 3, 2006

RP#1033

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

RE: 1 RP – 1033
Assessment and Work Plan for the 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 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,

application - p PAC0625646039

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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 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.

Assessment/Soil Sampling

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'. 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', then proceeded 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 spill area is shown on Figure 2.

Highlander personnel inspected and sampled the spill area. At the release point, measuring 12' x 60' and two - 125 x 1.0' areas, 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 location of the auger holes are shown on Figure 2.

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 Table 1. The laboratory reports are included in Appendix B.

Soil Sampling Results

Referring to Table 1, the impacted area (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 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.

Work Plan

Based on the results, the impacted areas west of the release showed a shallow impact to the subsurface soil. The area of AH-3 did show a slightly elevated chloride, which will be further evaluated and remediated. The areas of auger holes (AH-4 through AH-16) will be tilled to aid the degradation of the surface impact. In addition, any other impacted areas found west of the auger holes will be cleanup or remediated.

At the flow lines and the areas of auger holes (AH-1, AH-2 and AH-3), the impacted soils will be excavated and hauled to Sundance Services for disposal. Once excavated to the appropriate depth, soil confirmation samples will be collected from these areas. Soil samples will be placed into laboratory supplied containers and delivered to a laboratory under chain-of-custody control for TPH, BTEX and chloride analysis.

Once completed, the results of the assessment, along with recommendations for further investigation or remediation, if any, will be submitted to the NMOCD. If you require any additional information or have any questions or comments, please call.

Highlander Environmental Corp.

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

cc: COG – Erick Nelson

FIGURES

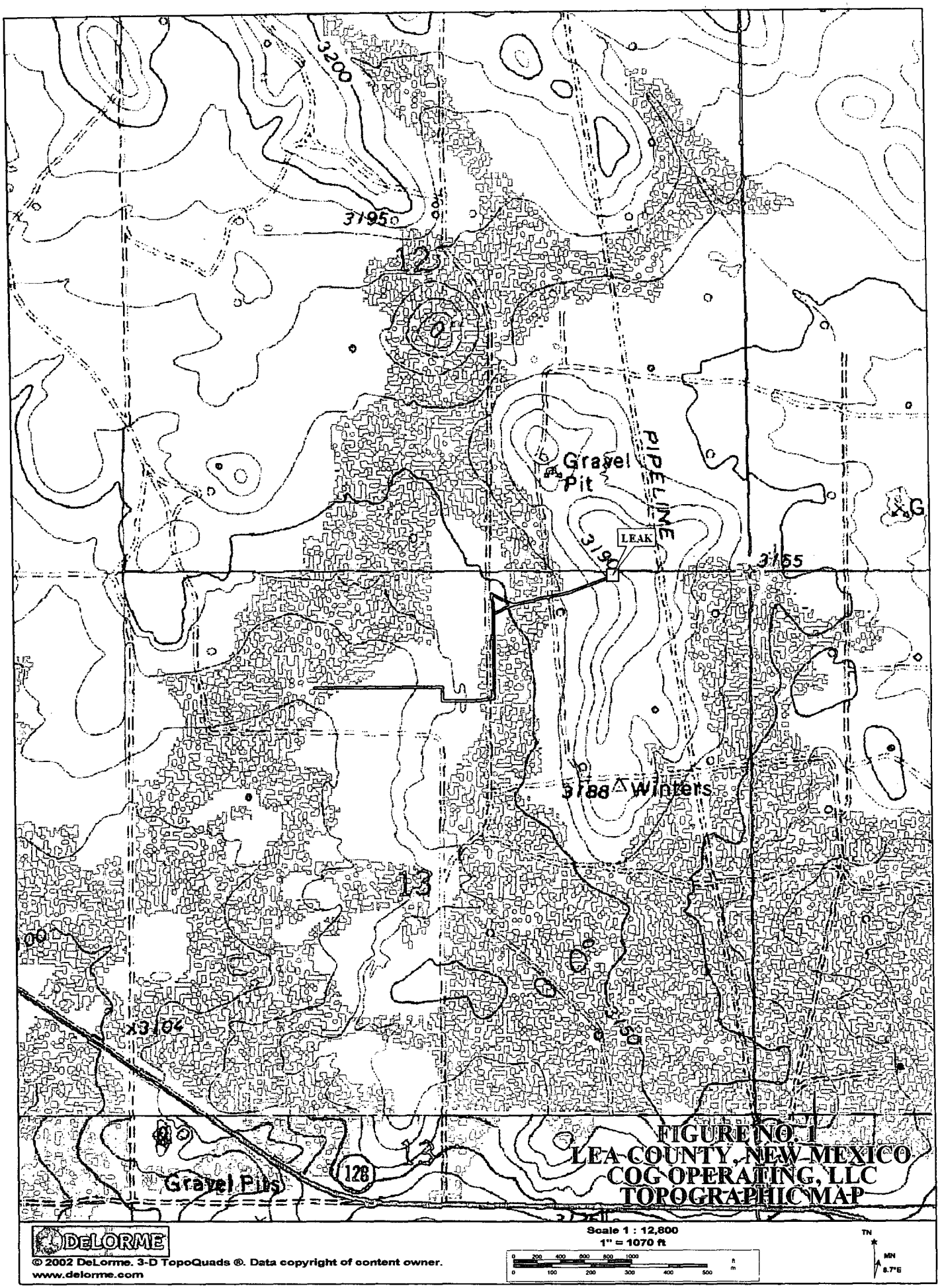
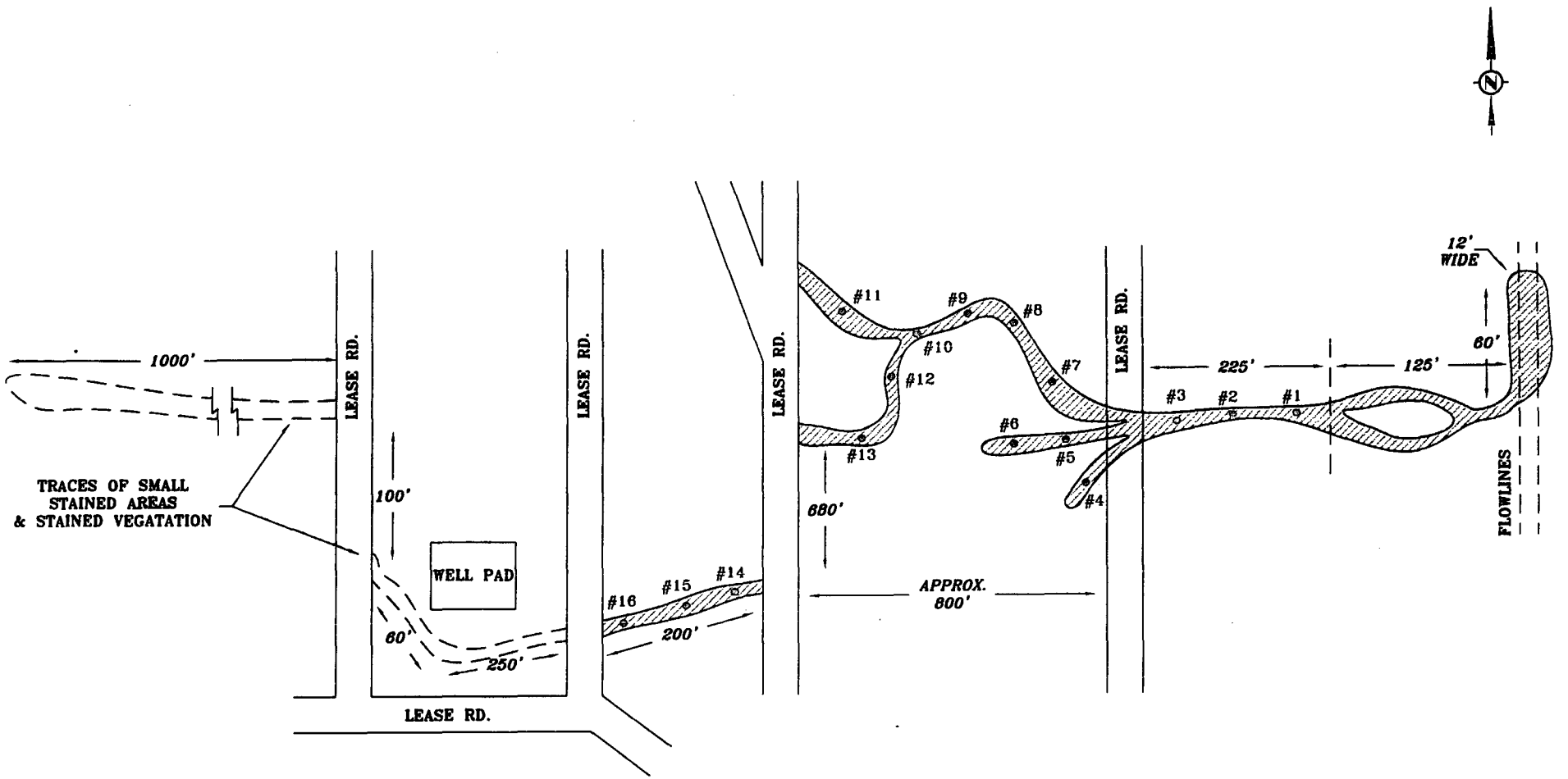


FIGURE NO. 1
LEA COUNTY, NEW MEXICO
COG OPERATING, LLC
TOPOGRAPHIC MAP



SPILL AREA

SAMPLE LOCATIONS

NOT TO SCALE

FIGURE NO. 2

LEA COUNTY, NEW MEXICO

COG OPERATING, LLC
JALMAT #7

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE: 10/9/06
DWN. BY: JJ
FILE: C:\COG\2737 JALMAT #7

TABLES

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

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			C6-C12	C12-C35	Total					
AH-1	9/18/2006	0-1.0'	7640	23680	**31300**	**0.413**	**11.4**	**23.9**	**72.3**	383
AH-1	9/18/2006	1.0'-1.5'	3640	11423	**15100**	**0.0723**	**3.67**	**11.5**	**35.2**	351
AH-1	9/18/2006	2.0'-2.5'	<10.0	179.0	179	<0.025	<0.025	<0.025	<0.025	128
AH-2	9/18/2006	0-1.0'	4570	13260	**17800**	0.0469	1.59	3.86	12.09	106
AH-2	9/18/2006	1.0'-1.5'	10.9	107.3	118	-	-	-	-	<20
AH-2	9/18/2006	2.0'-2.5'	13.3	134.5	148	-	-	-	-	<20
AH-3	9/18/2006	0-1.0'	3970	13828	**17800**	0.0215	1.52	5.42	14.1	**638**
AH-3	9/18/2006	1.0'-1.5'	<10.0	20.6	20.6	-	-	-	-	**830**
AH-3	9/18/2006	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	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	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	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	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	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethlybenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			C6-C12	C12-C35	Total					
AH-9	9/18/2006	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	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	0-0.5'	<10.0	272	272					<20
AH-11	9/18/2006	0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-12	9/18/2006	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	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	0-0.5'	<10.0	124	124	-	-	-	-	<20
AH-14	9/18/2006	0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-15	9/18/2006	0-0.5'	27.5	501.5	529	-	-	-	-	<20
AH-15	9/18/2006	0.5'-1.0'	-	-	-	-	-	-	-	<20
AH-16	9/18/2006	0-0.5'	27.4	797	824	-	-	-	-	<20
AH-16	9/18/2006	0.5'-1.0'	-	-	-	-	-	-	-	<20

(-) Not Analyzed

APPENDIX A

Water Well Data

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

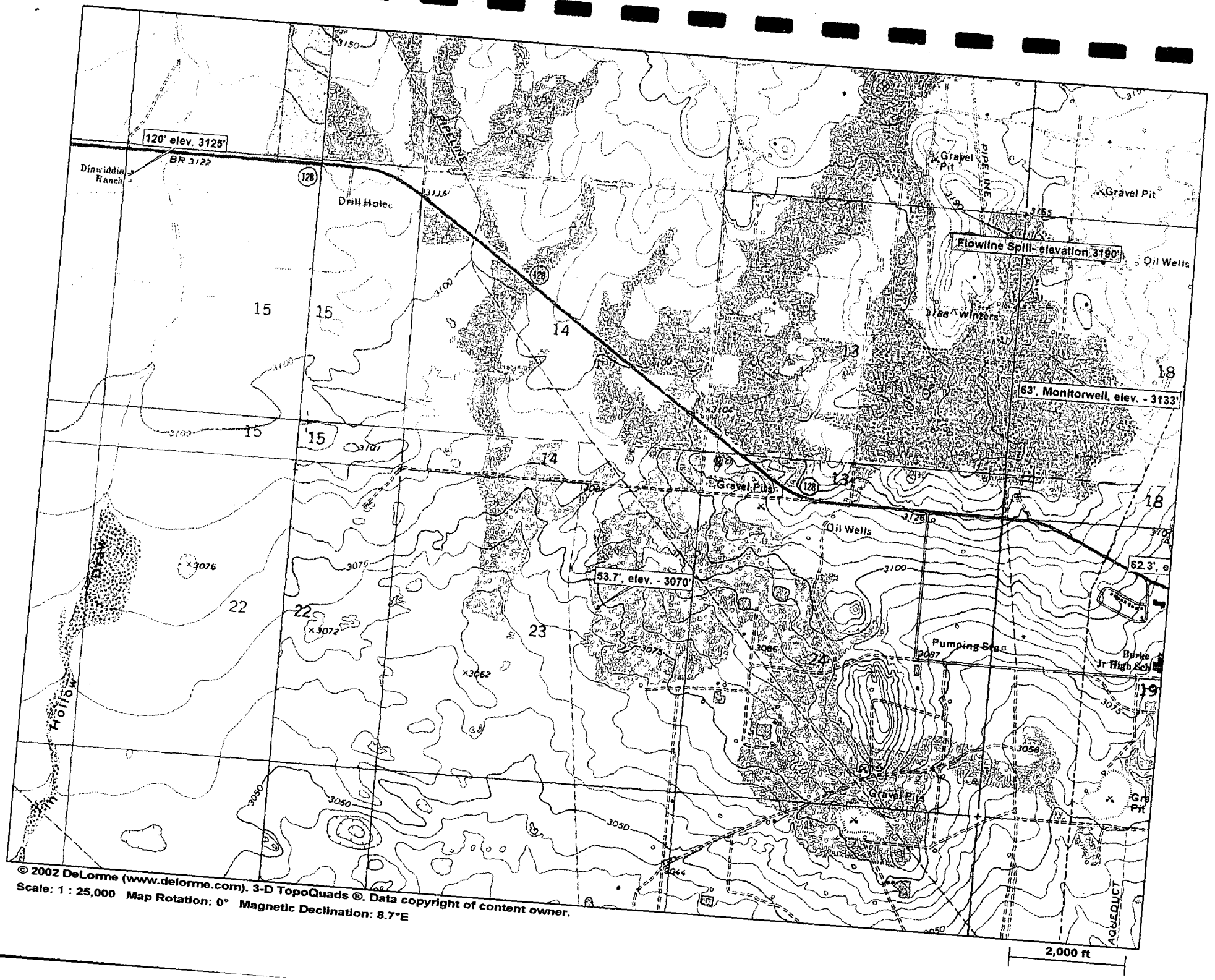
26 South 37 East

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)



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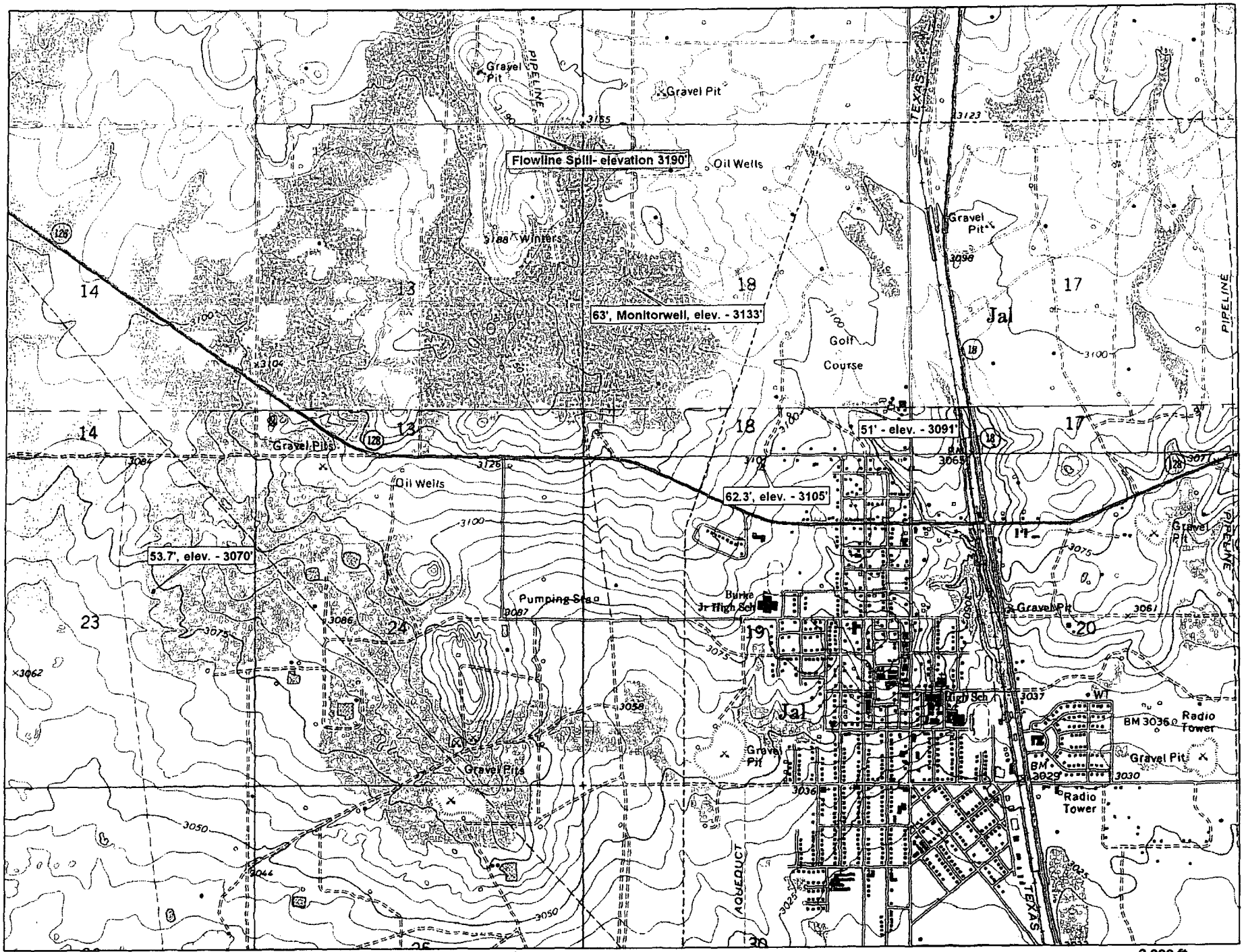

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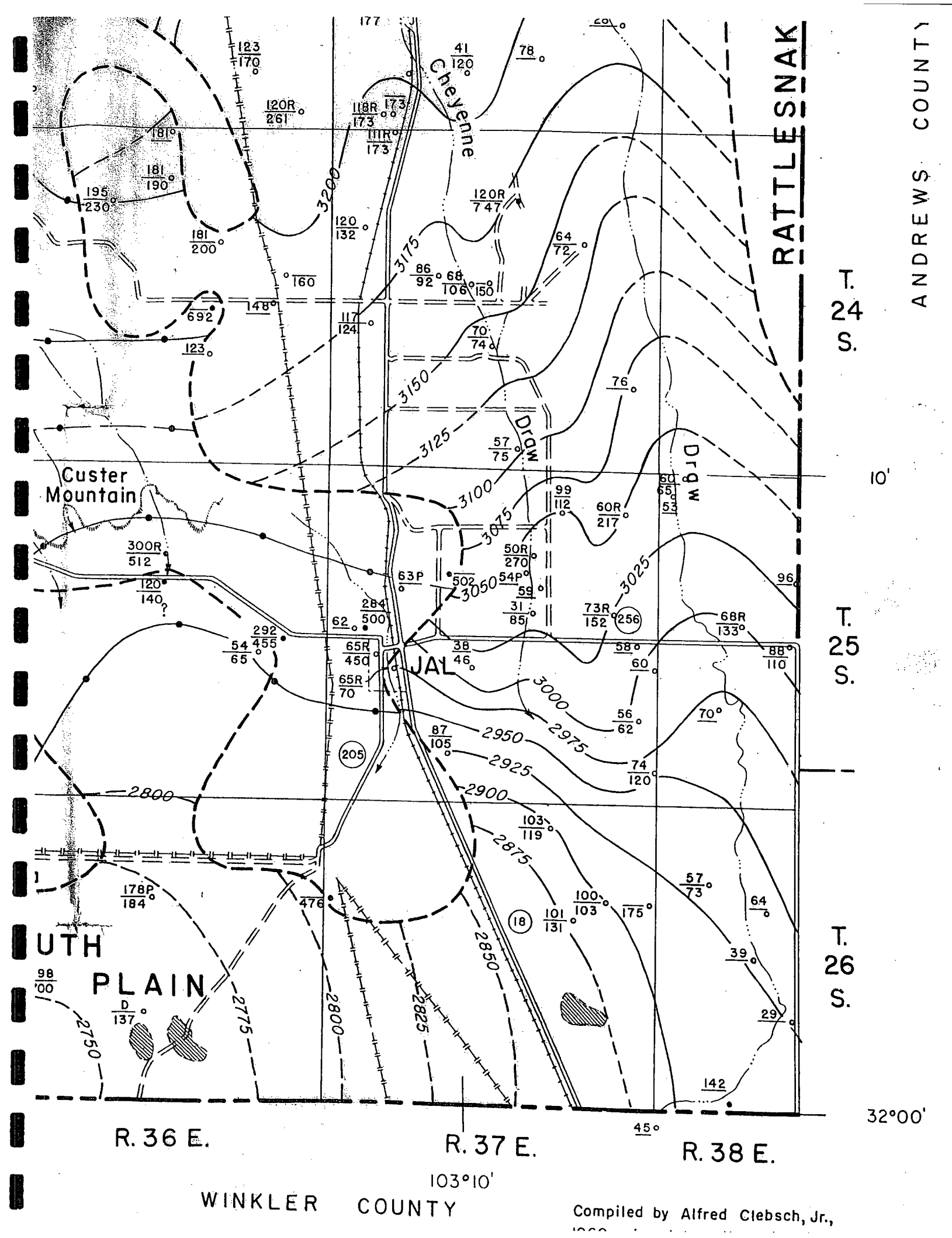
RATTLESNAK
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R. 38 E.
10'
32°00'
103°10'
ANDREWS COUNTY
WINKLER COUNTY
Compiled by Alfred Clebsch, Jr.,

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 wells	Method of lift	Use of water	Remarks
24.34.35.122	do.	Tr	258M	3,410	223.9	3-29-53	—	6	Lw	S	—
24.35.30.341	do.	Tr	150±M	3,320	139.6	11-27-53	—	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	—
9.133	do.	To	230	3,395	195.0	3- 6-53	1948	7	N	N	—
13.314	Humble Oil Co.	To	160	—	—	—	1941	—	—	—	WBZ sand, 138-158 feet. EY 10 gpm.
24.36.15.222	Canmex Oil Co.	To	200	3,370	181.3	3-12-53	1937	7	Lw	D	—
22.220	Continental Oil Co.	Tr	692	3,340	—	—	—	8¼	Li	D	A. H. Meyers "A" well 1. Intake set at about 475 feet. Maximum yield 6 gpm.
23.222	—	To	—	3,345	147.9	3- 6-53	—	6¼	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- 8-52	1952	10¾	Te	In,D	Jal Plant 4, well 6.
7.431	Fowler Hair	To	132M	3,300	119.9	3- 6-53	—	6¼	N	N	—
10.123	Trinity Production Co.	Tr	747	3,260	120	2- -53	1953	—	Li	In	EY 42 gpm. Chemical analysis in table 8.
14.211	Fowler Hair	To(?)	72M	3,205	64.5	3- 3-53	—	5	N	N	—
24.37.16.342	—	To	106M	3,235	67.7	3-11-53	—	9	N	N	—
16.423	Humble Oil Co.	To	150	3,240	—	—	1951	6⅝	Te	D	Fowler-Ellenburger Camp well 1. WBZ 90-150 feet.
17.422	Fowler Hair	To	92M	3,260	86.5	3- 4-53	—	7½	N	N	—
19.234	—	To	124M	3,290	117.4	3- 5-53	—	10	Lw	S	—
21.444	Dollarhide Water Co.	To	74M	3,210	69.6	3- 2-53	—	7½	N	N	—
25.322	Fowler Hair	To	—	3,136	76.1	3- 3-53	—	6½	Lw	D,S	—
34.320	Plains Production Co.	To	75±M	3,160	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	—
25.34.1.132	Madera Ranch	Tr	300+	3,385	231.0	4-15-53	—	6	N	N	—
25.34.15.242	—	Tr	168	3,335	164.9	7-23-54	—	10	Lw	S	—
25.35.10.223	Georgia Bryant	To	83M	3,180	76.9	4- 2-53	—	9	Lw	S	—
21.122	—	Tr	—	3,230	173.3	4- 2-53	—	8½	N	N	—
25.36.10.313	W. D. Dinwiddie	Tr	512	3,130	300	—	—	—	Lw	S	—
15.111	do.	Tr(?)	140	3,125	120.2	3- -53	1951	—	N	N	—
23.234	—	Qal	65M	3,070	53.7	3-31-53	—	6½	Lw	S	—
24.112	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	3,140	98.8	3-29-53	—	7	Lw	D	—
9.333	Stanolind Oil Co.	Tr	502	3,140	—	—	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.
10.433	M. B. Owens	To	—	3,100	54.3	2-26-53	—	7½	Lw	S	MWP
13.312a	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	85M	3,070	31.1	2-26-53	—	6½	N	N	—
17.114	—	Qal	—	3,105	62.8	3- 5-53	—	—	Lw	S	MWP
19.211	—	To	—	3,088	62.3	5-30-55	—	6	Je	D	—
19.221	City of Jal	Tr	500	3,110	284.0	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. Hadfield	To	46M	3,050	38.2	2-12-53	—	6	Lw	S	EY 1 gpm.
24.211	—	To	—	3,071	58.4	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	87.4	2-16-53	—	12	N	N	—
36.244	—	To	120	3,035	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	—	3	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	—	—	Li	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	—

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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
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
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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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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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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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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

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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	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

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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	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

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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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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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Township: 26S 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

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

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

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(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

USGS

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

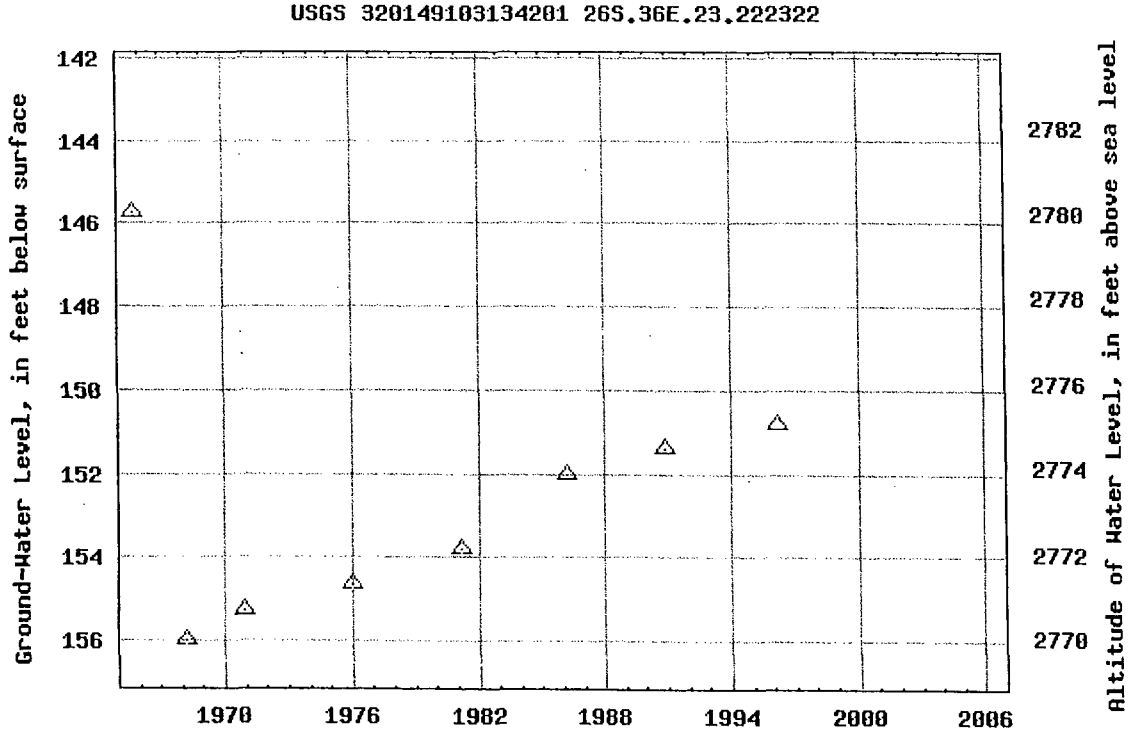
USGS 320149103134201 26S.36E.23.222322

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.

USGS

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

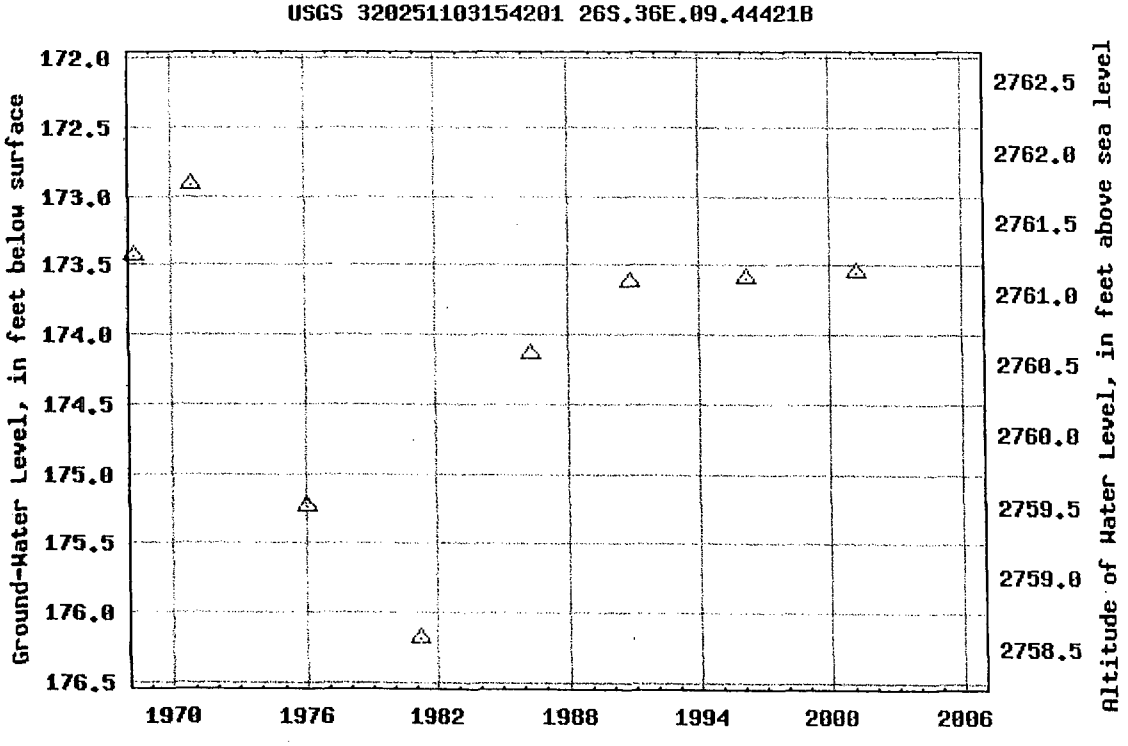
USGS 320251103154201 26S.36E.09.44421B

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

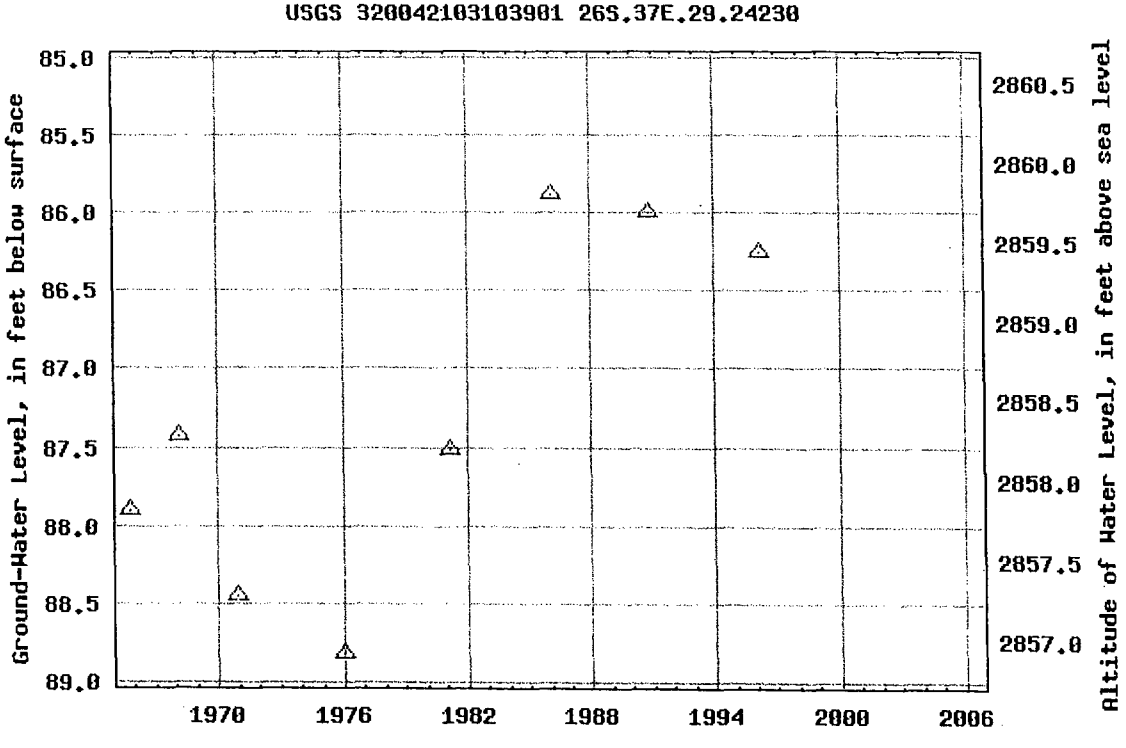
USGS 320042103103901 26S.37E.29.24230

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

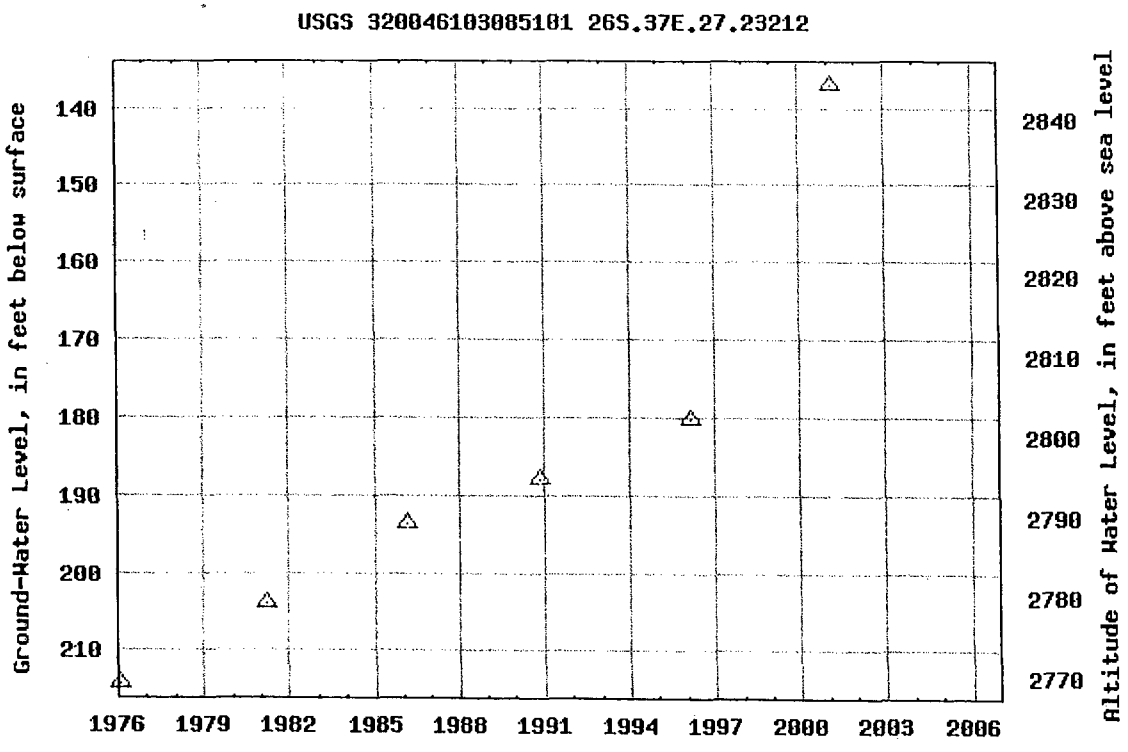
USGS 320046103085101 26S.37E.27.23212

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

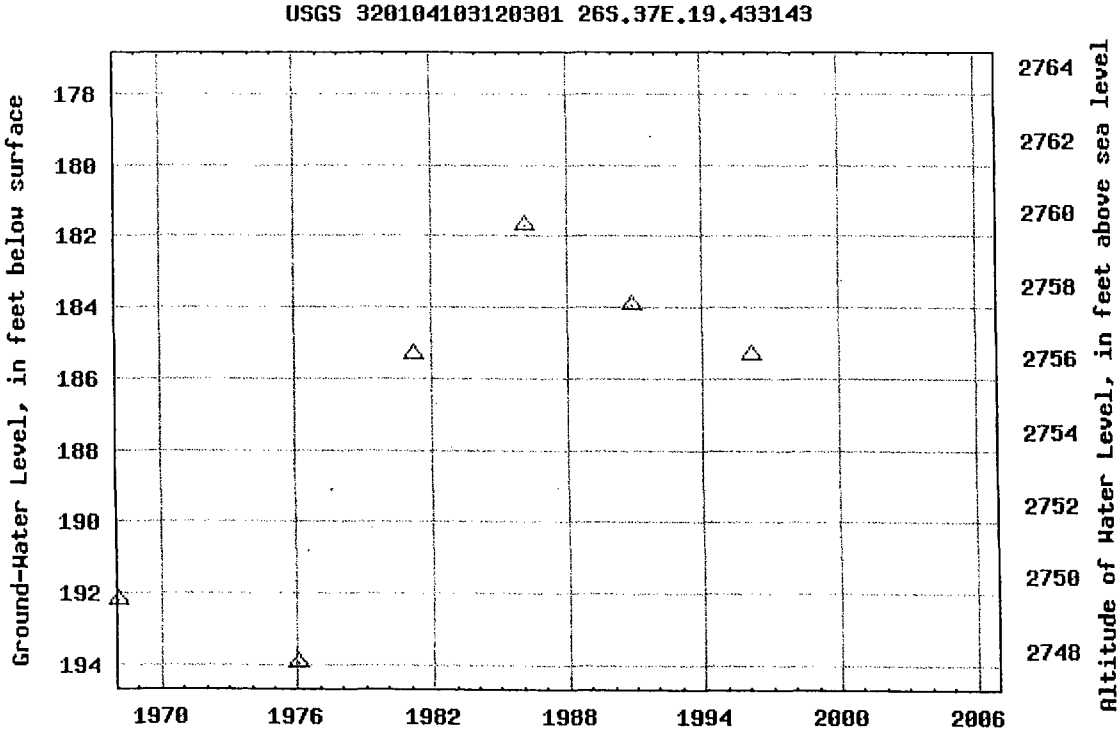
USGS 320104103120301 26S.37E.19.433143

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.

USGS

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

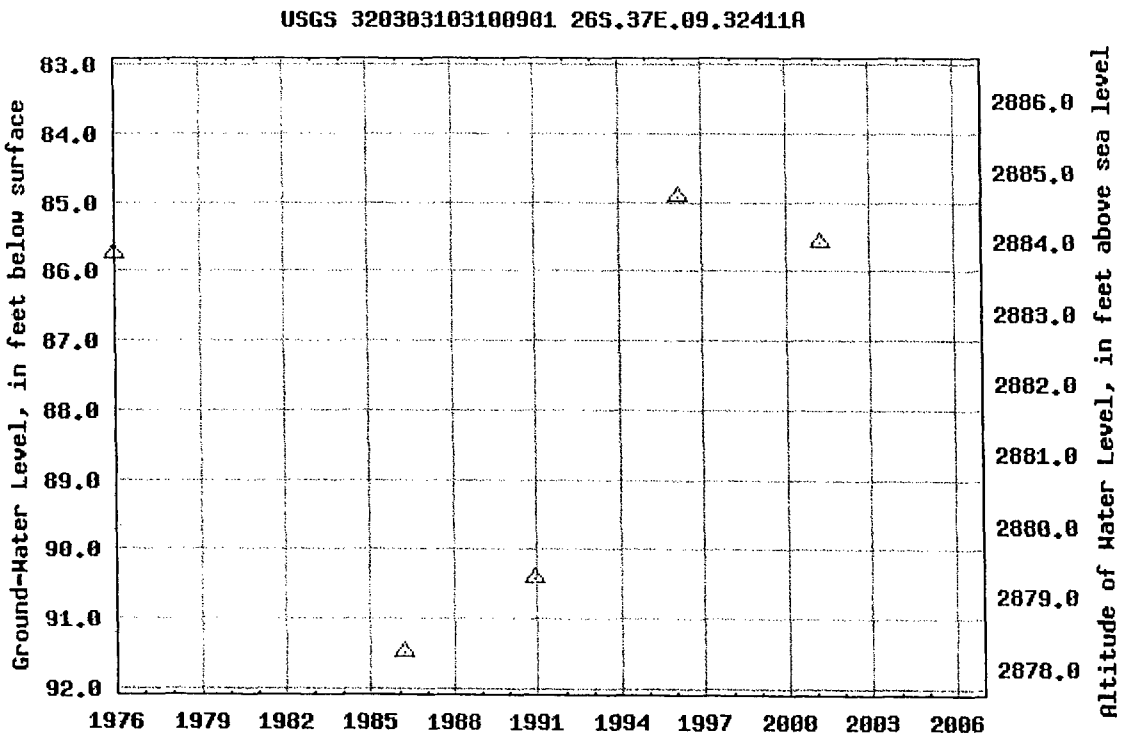
USGS 320303103100901 26S.37E.09.32411A

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

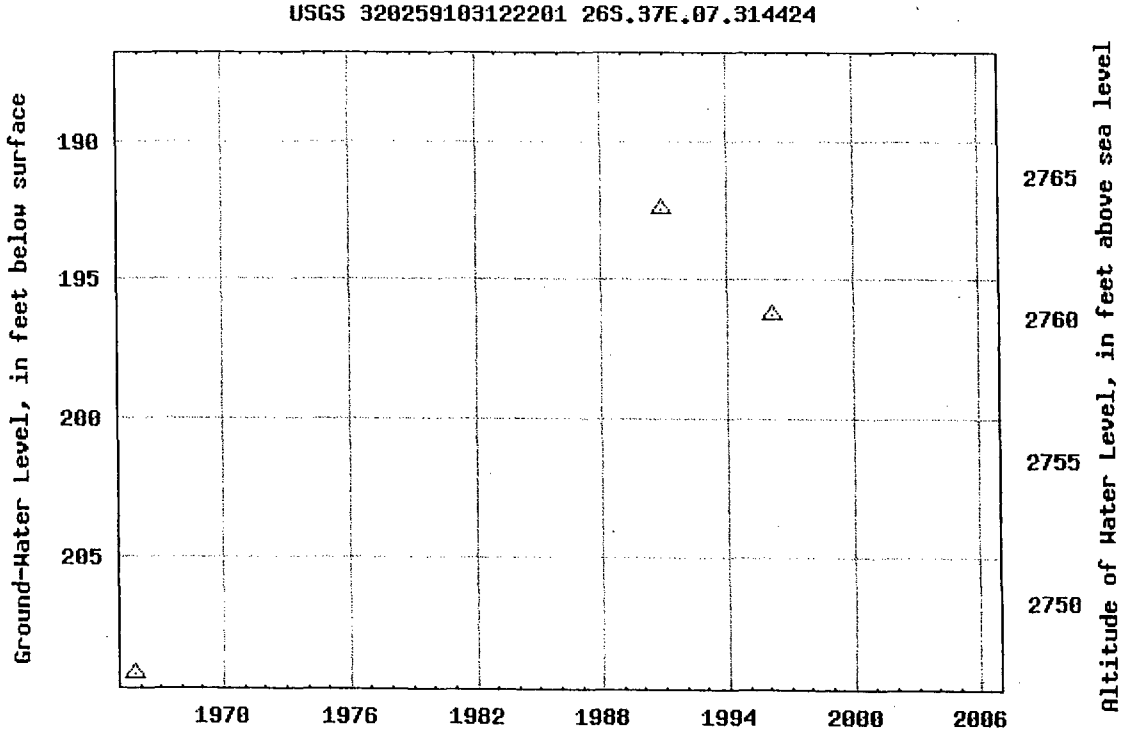
USGS 320259103122201 26S.37E.07.314424

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

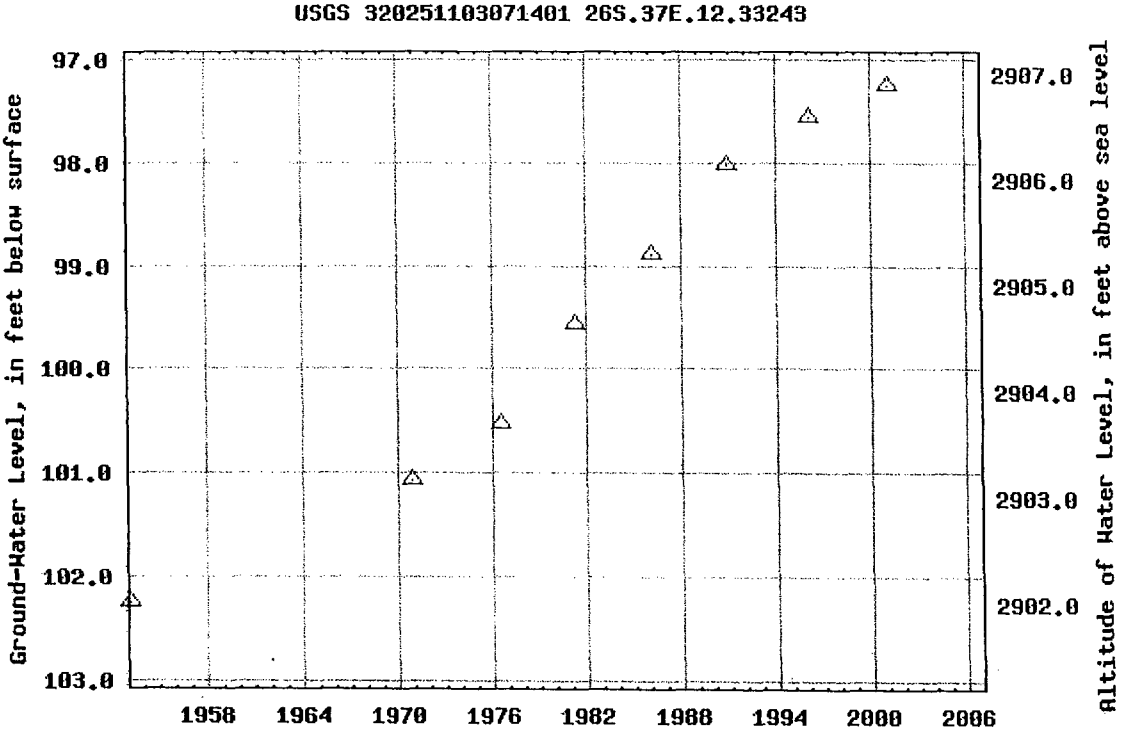
USGS 320251103071401 26S.37E.12.33243

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

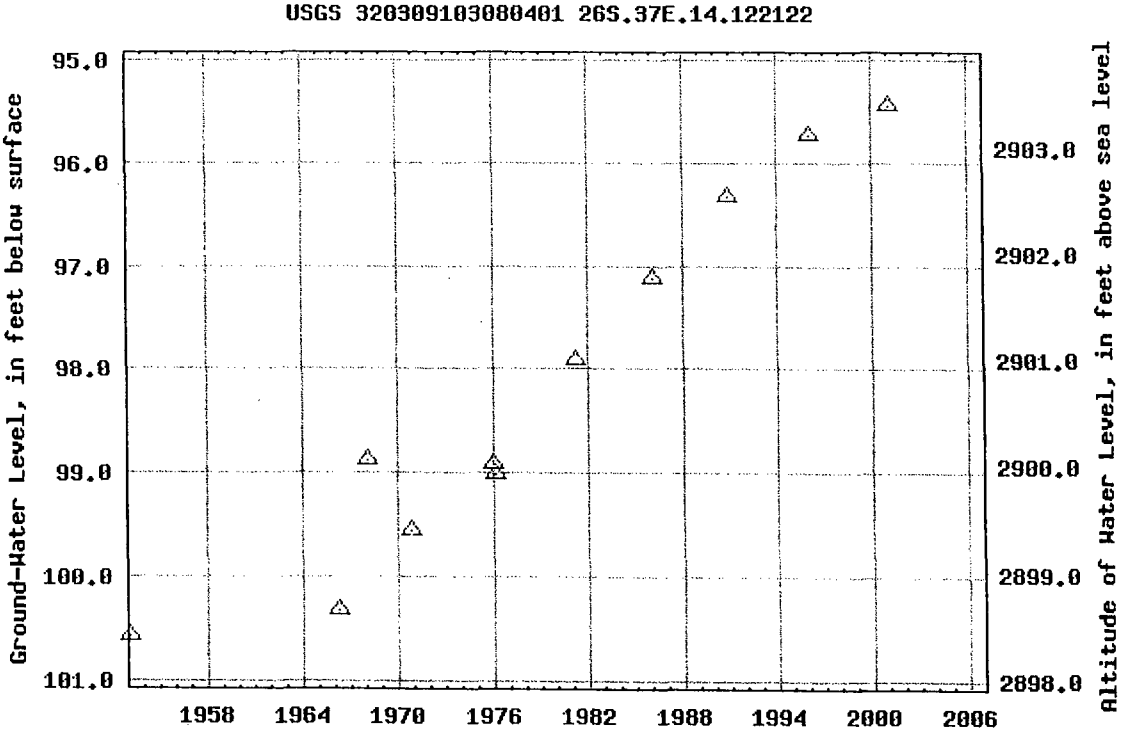
USGS 320309103080401 26S.37E.14.122122

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

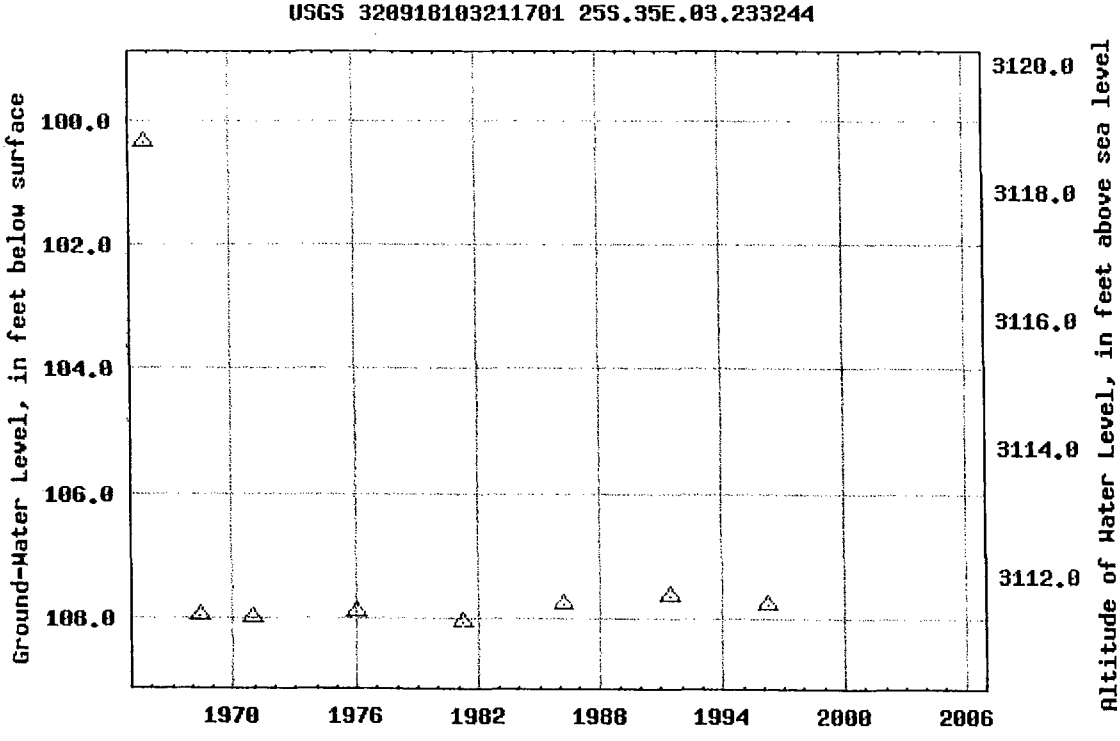
USGS 320918103211701 25S.35E.03.233244

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

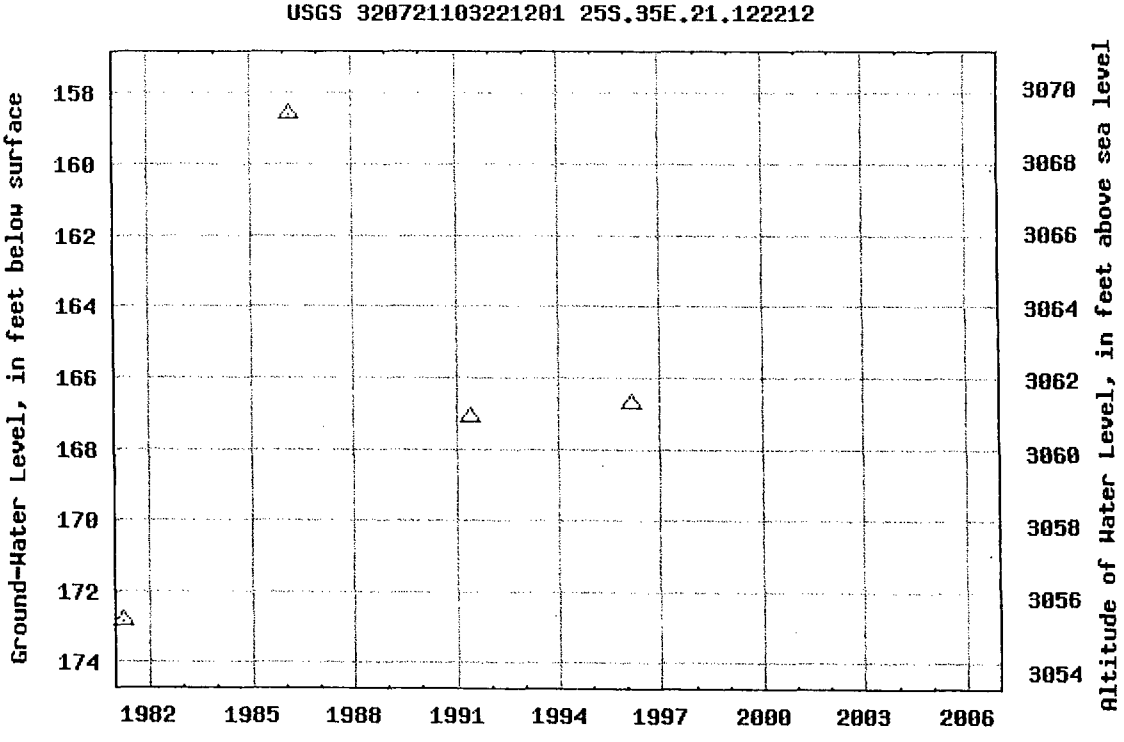
USGS 320721103221201 25S.35E.21.122212

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

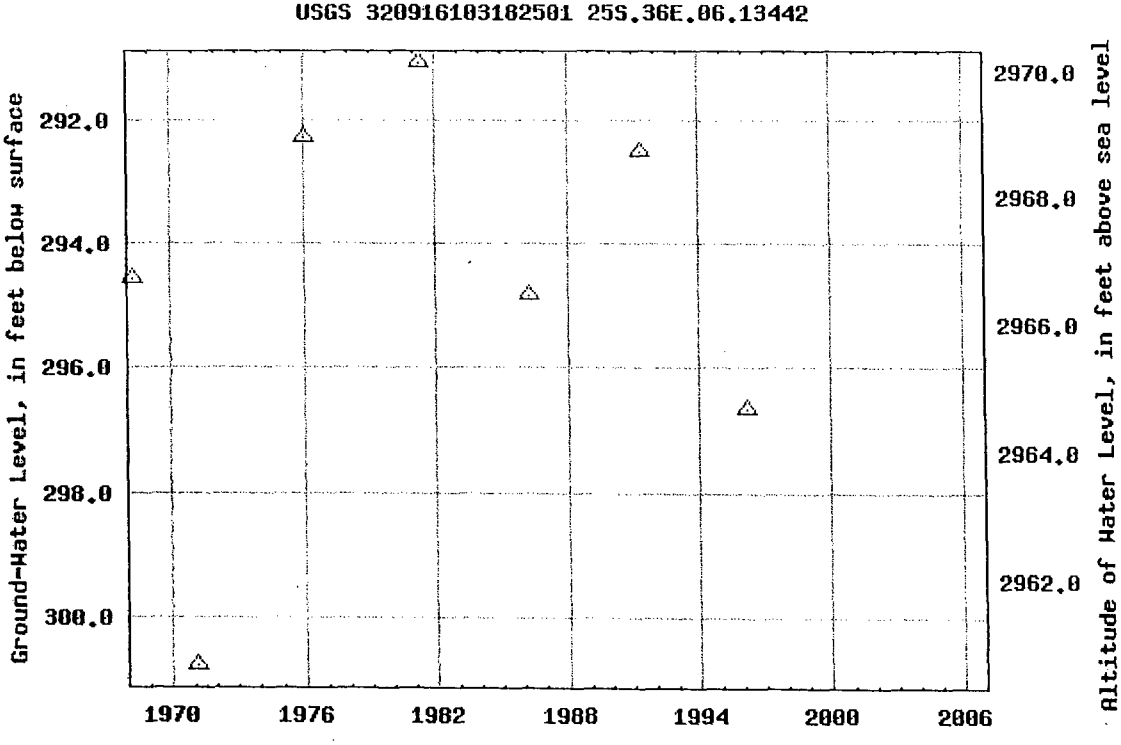
USGS 320916103182501 25S.36E.06.13442

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.

USGS

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

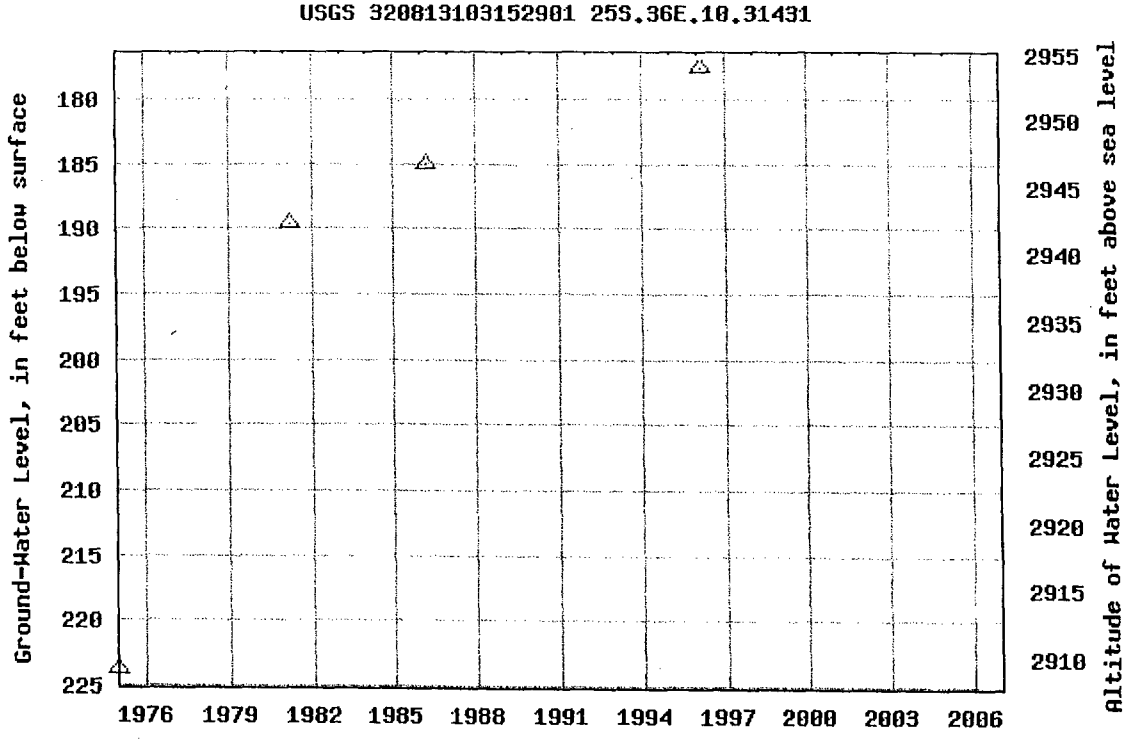
USGS 320813103152901 25S.36E.10.31431

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

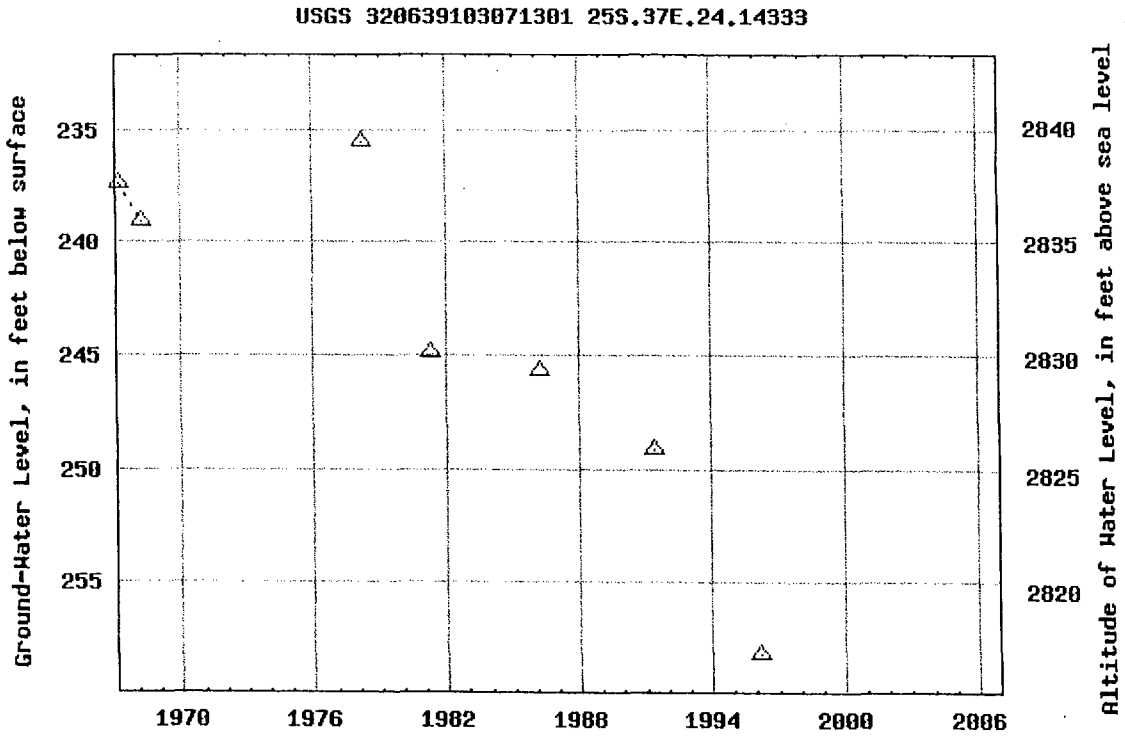
USGS 320639103071301 25S.37E.24.14333

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

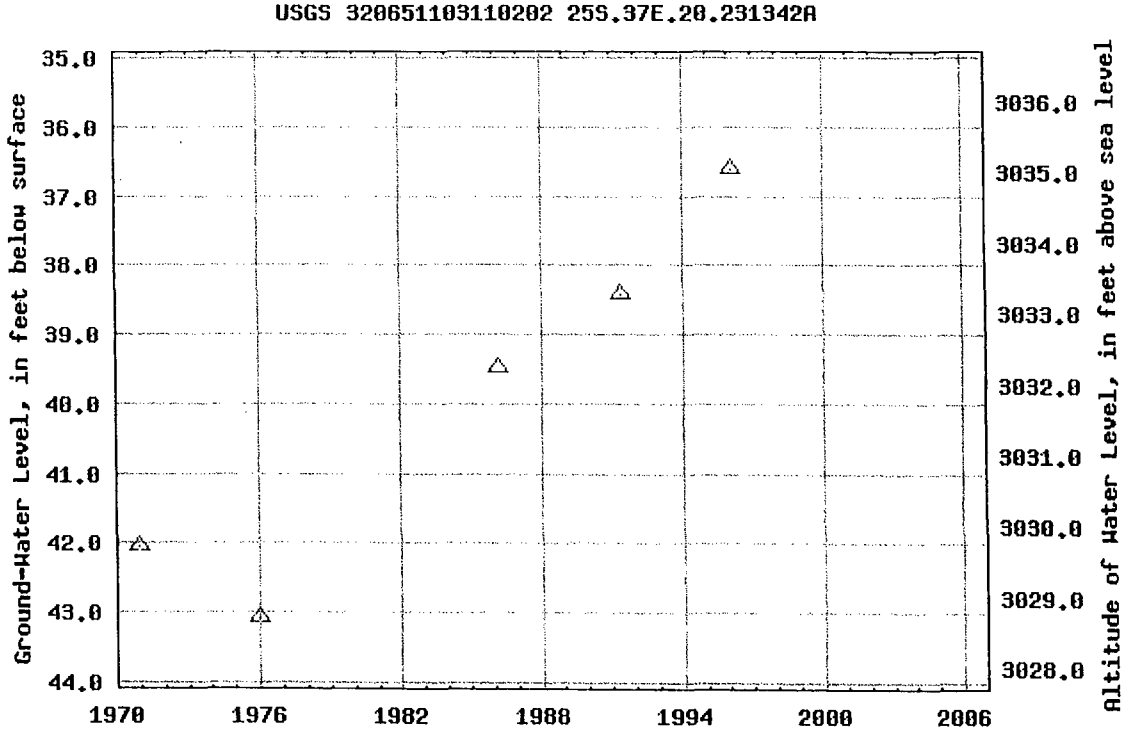
USGS 320651103110202 25S.37E.20.231342A

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

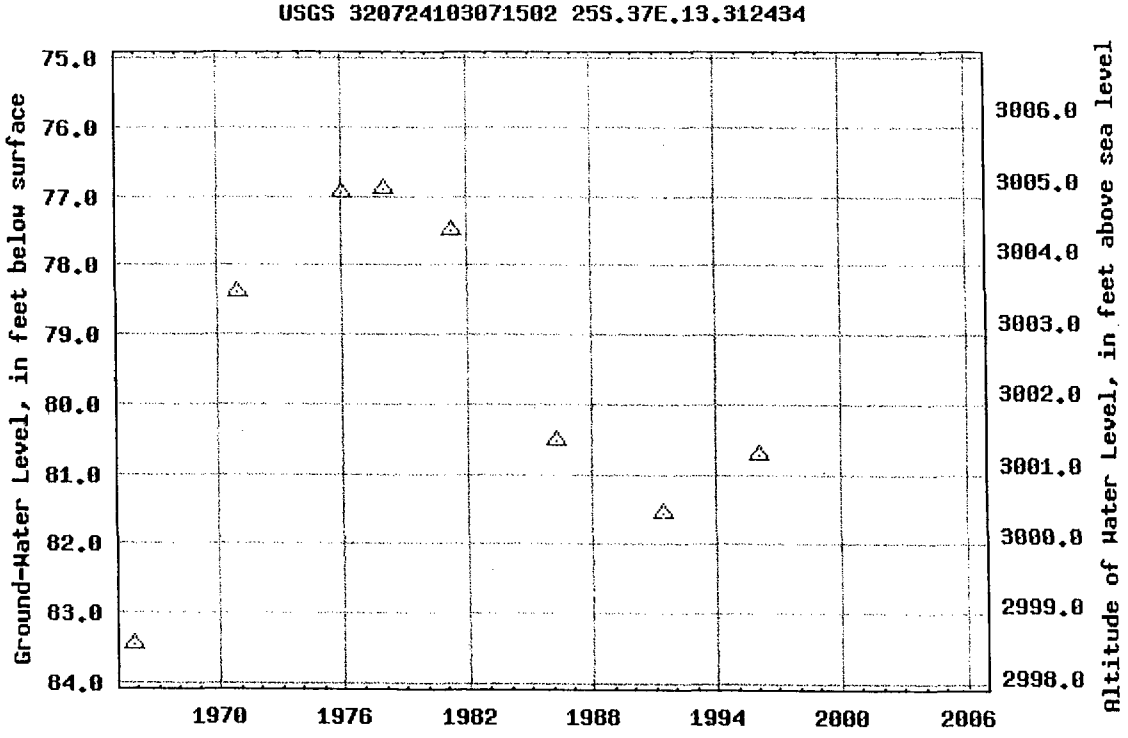
USGS 320724103071502 25S.37E.13.312434

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

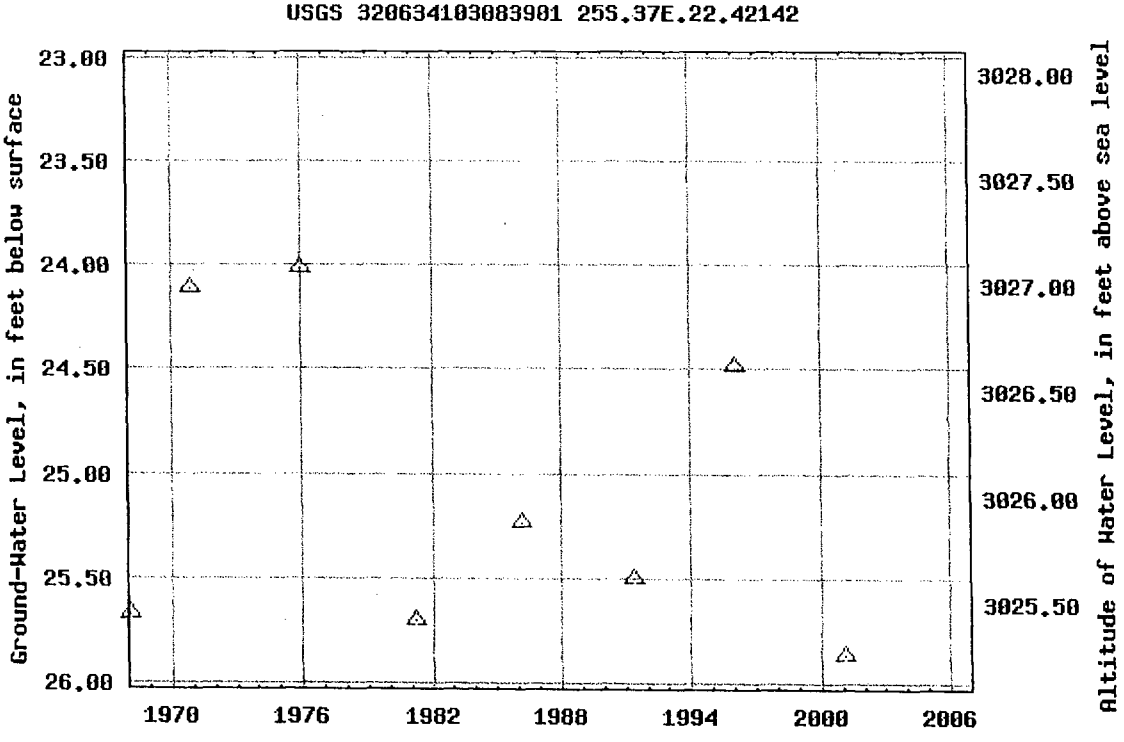
Save file of selected sites to local disk for future upload

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

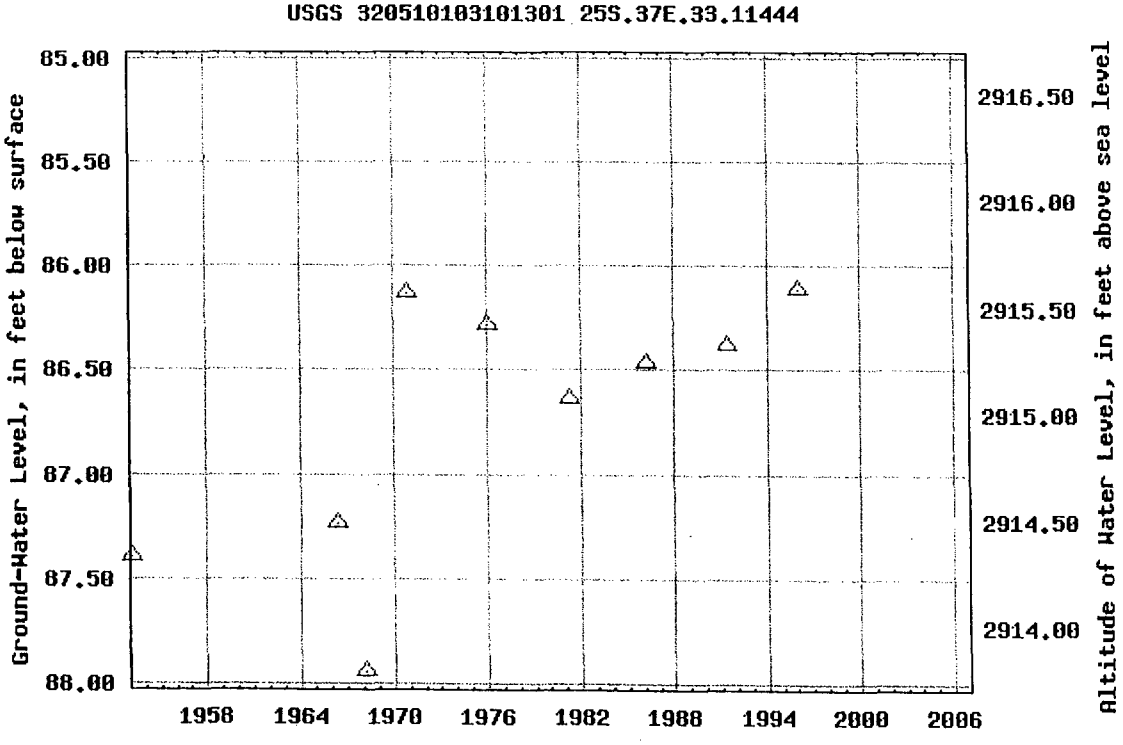
USGS 320510103101301 25S.37E.33.11444

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.

USGS

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

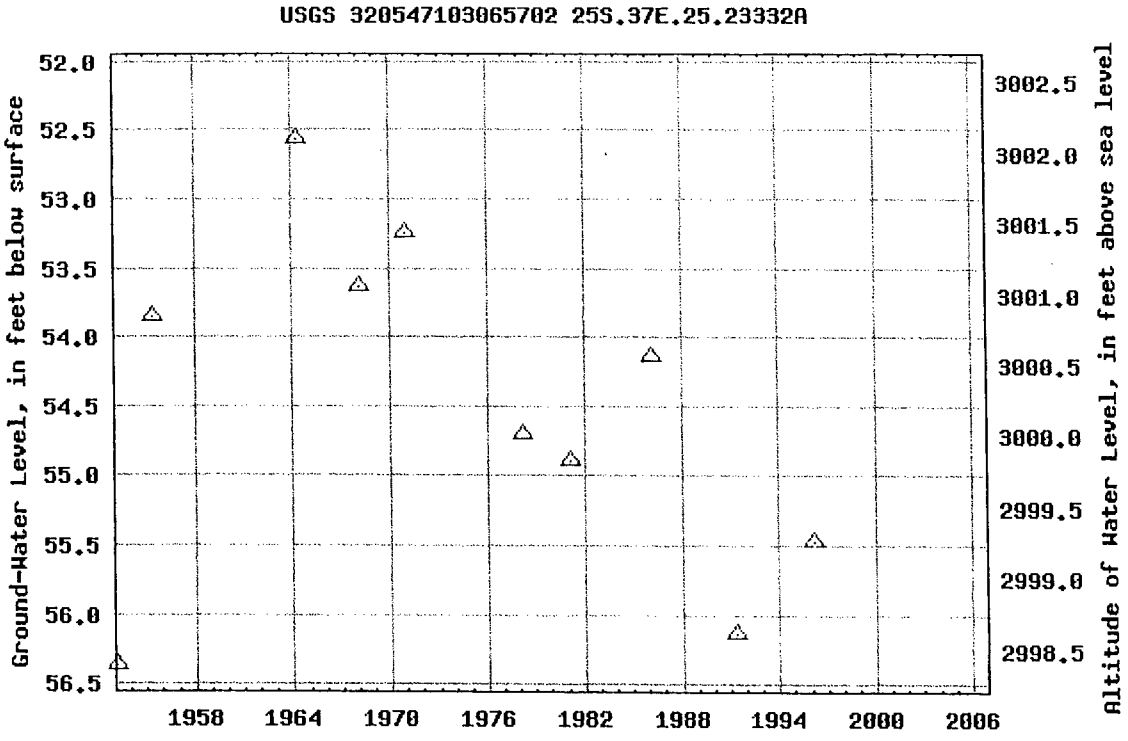
USGS 320547103065702 25S.37E.25.23332A

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.

USGS

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

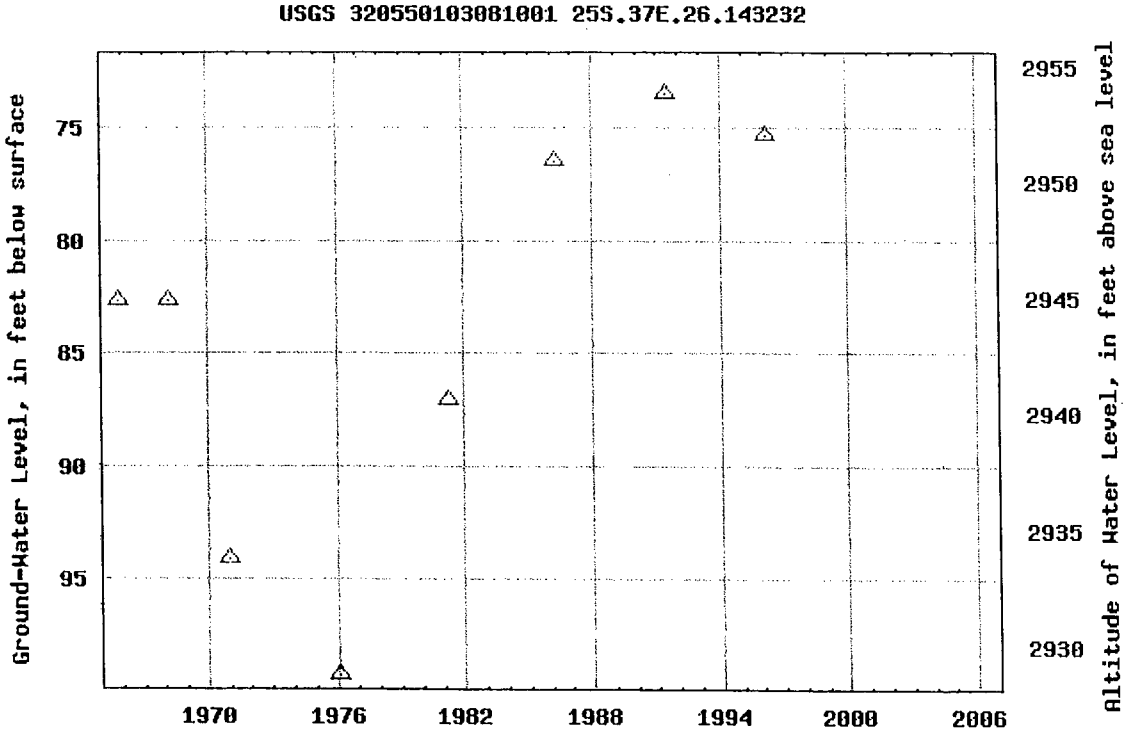
USGS 320550103081001 25S.37E.26.143232

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.

USGS

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

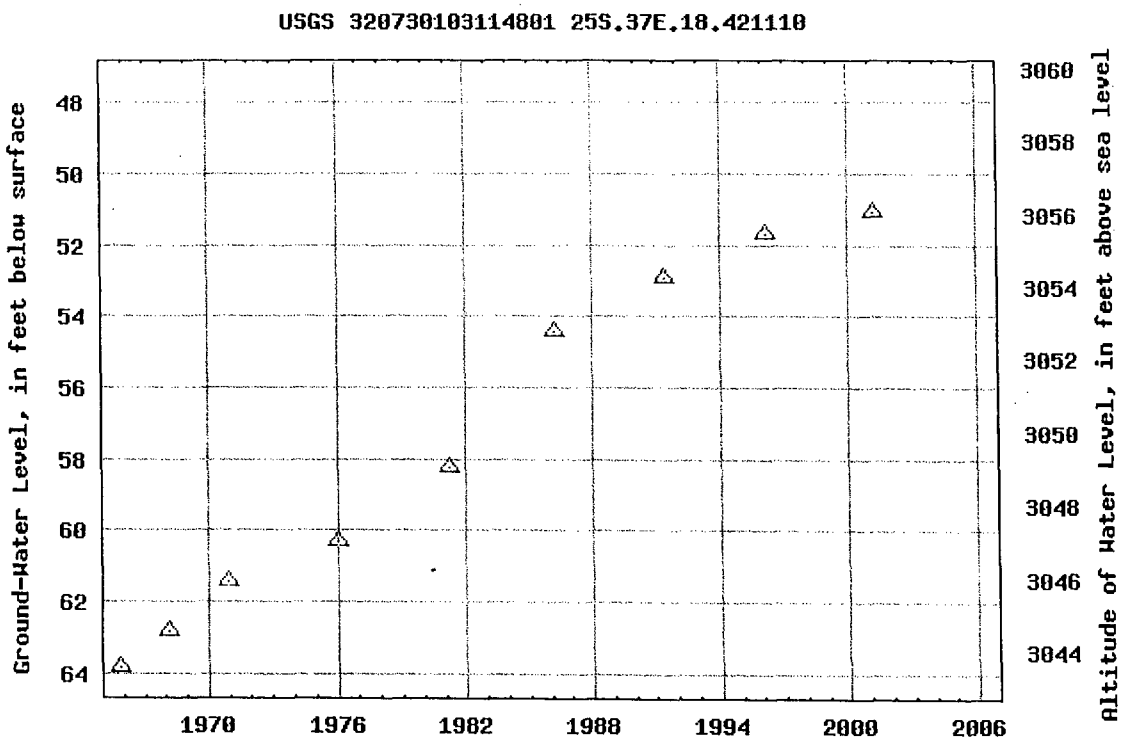
USGS 320730103114801 25S.37E.18.421110

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

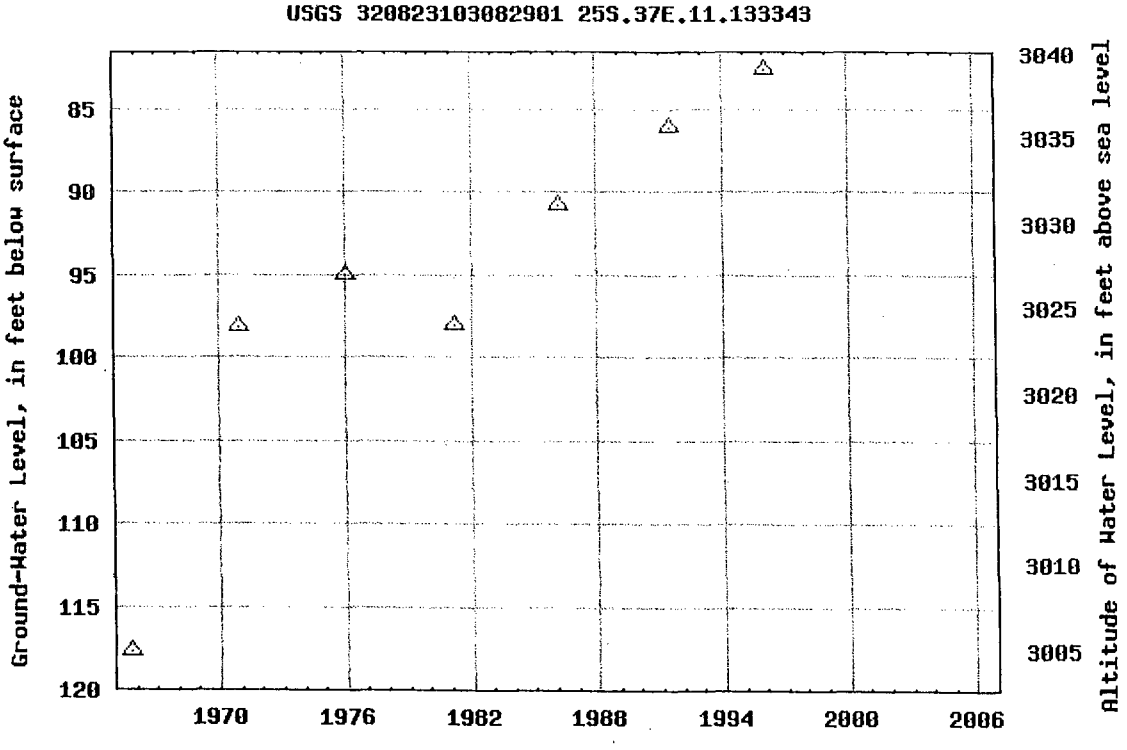
USGS 320823103082901 25S.37E.11.133343

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

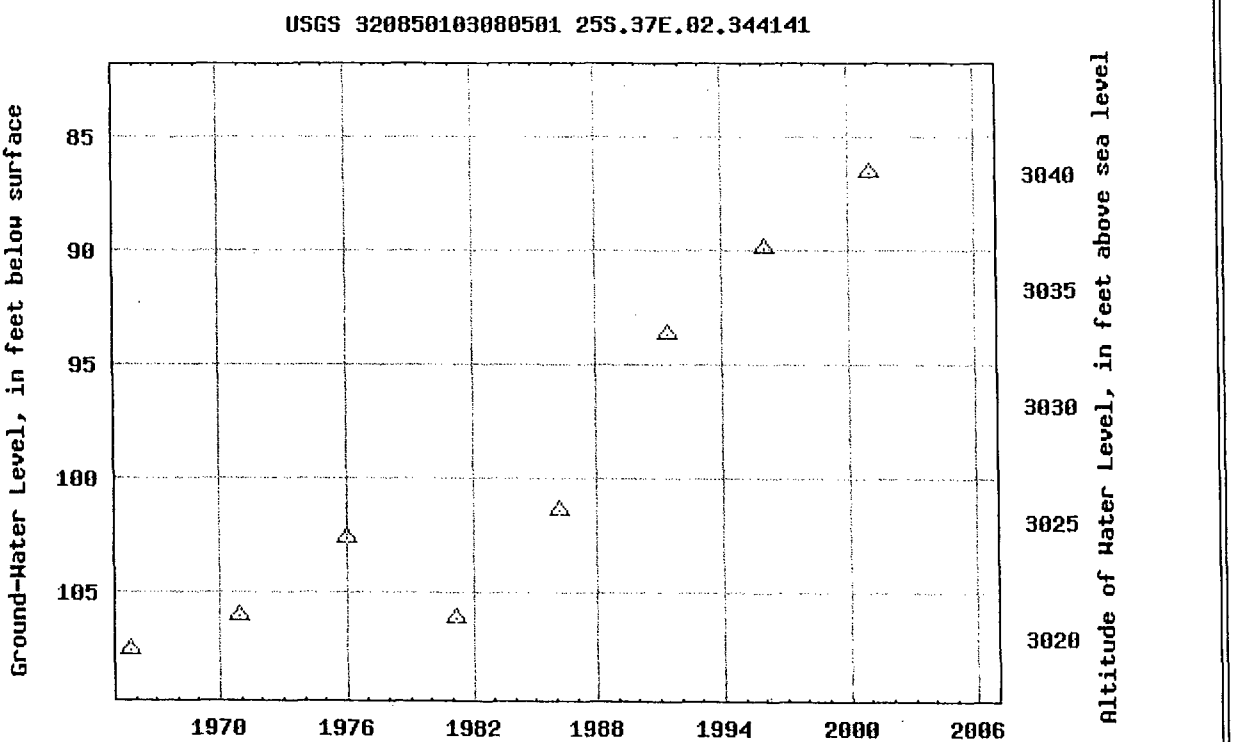
USGS 320850103080501 25S.37E.02.344141

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

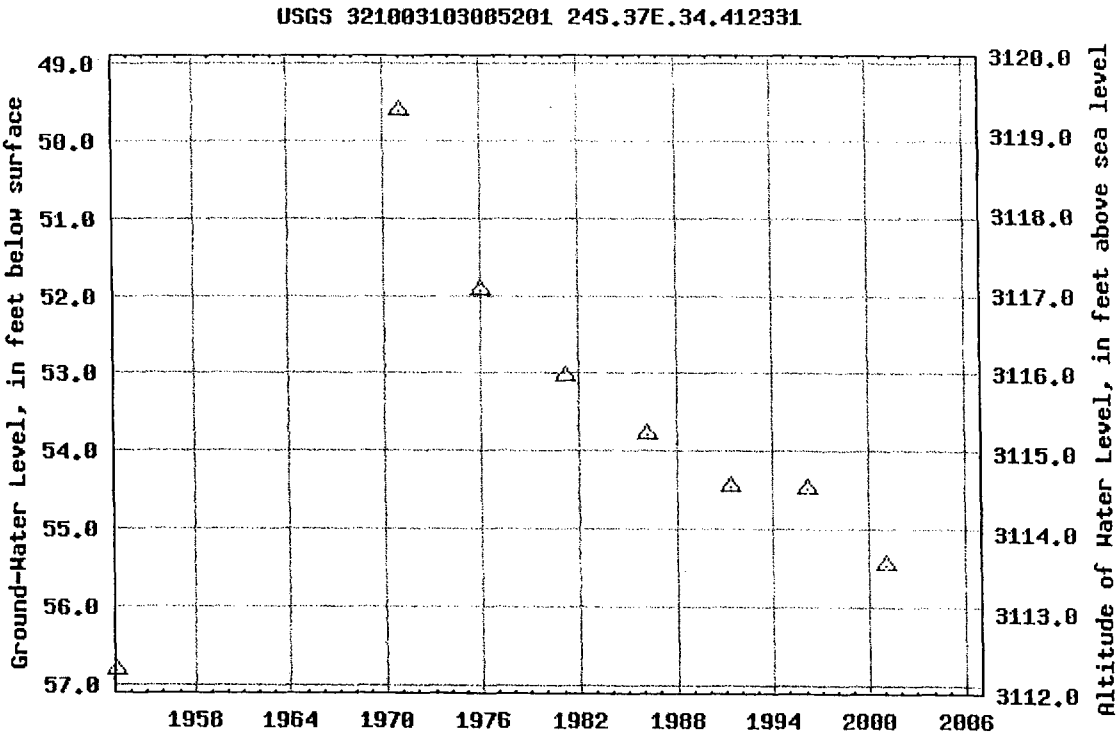
USGS 321003103085201 24S.37E.34.412331

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

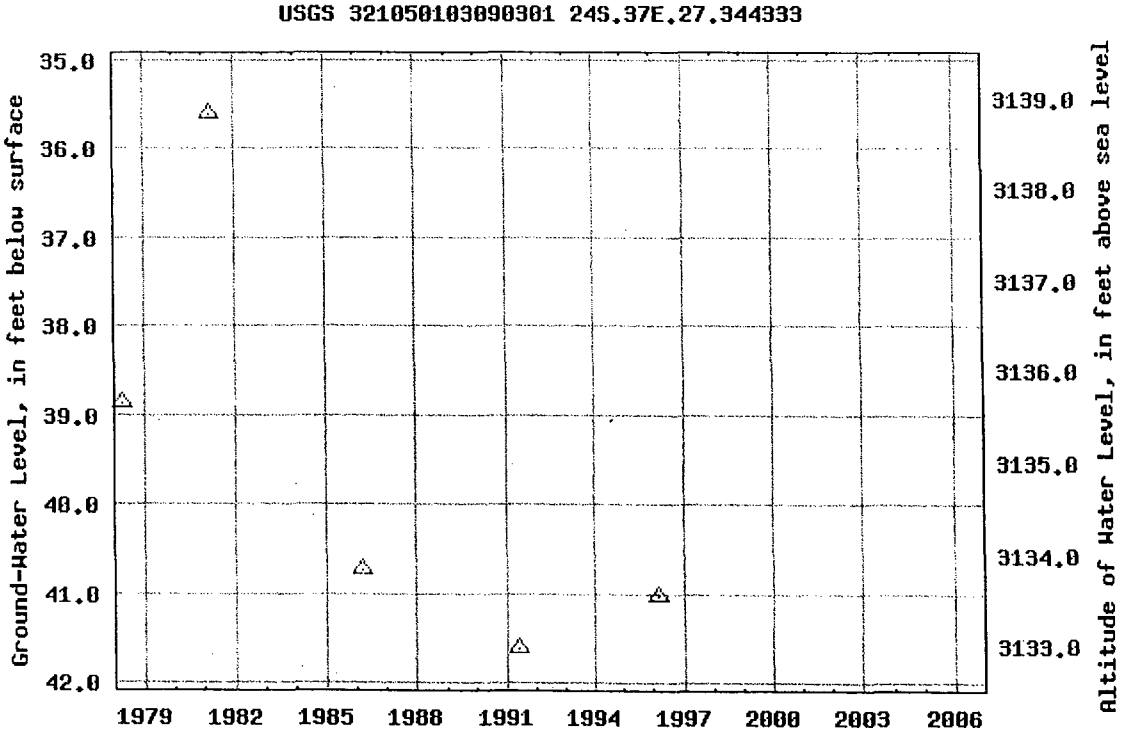
USGS 321050103090301 24S.37E.27.344333

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

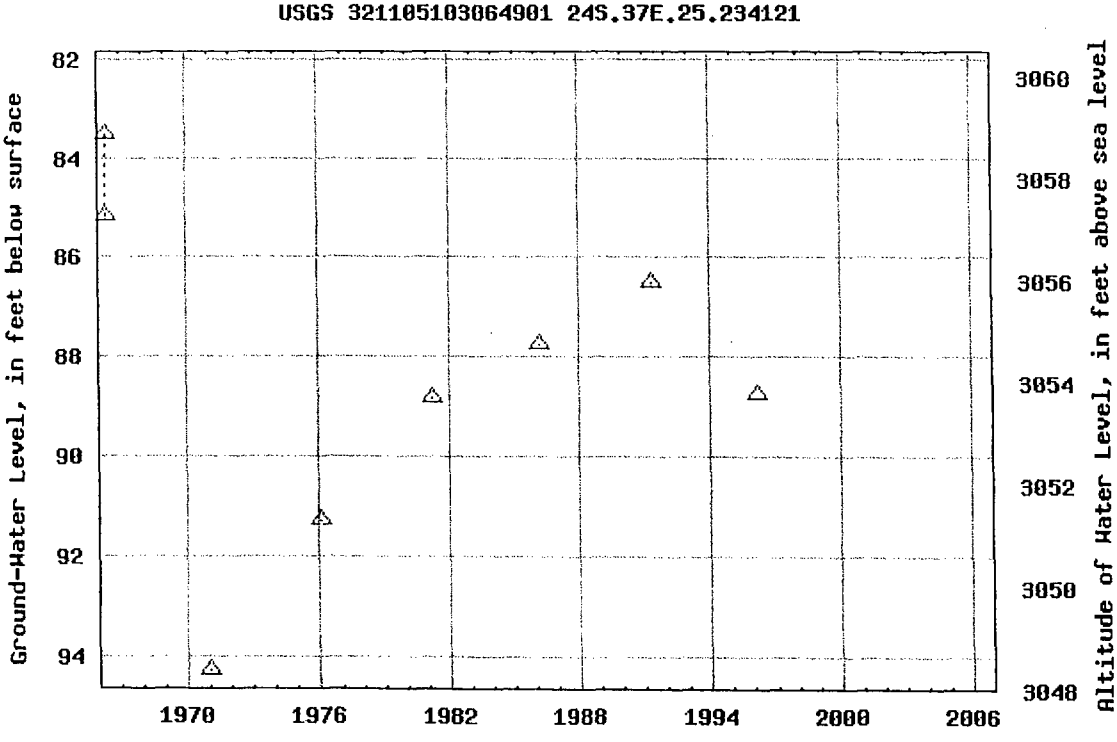
USGS 321105103064901 24S.37E.25.234121

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

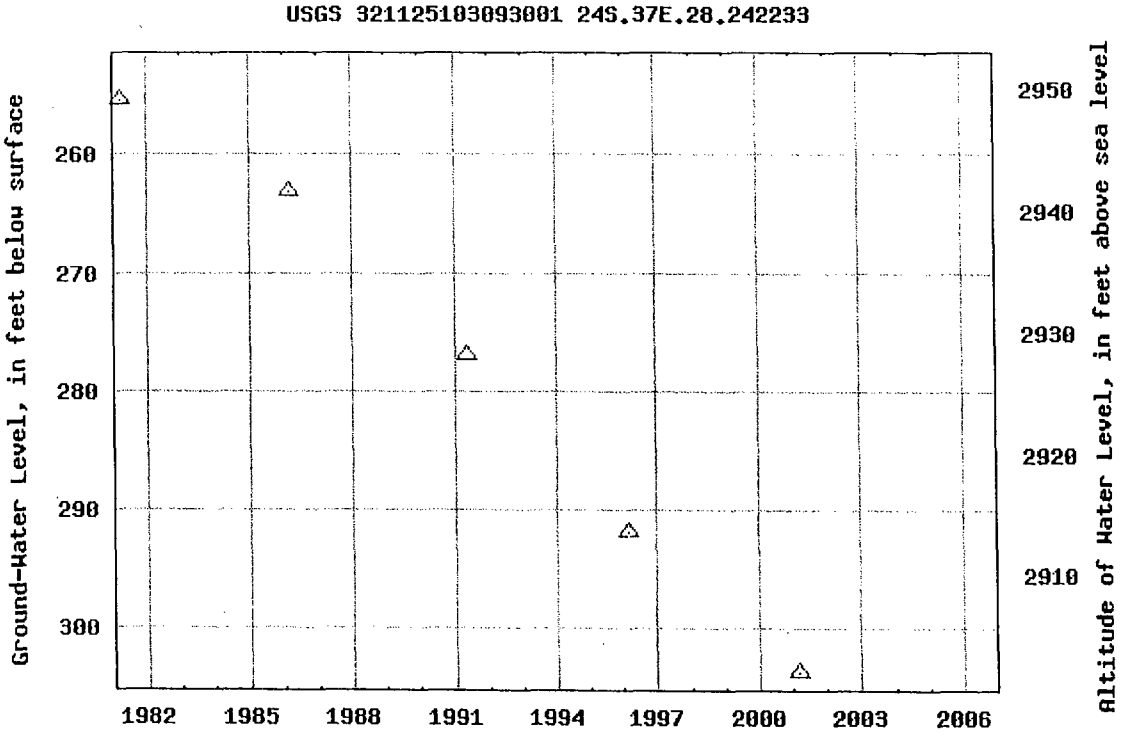
USGS 321125103093001 24S.37E.28.242233

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

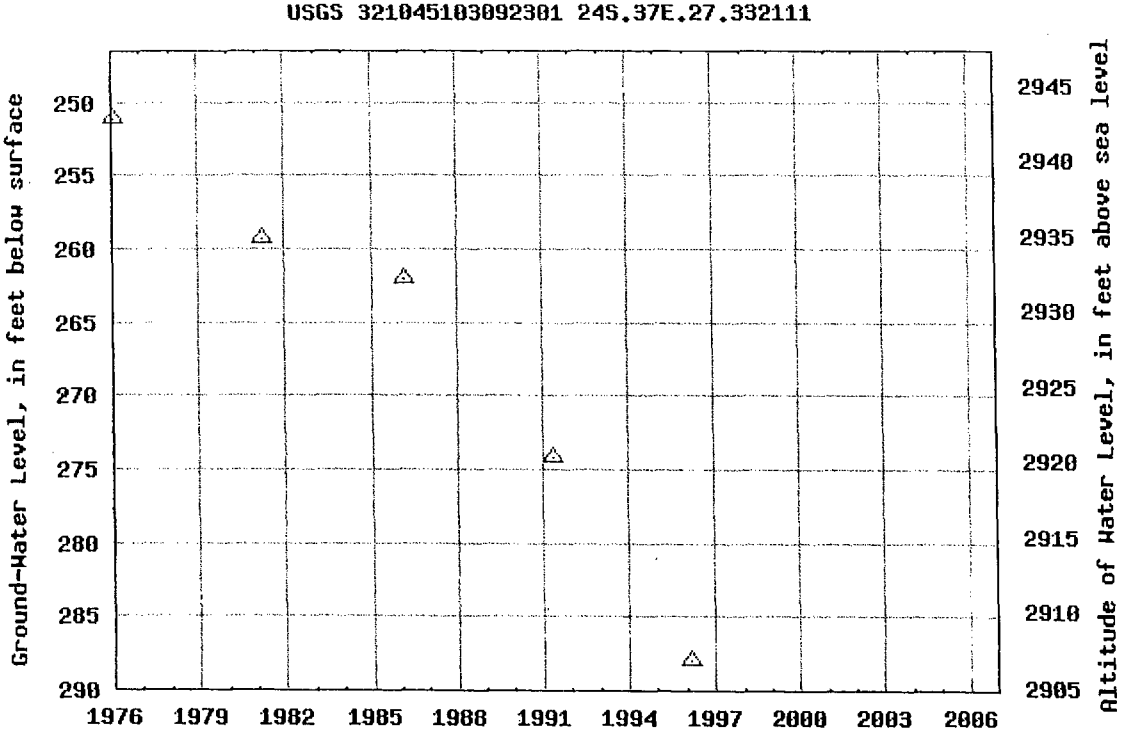
USGS 321045103092301 24S.37E.27.332111

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.

USGS

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

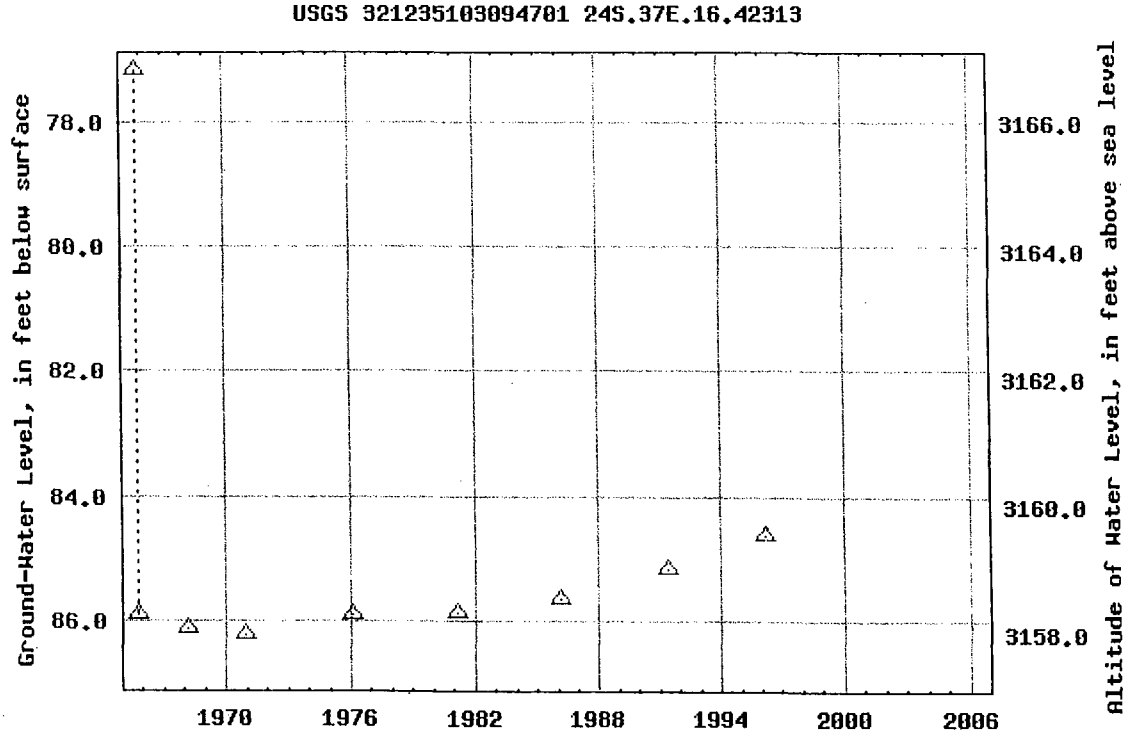
USGS 321235103094701 24S.37E.16.42313

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

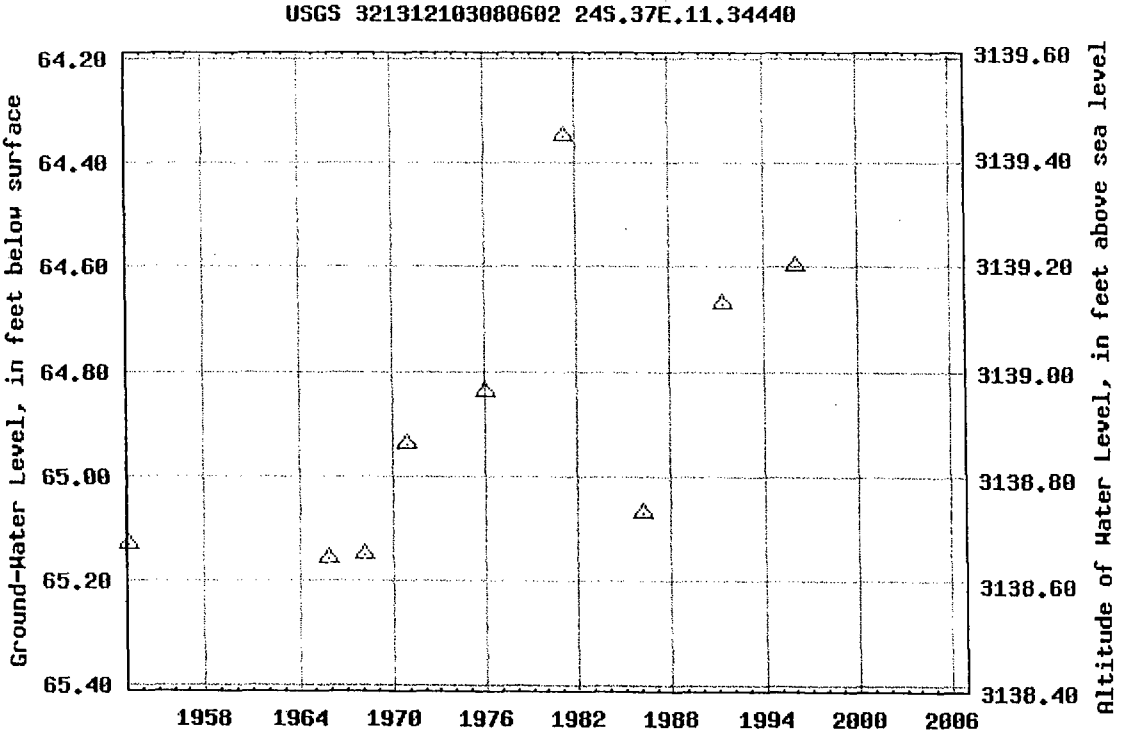
USGS 321312103080602 24S.37E.11.34440

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.

USGS

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

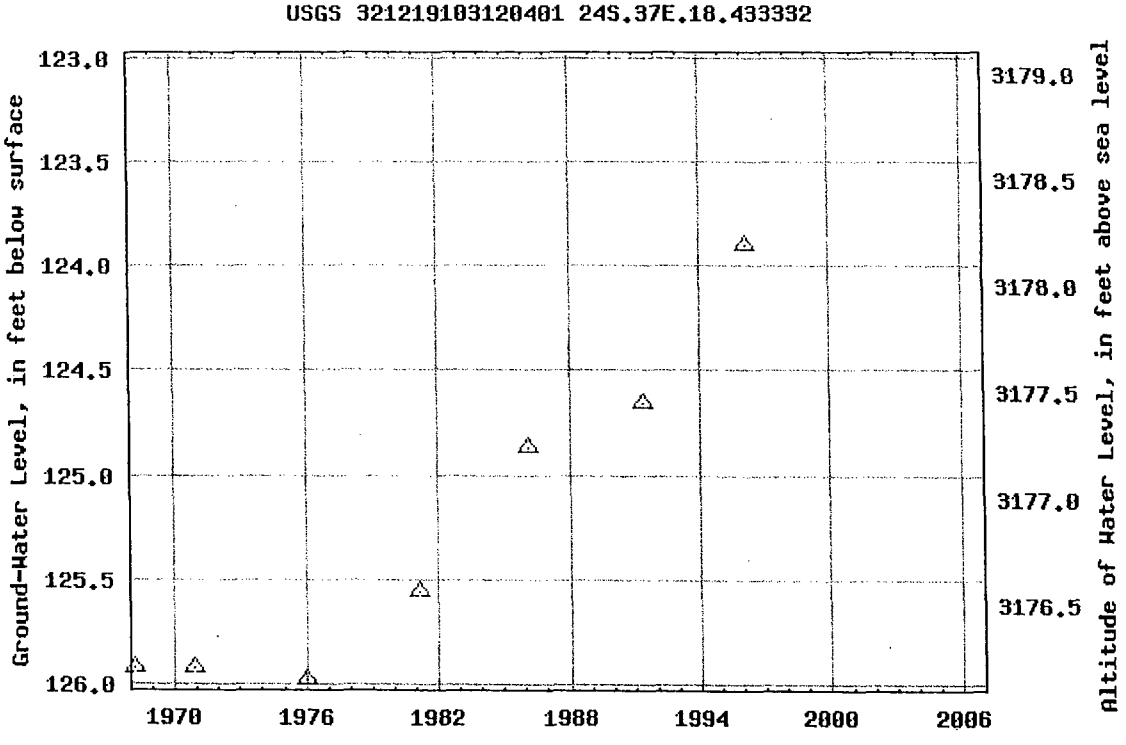
USGS 321219103120401 24S.37E.18.433332

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

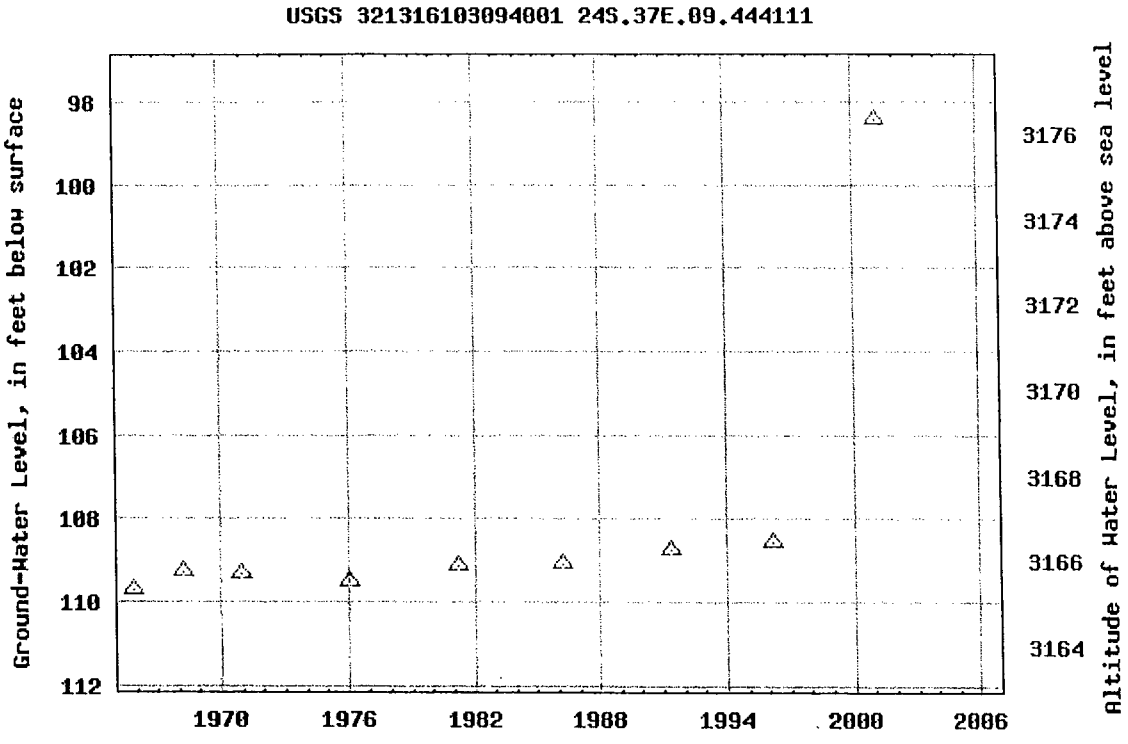
Save file of selected sites to local disk for future upload

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

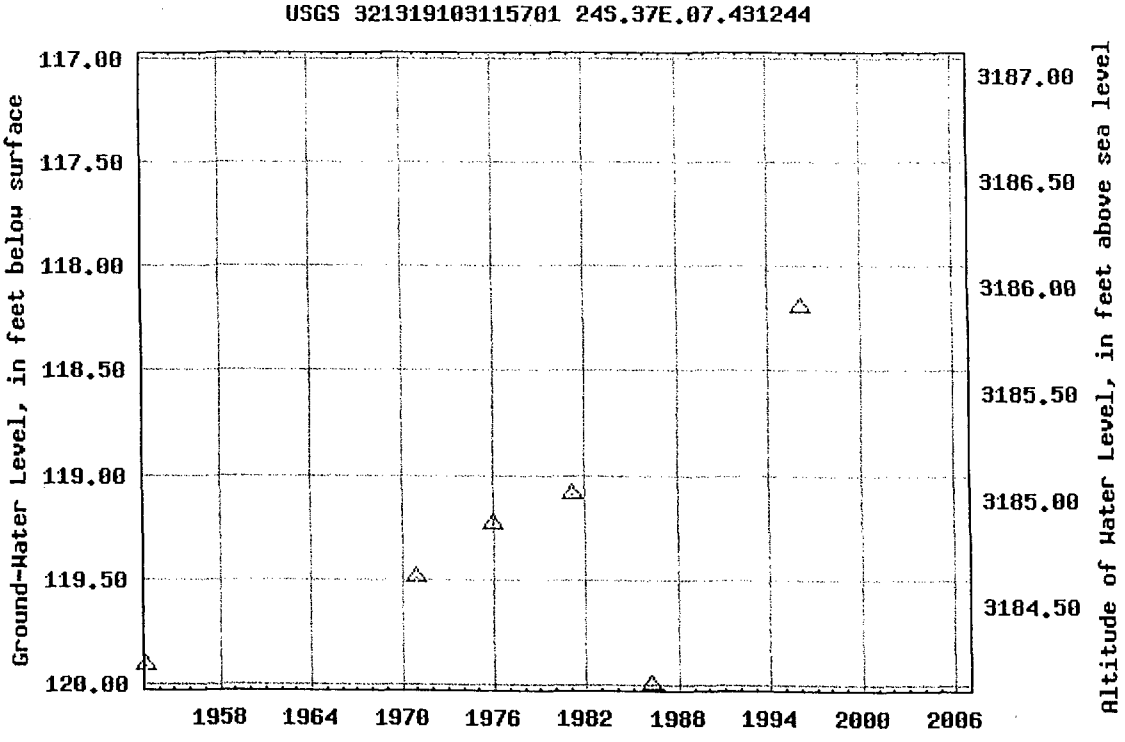
USGS 321319103115701 24S.37E.07.431244

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

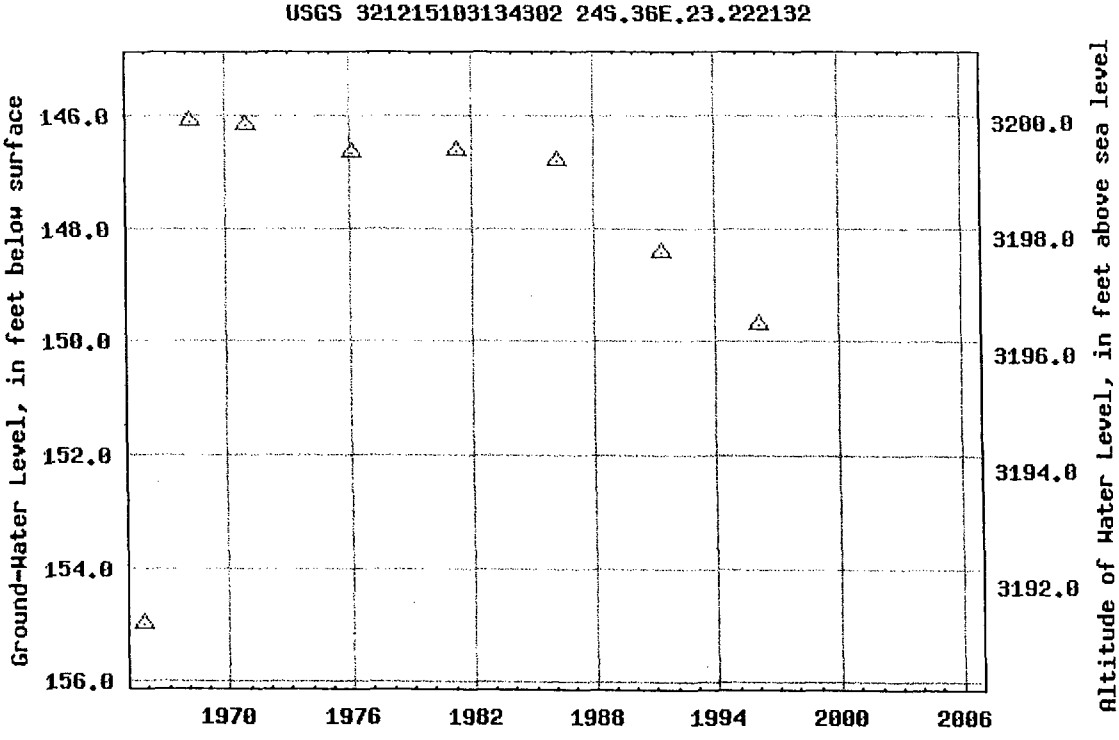
USGS 321215103134302 24S.36E.23.222132

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

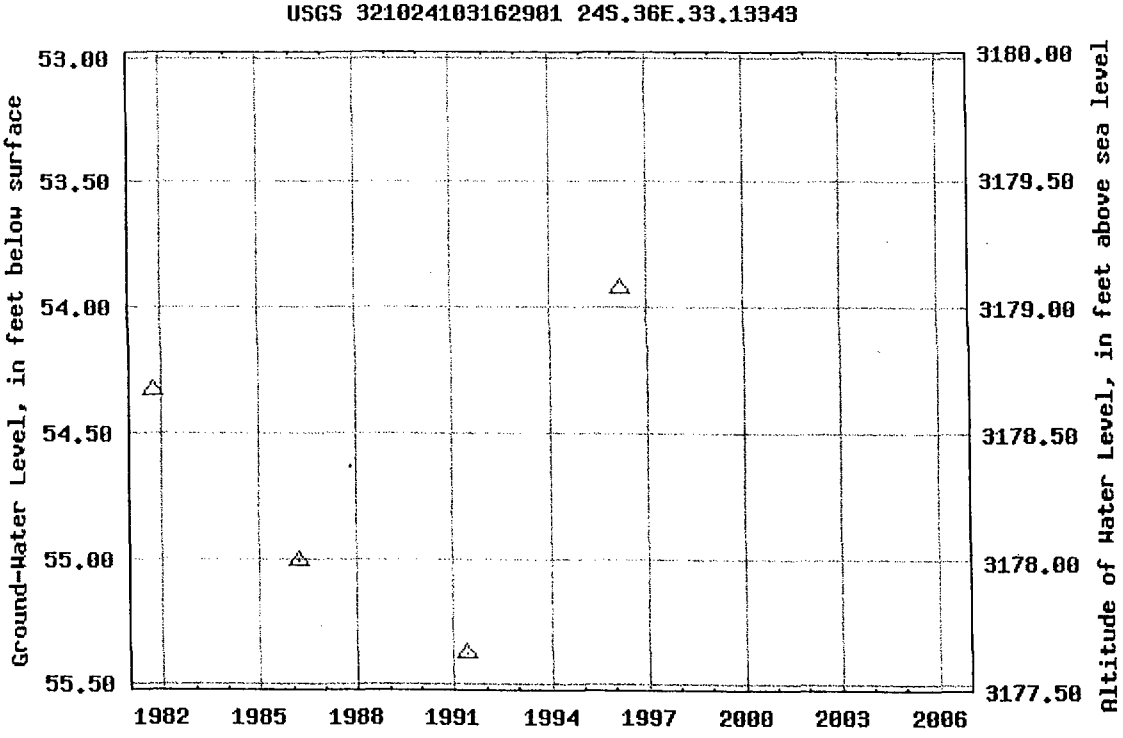
USGS 321024103162901 24S.36E.33.13343

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

Analytical Report

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: 6I19008

Report Date: 09/29/06

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
AH-1 0-1.0'	6I19008-01	Soil	09/18/06 00:00	09-19-2006 14:45
AH-1 1-1.5'	6I19008-02	Soil	09/18/06 00:00	09-19-2006 14:45
AH-1 2-2.5'	6I19008-03	Soil	09/18/06 00:00	09-19-2006 14:45
AH-2 0-1.0'	6I19008-04	Soil	09/18/06 00:00	09-19-2006 14:45
AH-2 1-1.5	6I19008-05	Soil	09/18/06 00:00	09-19-2006 14:45
AH-2 2-2.5'	6I19008-06	Soil	09/18/06 00:00	09-19-2006 14:45
AH-3 0-1.0'	6I19008-07	Soil	09/18/06 00:00	09-19-2006 14:45
AH-3 1-1.5'	6I19008-08	Soil	09/18/06 00:00	09-19-2006 14:45
AH-3 2-2.5'	6I19008-09	Soil	09/18/06 00:00	09-19-2006 14:45
AH-4 0-0.5'	6I19008-10	Soil	09/18/06 00:00	09-19-2006 14:45
AH-4 0.5-1.0'	6I19008-11	Soil	09/18/06 00:00	09-19-2006 14:45
AH-5 0-0.5'	6I19008-12	Soil	09/18/06 00:00	09-19-2006 14:45
AH-5 0.5-1.0'	6I19008-13	Soil	09/18/06 00:00	09-19-2006 14:45
AH-6 0-0.5'	6I19008-14	Soil	09/18/06 00:00	09-19-2006 14:45
AH-6 0.5-1.0'	6I19008-15	Soil	09/18/06 00:00	09-19-2006 14:45
AH-7 0-0.5'	6I19008-16	Soil	09/18/06 00:00	09-19-2006 14:45
AH-7 0.5-1.0'	6I19008-17	Soil	09/18/06 00:00	09-19-2006 14:45
AH-8 0-0.5'	6I19008-18	Soil	09/18/06 00:00	09-19-2006 14:45
AH-8 0.5-1.0'	6I19008-19	Soil	09/18/06 00:00	09-19-2006 14:45
AH-9 0-0.5'	6I19008-20	Soil	09/18/06 00:00	09-19-2006 14:45
AH-9 0.5-1.0'	6I19008-21	Soil	09/18/06 00:00	09-19-2006 14:45
AH-10 0-0.5'	6I19008-22	Soil	09/18/06 00:00	09-19-2006 14:45
AH-10 0.5-1.0'	6I19008-23	Soil	09/18/06 00:00	09-19-2006 14:45
AH-11 0-0.5'	6I19008-24	Soil	09/18/06 00:00	09-19-2006 14:45
AH-11 0.5-1.0'	6I19008-25	Soil	09/18/06 00:00	09-19-2006 14:45
AH-12 0-0.5'	6I19008-26	Soil	09/18/06 00:00	09-19-2006 14:45
AH-12 0.5-1.0'	6I19008-27	Soil	09/18/06 00:00	09-19-2006 14:45
AH-13 0-0.5'	6I19008-28	Soil	09/18/06 00:00	09-19-2006 14:45
AH-13 0.5-1.0'	6I19008-29	Soil	09/18/06 00:00	09-19-2006 14:45
AH-14 0-0.5'	6I19008-30	Soil	09/18/06 00:00	09-19-2006 14:45
AH-14 0.5-1.0'	6I19008-31	Soil	09/18/06 00:00	09-19-2006 14:45
AH-15 0-0.5'	6I19008-32	Soil	09/18/06 00:00	09-19-2006 14:45
AH-15 0.5-1.0'	6I19008-33	Soil	09/18/06 00:00	09-19-2006 14:45
AH-16 0-0.5'	6I19008-34	Soil	09/18/06 00:00	09-19-2006 14:45

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	

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
AH-16 0.5-1.0'	6I19008-35	Soil	09/18/06 00:00	09-19-2006 14:45

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 0-1.0' (6I19008-01) Soil									
Benzene	**0.413**	0.200	mg/kg dry	200	EI62202	09/22/06	09/22/06	EPA 8021B	
Toluene	**11.4**	0.200	"	"	"	"	"	"	
Ethylbenzene	**23.9**	0.200	"	"	"	"	"	"	
Xylene (p/m)	**51.1**	0.200	"	"	"	"	"	"	
Xylene (o)	**21.2**	0.200	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*126 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*166 %*	*80-120*		"	"	"	"	*S-04*
Carbon Ranges C6-C12	**7640**	100	mg/kg dry	10	EI62119	09/21/06	09/21/06	EPA 8015M	
Carbon Ranges C12-C28	**21700**	100	"	"	"	"	"	"	
Carbon Ranges C28-C35	**1980**	100	"	"	"	"	"	"	
Total Hydrocarbons	**31300**	100	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*12.2 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*51.6 %*	*70-130*		"	"	"	"	*S-06*
AH-1 1-1.5' (6I19008-02) Soil									
Benzene	**J [0.0723]**	0.100	mg/kg dry	100	EI62730	09/27/06	09/27/06	EPA 8021B	J
Toluene	**3.67**	0.100	"	"	"	"	"	"	
Ethylbenzene	**11.5**	0.100	"	"	"	"	"	"	
Xylene (p/m)	**24.0**	0.100	"	"	"	"	"	"	
Xylene (o)	**11.2**	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*117 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*179 %*	*80-120*		"	"	"	"	*S-04*
Carbon Ranges C6-C12	**3640**	50.0	mg/kg dry	5	EI62119	09/21/06	09/21/06	EPA 8015M	
Carbon Ranges C12-C28	**10500**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**923**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**15100**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*11.3 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*62.6 %*	*70-130*		"	"	"	"	*S-06*
AH-1 2-2.5' (6I19008-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI62730	09/27/06	09/27/06	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		*84.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*106 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62119	09/21/06	09/21/06	EPA 8015M	

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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
AH-1 2-2.5' (6I19008-03) Soil									
Carbon Ranges C12-C28	**122**	10.0	mg/kg dry	1	EI62119	09/21/06	09/21/06	EPA 8015M	
Carbon Ranges C28-C35	**56.8**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**179**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*130 %*	*70-130*		"	"	"	"	
AH-2 0-1.0' (6I19008-04) Soil									
Benzene	**0.0469**	0.0250	mg/kg dry	25	EI62202	09/22/06	09/25/06	EPA 8021B	
Toluene	**1.59**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**3.86**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**8.11**	0.0250	"	"	"	"	"	"	
Xylene (o)	**3.98**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*105 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*108 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	**4570**	50.0	mg/kg dry	5	EI62119	09/21/06	09/21/06	EPA 8015M	
Carbon Ranges C12-C28	**12500**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**760**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**17800**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*14.9 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*8.60 %*	*70-130*		"	"	"	"	*S-06*
AH-2 1-1.5 (6I19008-05) Soil									
Carbon Ranges C6-C12	**10.9**	10.0	mg/kg dry	1	EI62119	09/21/06	09/21/06	EPA 8015M	
Carbon Ranges C12-C28	**89.5**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**17.8**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**118**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*99.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*125 %*	*70-130*		"	"	"	"	
AH-2 2-2.5' (6I19008-06) Soil									
Carbon Ranges C6-C12	**13.3**	10.0	mg/kg dry	1	EI62119	09/21/06	09/21/06	EPA 8015M	
Carbon Ranges C12-C28	**114**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**20.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**148**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*98.2 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*122 %*	*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	

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-3 0-1.0' (6I19008-07) Soil									
Benzene	**J [0.0215]**	0.0250	mg/kg dry	25	EI62202	09/22/06	09/25/06	EPA 8021B	J
Toluene	**1.52**	0.0250	"	"	"	"	"	"	
Ethylbenzene	**5.42**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**5.11**	0.0250	"	"	"	"	"	"	
Xylene (o)	**8.99**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*107 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*220 %*	*80-120*		"	"	"	"	*S-04*
Carbon Ranges C6-C12	**3970**	50.0	mg/kg dry	5	EI62119	09/21/06	09/21/06	EPA 8015M	
Carbon Ranges C12-C28	**13100**	50.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**728**	50.0	"	"	"	"	"	"	
Total Hydrocarbons	**17800**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*50.4 %*	*70-130*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*71.0 %*	*70-130*		"	"	"	"	*S-06*
AH-3 1-1.5' (6I19008-08) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**20.6**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [1.73]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbons	**20.6**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*87.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*114 %*	*70-130*		"	"	"	"	
AH-3 2-2.5' (6I19008-09) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*101 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*124 %*	*70-130*		"	"	"	"	

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Highlander Environmental Corp.
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Midland TX, 79705

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

Fax: (432) 682-3946

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-4 0-0.5' (6I19008-10) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI62202	09/22/06	09/22/06	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		*81.0 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	**32.8**	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**1010**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**105**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**1150**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*137 %*	*70-130*		"	"	"	"	*S-04*
Surrogate: 1-Chlorooctadecane		*191 %*	*70-130*		"	"	"	"	*S-04*
AH-4 0.5-1.0' (6I19008-11) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62729	09/27/06	09/27/06	EPA 8015M	
Carbon Ranges C12-C28	**18.2**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**18.2**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*71.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*73.6 %*	*70-130*		"	"	"	"	
AH-5 0-0.5' (6I19008-12) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI62202	09/22/06	09/25/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	**0.0262**	0.0250	"	"	"	"	"	"	
Xylene (p/m)	**0.0576**	0.0250	"	"	"	"	"	"	
Xylene (o)	**0.0654**	0.0250	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*98.2 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*97.2 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	**160**	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**1360**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**116**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**1640**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*130 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*186 %*	*70-130*		"	"	"	"	*S-04*

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1910 N. Big Spring St.	Project Number: 2737	
Midland TX, 79705	Project Manager: Ike Tavarez	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-5 0.5-1.0' (6I19008-13) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62729	09/27/06	09/27/06	EPA 8015M	
Carbon Ranges C12-C28	**J [6.93]**	10.0	"	"	"	"	"	"	J
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*71.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70.2 %*	*70-130*		"	"	"	"	
AH-6 0-0.5' (6I19008-14) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EI62202	09/22/06	09/22/06	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		*84.8 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*94.0 %*	*80-120*		"	"	"	"	
Carbon Ranges C6-C12	**58.6**	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**706**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**70.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**835**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*107 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*144 %*	*70-130*		"	"	"	"	*S-04*
AH-7 0-0.5' (6I19008-16) Soil									
Carbon Ranges C6-C12	**472**	10.0	mg/kg dry	1	EI62120	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**2970**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**148**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**3590**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*145 %*	*70-130*		"	"	"	"	*S-04*
Surrogate: 1-Chlorooctadecane		*224 %*	*70-130*		"	"	"	"	*S-04*

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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	

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-7 0.5-1.0' (6I19008-17) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62729	09/27/06	09/27/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*71.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70.6 %*	*70-130*		"	"	"	"	
AH-8 0-0.5' (6I19008-18) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62120	09/21/06	09/26/06	EPA 8015M	
Carbon Ranges C12-C28	**34.2**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [4.14]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbons	**34.2**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.4 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*116 %*	*70-130*		"	"	"	"	
AH-9 0-0.5' (6I19008-20) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62120	09/21/06	09/26/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*89.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*112 %*	*70-130*		"	"	"	"	
AH-10 0-0.5' (6I19008-22) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**35.6**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**12.7**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**48.3**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*130 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*166 %*	*70-130*		"	"	"	"	*S-04*

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1910 N. Big Spring St.	Project Number: 2737	
Midland TX, 79705	Project Manager: Ike Tavarez	

Organics by GC

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Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-11 0-0.5' (6I19008-24) Soil									
Carbon Ranges C6-C12	**J [5.29]**	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	J
Carbon Ranges C12-C28	**228**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**44.3**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**272**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*126 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*167 %*	*70-130*		"	"	"	"	*S-04*
AH-12 0-0.5' (6I19008-26) Soil									
Carbon Ranges C6-C12	**J [3.39]**	10.0	mg/kg dry	1	EI62119	09/21/06	09/22/06	EPA 8015M	J
Carbon Ranges C12-C28	**1090**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**124**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**1210**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*105 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*169 %*	*70-130*		"	"	"	"	*S-04*
AH-12 0.5-1.0' (6I19008-27) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62729	09/27/06	09/27/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbons	ND	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*72.0 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*70.6 %*	*70-130*		"	"	"	"	
AH-13 0-0.5' (6I19008-28) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62120	09/21/06	09/26/06	EPA 8015M	
Carbon Ranges C12-C28	**58.6**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**J [4.75]**	10.0	"	"	"	"	"	"	J
Total Hydrocarbons	**58.6**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*93.8 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*118 %*	*70-130*		"	"	"	"	

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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
AH-14 0-0.5' (6I19008-30) Soil									
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EI62120	09/21/06	09/26/06	EPA 8015M	
Carbon Ranges C12-C28	**113**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**10.9**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**124**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*92.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*118 %*	*70-130*		"	"	"	"	
AH-15 0-0.5' (6I19008-32) Soil									
Carbon Ranges C6-C12	**27.5**	10.0	mg/kg dry	1	EI62120	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**442**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**59.5**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**529**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*117 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*156 %*	*70-130*		"	"	"	"	*S-04*
AH-16 0-0.5' (6I19008-34) Soil									
Carbon Ranges C6-C12	**27.4**	10.0	mg/kg dry	1	EI62120	09/21/06	09/22/06	EPA 8015M	
Carbon Ranges C12-C28	**726**	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	**70.9**	10.0	"	"	"	"	"	"	
Total Hydrocarbons	**824**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.6 %*	*70-130*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*130 %*	*70-130*		"	"	"	"	

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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

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-1 0-1.0' (6I19008-01) Soil									
Chloride	**383**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**6.3**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-1 1-1.5' (6I19008-02) Soil									
Chloride	**351**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**7.3**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-1 2-2.5' (6I19008-03) Soil									
Chloride	**128**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**11.9**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-2 0-1.0' (6I19008-04) Soil									
Chloride	**106**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**6.3**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-2 1-1.5 (6I19008-05) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**6.5**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-2 2-2.5' (6I19008-06) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**9.6**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-3 0-1.0' (6I19008-07) Soil									
Chloride	**638**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**5.9**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-3 1-1.5' (6I19008-08) Soil									
Chloride	**830**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**6.5**	0.1	%	1	EI62110	09/20/06	09/21/06	% 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
AH-3 2-2.5' (6I19008-09) Soil									
Chloride	**1380**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**11.0**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-4 0-0.5' (6I19008-10) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**4.8**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-4 0.5-1.0' (6I19008-11) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**5.6**	0.1	%	1	EI62802	09/27/06	09/28/06	% calculation	
AH-5 0-0.5' (6I19008-12) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**3.8**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-5 0.5-1.0' (6I19008-13) Soil									
Chloride	**53.2**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**6.2**	0.1	%	1	EI62802	09/27/06	09/28/06	% calculation	
AH-6 0-0.5' (6I19008-14) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**5.1**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-6 0.5-1.0' (6I19008-15) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
AH-7 0-0.5' (6I19008-16) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**2.5**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	

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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
AH-7 0.5-1.0' (6I19008-17) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**4.4**	0.1	%	1	EI62802	09/27/06	09/28/06	% calculation	
AH-8 0-0.5' (6I19008-18) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**4.2**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-8 0.5-1.0' (6I19008-19) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
AH-9 0-0.5' (6I19008-20) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62203	09/22/06	09/22/06	SW 846 9253	
% Moisture	**4.6**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-9 0.5-1.0' (6I19008-21) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
AH-10 0-0.5' (6I19008-22) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	**3.2**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-10 0.5-1.0' (6I19008-23) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
AH-11 0-0.5' (6I19008-24) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	**2.6**	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-11 0.5-1.0' (6I19008-25) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	

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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-12 0-0.5' (6I19008-26) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	4.7	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-12 0.5-1.0' (6I19008-27) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	7.8	0.1	%	1	EI62802	09/27/06	09/28/06	% calculation	
AH-13 0-0.5' (6I19008-28) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	3.9	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-13 0.5-1.0' (6I19008-29) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
AH-14 0-0.5' (6I19008-30) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	4.2	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-14 0.5-1.0' (6I19008-31) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
AH-15 0-0.5' (6I19008-32) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	5.5	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	
AH-15 0.5-1.0' (6I19008-33) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
AH-16 0-0.5' (6I19008-34) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	
% Moisture	3.5	0.1	%	1	EI62110	09/20/06	09/21/06	% calculation	

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1910 N. Big Spring St.	Project Number: 2737	
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General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
AH-16 0.5-1.0' (6I19008-35) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EI62204	09/22/06	09/22/06	SW 846 9253	

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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 EI62119 - Solvent Extraction (GC)										
Blank (EI62119-BLK1)				Prepared & Analyzed: 09/21/06						
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	*47.4*		*mg/kg*	*50.0*		*94.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*58.4*		"	*50.0*		*117*	*70-130*			
LCS (EI62119-BS1)				Prepared & Analyzed: 09/21/06						
Carbon Ranges C6-C12	506	10.0	mg/kg wet	500		101	75-125			
Carbon Ranges C12-C28	401	10.0	"	500		80.2	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	907	10.0	"	1000		90.7	75-125			
Surrogate: 1-Chlorooctane	*54.4*		*mg/kg*	*50.0*		*109*	*70-130*			
Surrogate: 1-Chlorooctadecane	*61.1*		"	*50.0*		*122*	*70-130*			
Calibration Check (EI62119-CCV1)				Prepared: 09/21/06 Analyzed: 09/22/06						
Carbon Ranges C6-C12	228		mg/kg	250		91.2	80-120			
Carbon Ranges C12-C28	222		"	250		88.8	80-120			
Total Hydrocarbons	450		"	500		90.0	80-120			
Surrogate: 1-Chlorooctane	*57.0*		"	*50.0*		*114*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.3*		"	*50.0*		*129*	*70-130*			
Matrix Spike (EI62119-MS1)	**Source: 6I19008-09**			Prepared: 09/21/06 Analyzed: 09/22/06						
Carbon Ranges C6-C12	635	10.0	mg/kg dry	562	ND	113	75-125			
Carbon Ranges C12-C28	477	10.0	"	562	ND	84.9	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1080	10.0	"	1120	ND	96.4	75-125			
Surrogate: 1-Chlorooctane	*60.8*		*mg/kg*	*50.0*		*122*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.6*		"	*50.0*		*129*	*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 EI62119 - Solvent Extraction (GC)										
Matrix Spike Dup (EI62119-MSD1)	**Source: 6I19008-09**			Prepared: 09/21/06 Analyzed: 09/22/06						
Carbon Ranges C6-C12	632	10.0	mg/kg dry	562	ND	112	75-125	0.474	20	
Carbon Ranges C12-C28	472	10.0	"	562	ND	84.0	75-125	1.05	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1100	10.0	"	1120	ND	98.2	75-125	1.83	20	
Surrogate: 1-Chlorooctane	*58.9*		*mg/kg*	*50.0*		*118*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.8*		*"*	*50.0*		*130*	*70-130*			
Batch EI62120 - Solvent Extraction (GC)										
Blank (EI62120-BLK1)				Prepared: 09/21/06 Analyzed: 09/22/06						
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	*48.9*		*mg/kg*	*50.0*		*97.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*60.9*		*"*	*50.0*		*122*	*70-130*			
LCS (EI62120-BS1)				Prepared: 09/21/06 Analyzed: 09/22/06						
Carbon Ranges C6-C12	516	10.0	mg/kg wet	500		103	75-125			
Carbon Ranges C12-C28	412	10.0	"	500		82.4	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	928	10.0	"	1000		92.8	75-125			
Surrogate: 1-Chlorooctane	*55.7*		*mg/kg*	*50.0*		*111*	*70-130*			
Surrogate: 1-Chlorooctadecane	*63.2*		*"*	*50.0*		*126*	*70-130*			
Calibration Check (EI62120-CCV1)				Prepared: 09/21/06 Analyzed: 09/22/06						
Carbon Ranges C6-C12	210		mg/kg	250		84.0	80-120			
Carbon Ranges C12-C28	210		"	250		84.0	80-120			
Total Hydrocarbons	420		"	500		84.0	80-120			
Surrogate: 1-Chlorooctane	*54.2*		*"*	*50.0*		*108*	*70-130*			
Surrogate: 1-Chlorooctadecane	*64.5*		*"*	*50.0*		*129*	*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 EI62120 - Solvent Extraction (GC)										
Matrix Spike (EI62120-MS1)	**Source: 6I19016-09**			Prepared: 09/21/06 Analyzed: 09/22/06						
Carbon Ranges C6-C12	616	10.0	mg/kg dry	525	ND	117	75-125			
Carbon Ranges C12-C28	568	10.0	"	525	54.9	97.7	75-125			
Carbon Ranges C28-C35	12.4	10.0	"	0.00	14.7		75-125			
Total Hydrocarbons	1200	10.0	"	1050	69.6	108	75-125			
Surrogate: 1-Chlorooctane	*63.9*		*mg/kg*	*50.0*		*128*	*70-130*			
Surrogate: 1-Chlorooctadecane	*71.9*		"	*50.0*		*144*	*70-130*			*S-04*
Matrix Spike Dup (EI62120-MSD1)	**Source: 6I19016-09**			Prepared: 09/21/06 Analyzed: 09/22/06						
Carbon Ranges C6-C12	628	10.0	mg/kg dry	525	ND	120	75-125	1.93	20	
Carbon Ranges C12-C28	578	10.0	"	525	54.9	99.6	75-125	1.75	20	
Carbon Ranges C28-C35	12.4	10.0	"	0.00	14.7		75-125	0.00	20	
Total Hydrocarbons	1220	10.0	"	1050	69.6	110	75-125	1.65	20	
Surrogate: 1-Chlorooctane	*64.9*		*mg/kg*	*50.0*		*130*	*70-130*			
Surrogate: 1-Chlorooctadecane	*76.4*		"	*50.0*		*153*	*70-130*			*S-04*
Batch EI62202 - EPA 5030C (GC)										
Blank (EI62202-BLK1)				Prepared & Analyzed: 09/22/06						
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	*36.2*		*ug/kg*	*40.0*		*90.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*37.1*		"	*40.0*		*92.8*	*80-120*			
LCS (EI62202-BS1)				Prepared & Analyzed: 09/22/06						
Benzene	1.32	0.0250	mg/kg wet	1.25		106	80-120			
Toluene	1.15	0.0250	"	1.25		92.0	80-120			
Ethylbenzene	1.01	0.0250	"	1.25		80.8	80-120			
Xylene (p/m)	2.26	0.0250	"	2.50		90.4	80-120			
Xylene (o)	1.07	0.0250	"	1.25		85.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*32.3*		*ug/kg*	*40.0*		*80.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*41.7*		"	*40.0*		*104*	*80-120*			

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Organics by GC - Quality Control

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI62202 - EPA 5030C (GC)										
Calibration Check (EI62202-CCV1)				Prepared & Analyzed: 09/22/06						
Benzene	53.8		ug/kg	50.0		108	80-120			
Toluene	47.6		"	50.0		95.2	80-120			
Ethylbenzene	44.7		"	50.0		89.4	80-120			
Xylene (p/m)	89.6		"	100		89.6	80-120			
Xylene (o)	44.7		"	50.0		89.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*38.4*		"	*40.0*		*96.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*40.3*		"	*40.0*		*101*	*80-120*			
Matrix Spike (EI62202-MS1)		**Source: 6I19006-01**		Prepared: 09/22/06 Analyzed: 09/25/06						
Benzene	1.54	0.0250	mg/kg dry	1.38	ND	112	80-120			
Toluene	1.32	0.0250	"	1.38	ND	95.7	80-120			
Ethylbenzene	1.23	0.0250	"	1.38	ND	89.1	80-120			
Xylene (p/m)	2.54	0.0250	"	2.75	ND	92.4	80-120			
Xylene (o)	1.16	0.0250	"	1.38	ND	84.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	*35.5*		*ug/kg*	*40.0*		*88.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*32.8*		"	*40.0*		*82.0*	*80-120*			
Matrix Spike Dup (EI62202-MSD1)		**Source: 6I19006-01**		Prepared & Analyzed: 09/22/06						
Benzene	1.42	0.0250	mg/kg dry	1.38	ND	103	80-120	8.37	20	
Toluene	1.25	0.0250	"	1.38	ND	90.6	80-120	5.48	20	
Ethylbenzene	1.12	0.0250	"	1.38	ND	81.2	80-120	9.28	20	
Xylene (p/m)	2.38	0.0250	"	2.75	ND	86.5	80-120	6.60	20	
Xylene (o)	1.12	0.0250	"	1.38	ND	81.2	80-120	3.51	20	
Surrogate: a,a,a-Trifluorotoluene	*35.2*		*ug/kg*	*40.0*		*88.0*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.6*		"	*40.0*		*91.5*	*80-120*			
Batch EI62729 - Solvent Extraction (GC)										
Blank (EI62729-BLK1)				Prepared & Analyzed: 09/27/06						
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	*37.8*		*mg/kg*	*50.0*		*75.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*35.1*		"	*50.0*		*70.2*	*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 - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI62729 - Solvent Extraction (GC)										
LCS (EI62729-BS1)				Prepared & Analyzed: 09/27/06						
Carbon Ranges C6-C12	585	10.0	mg/kg wet	500		117	75-125			
Carbon Ranges C12-C28	407	10.0	"	500		81.4	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00			75-125			
Total Hydrocarbons	992	10.0	"	1000		99.2	75-125			
Surrogate: 1-Chlorooctane	*43.9*		*mg/kg*	*50.0*		*87.8*	*70-130*			
Surrogate: 1-Chlorooctadecane	*41.1*		"	*50.0*		*82.2*	*70-130*			
Calibration Check (EI62729-CCV1)				Prepared: 09/27/06 Analyzed: 09/28/06						
Carbon Ranges C6-C12	276		mg/kg	250		110	80-120			
Carbon Ranges C12-C28	228		"	250		91.2	80-120			
Total Hydrocarbons	504		"	500		101	80-120			
Surrogate: 1-Chlorooctane	*43.8*		"	*50.0*		*87.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*54.7*		"	*50.0*		*109*	*70-130*			
Matrix Spike (EI62729-MS1)	**Source: 6I26005-19**			Prepared & Analyzed: 09/27/06						
Carbon Ranges C6-C12	652	10.0	mg/kg dry	589	ND	111	75-125			
Carbon Ranges C12-C28	476	10.0	"	589	ND	80.8	75-125			
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125			
Total Hydrocarbons	1130	10.0	"	1180	ND	95.8	75-125			
Surrogate: 1-Chlorooctane	*41.6*		*mg/kg*	*50.0*		*83.2*	*70-130*			
Surrogate: 1-Chlorooctadecane	*49.7*		"	*50.0*		*99.4*	*70-130*			
Matrix Spike Dup (EI62729-MSD1)	**Source: 6I26005-19**			Prepared & Analyzed: 09/27/06						
Carbon Ranges C6-C12	672	10.0	mg/kg dry	589	ND	114	75-125	3.02	20	
Carbon Ranges C12-C28	476	10.0	"	589	ND	80.8	75-125	0.00	20	
Carbon Ranges C28-C35	ND	10.0	"	0.00	ND		75-125		20	
Total Hydrocarbons	1150	10.0	"	1180	ND	97.5	75-125	1.75	20	
Surrogate: 1-Chlorooctane	*42.3*		*mg/kg*	*50.0*		*84.6*	*70-130*			
Surrogate: 1-Chlorooctadecane	*50.9*		"	*50.0*		*102*	*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 - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI62730 - EPA 5030C (GC)										
Blank (EI62730-BLK1)				Prepared: 09/27/06 Analyzed: 09/28/06						
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	*32.5*		*ug/kg*	*40.0*		*81.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*36.2*		"	*40.0*		*90.5*	*80-120*			
LCS (EI62730-BS1)				Prepared: 09/27/06 Analyzed: 09/28/06						
Benzene	1.22	0.0250	mg/kg wet	1.25		97.6	80-120			
Toluene	1.10	0.0250	"	1.25		88.0	80-120			
Ethylbenzene	1.15	0.0250	"	1.25		92.0	80-120			
Xylene (p/m)	2.27	0.0250	"	2.50		90.8	80-120			
Xylene (o)	1.14	0.0250	"	1.25		91.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*34.6*		*ug/kg*	*40.0*		*86.5*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.3*		"	*40.0*		*113*	*80-120*			
LCS Dup (EI62730-BSD1)				Prepared: 09/27/06 Analyzed: 09/29/06						
Benzene	1.34	0.0250	mg/kg wet	1.25		107	80-120	9.19	20	
Toluene	1.19	0.0250	"	1.25		95.2	80-120	7.86	20	
Ethylbenzene	1.14	0.0250	"	1.25		91.2	80-120	0.873	20	
Xylene (p/m)	2.40	0.0250	"	2.50		96.0	80-120	5.57	20	
Xylene (o)	1.17	0.0250	"	1.25		93.6	80-120	2.60	20	
Surrogate: a,a,a-Trifluorotoluene	*38.7*		*ug/kg*	*40.0*		*96.8*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.7*		"	*40.0*		*114*	*80-120*			
Calibration Check (EI62730-CCV1)				Prepared: 09/27/06 Analyzed: 09/29/06						
Benzene	55.0		ug/kg	50.0		110	80-120			
Toluene	48.5		"	50.0		97.0	80-120			
Ethylbenzene	47.8		"	50.0		95.6	80-120			
Xylene (p/m)	92.0		"	100		92.0	80-120			
Xylene (o)	48.4		"	50.0		96.8	80-120			
Surrogate: a,a,a-Trifluorotoluene	*41.8*		"	*40.0*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*42.0*		"	*40.0*		*105*	*80-120*			

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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 - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI62730 - EPA 5030C (GC)										
Matrix Spike (EI62730-MS1)	**Source: 6I22014-12**			Prepared: 09/27/06 Analyzed: 09/28/06						
Benzene	1.30	0.0250	mg/kg dry	1.42	ND	91.5	80-120			
Toluene	1.15	0.0250	"	1.42	ND	81.0	80-120			
Ethylbenzene	1.31	0.0250	"	1.42	ND	92.3	80-120			
Xylene (p/m)	2.30	0.0250	"	2.84	ND	81.0	80-120			
Xylene (o)	1.18	0.0250	"	1.42	ND	83.1	80-120			
Surrogate: a,a,a-Trifluorotoluene	*33.7*		*ug/kg*	*40.0*		*84.2*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*45.7*		*"*	*40.0*		*114*	*80-120*			

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

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 EI62110 - General Preparation (Prep)										
Blank (EI62110-BLK1)				Prepared: 09/20/06 Analyzed: 09/21/06						
% Solids	100		%							
Duplicate (EI62110-DUP1)	**Source: 6I19008-01**			Prepared: 09/20/06 Analyzed: 09/21/06						
% Solids	93.2		%		93.7			0.535	20	
Duplicate (EI62110-DUP2)	**Source: 6I19008-32**			Prepared: 09/20/06 Analyzed: 09/21/06						
% Solids	94.5		%		94.5			0.00	20	
Duplicate (EI62110-DUP3)	**Source: 6I19012-03**			Prepared: 09/20/06 Analyzed: 09/21/06						
% Solids	80.8		%		78.8			2.51	20	
Duplicate (EI62110-DUP4)	**Source: 6I19012-23**			Prepared: 09/20/06 Analyzed: 09/21/06						
% Solids	85.3		%		86.7			1.63	20	
Duplicate (EI62110-DUP5)	**Source: 6I20012-01**			Prepared: 09/20/06 Analyzed: 09/21/06						
% Solids	41.0		%		43.7			6.38	20	
Batch EI62203 - Water Extraction										
Blank (EI62203-BLK1)				Prepared & Analyzed: 09/22/06						
Chloride	ND	20.0	mg/kg Wet							
LCS (EI62203-BS1)				Prepared & Analyzed: 09/22/06						
Chloride	91.5		mg/kg	100		91.5	80-120			
Calibration Check (EI62203-CCV1)				Prepared & Analyzed: 09/22/06						
Chloride	50.0		mg/kg	50.0		100	80-120			

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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

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 EI62203 - Water Extraction										
Matrix Spike (EI62203-MS1)	**Source: 6I19008-01**			Prepared & Analyzed: 09/22/06						
Chloride	851	20.0	mg/kg Wet	500	383	93.6	80-120			
Matrix Spike Dup (EI62203-MSD1)	**Source: 6I19008-01**			Prepared & Analyzed: 09/22/06						
Chloride	861	20.0	mg/kg Wet	500	383	95.6	80-120	1.17	20	
Batch EI62204 - Water Extraction										
Blank (EI62204-BLK1)				Prepared & Analyzed: 09/22/06						
Chloride	ND	20.0	mg/kg Wet							
LCS (EI62204-BS1)				Prepared & Analyzed: 09/22/06						
Chloride	91.5		mg/kg	100		91.5	80-120			
Matrix Spike (EI62204-MS1)	**Source: 6I19008-21**			Prepared & Analyzed: 09/22/06						
Chloride	510	20.0	mg/kg Wet	500	0.00	102	80-120			
Matrix Spike Dup (EI62204-MSD1)	**Source: 6I19008-21**			Prepared & Analyzed: 09/22/06						
Chloride	500	20.0	mg/kg Wet	500	0.00	100	80-120	1.98	20	
Reference (EI62204-SRM1)				Prepared & Analyzed: 09/22/06						
Chloride	50.0		mg/kg	50.0		100	80-120			
Batch EI62802 - General Preparation (Prep)										
Blank (EI62802-BLK1)				Prepared: 09/27/06 Analyzed: 09/28/06						
% Solids	100		%							

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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

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 EI62802 - General Preparation (Prep)										
Duplicate (EI62802-DUP1)	**Source: 6I19008-11**			Prepared: 09/27/06 Analyzed: 09/28/06						
% Solids	94.7		%		94.4			0.317	20	
Duplicate (EI62802-DUP2)	**Source: 6I27008-01**			Prepared: 09/27/06 Analyzed: 09/28/06						
% Solids	83.0		%		83.7			0.840	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	

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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: 9/29/2006

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.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

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
19008-01	9/18/06		S		X	AH-1 0-1.0'	1				X	
-02			S		X	AH-1 1'-1.5'	1				X	
-03			S		X	AH-1 2'-2.5'	1				X	
04			S		X	AH-2 0-1.0'	1				X	
05			S		X	AH-2 1'-1.5'	1				X	
06			S		X	AH-2 2'-2.5'	1				X	
07			S		X	AH-3 0-1.0'	1				X	
08			S		X	AH-3 1'-1.5'	1				X	
09			S		X	AH-3 2'-2.5'	1				X	
10			S		X	AH-4 0-0.5'	1				X	

ANALYSIS REQUEST (Circle or Specify Method No.)

BTEX 8021/602	MTBE 8021/602	TPH (8015 MOD.) TX1005 / 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. 8240/8260/624	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)
X		X											X			
X		X											X			
X		X											X			
X		X											X			
		X											X			
		X											X			
X		X											X			
		X											X			
		X											X			
X		X											X			

RELINQUISHED BY: (Signature) Date: 9/19/06 Time: 2:45 | 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 Floyd Josh Harrison Date: 9/19/06 Time:

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

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

RECEIVED BY: (Signature)
DATE: 9/19/06 TIME: 2:45

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: 402 glass 3.5°C

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) Added 09-26-06 @ 1645 as per attached fax

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 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
19008												
11	9/18/06		S		X	AH-4 0.5'-1.0'	1				X	
12			S		X	AH-5 0-0.5'	1				X	
13			S		X	AH-5 0.5'-1.0'	1				X	
14			S		X	AH-6 0-0.5'	1				X	
15			S		X	AH-6 0.5'-1.0'	1				X	
16			S		X	AH-7 0-0.5'	1				X	
17			S		X	AH-7 0.5'-1.0'	1				X	
18			S		X	AH-8 0-0.5'	1				X	
19			S		X	AH-8 0.5'-1.0'	1				X	
20	↓		S		X	AH-9 0-0.5'	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. 608/808	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											X			
													X			
		X											X			

RELINQUISHED BY: (Signature) Date: 9/19/06 Time: 2:45
RECEIVED BY: (Signature) Date: Time:
SAMPLED BY: (Print & Sign) Ray Taylor & Wolf Harrison Date: 9/19/06 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: TX ZIP:
CONTACT: PHONE:
RECEIVED BY: (Signature)
DATE: 9/19/06 TIME: 2:45
RUSH Charges Authorized: Yes No

SAMPLE CONDITION WHEN RECEIVED:

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

REMARKS: 402 glass 35

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.

APPENDIX C

NMOCD Form C-141

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

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 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	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. 608/608	BOD, TSS, pH, TDS, Chloride	Gamma Spec.	Alpha Beta (Air)	PLM (Asbestos)
19008-1	9/18/06		S		X	AH - 9 0.5' - 1.0'	1				X															X			
-2			S		X	AH - 10 0 - 0.5'	1				X				X											X			
-3			S		X	AH - 10 0.5' - 1.0'	1				X															X			
-4			S		X	AH - 11 0 - 0.5'	1				X				X											X			
-5			S		X	AH - 11 0.5' - 1.0'	1				X															X			
-6			S		X	AH - 12 0 - 0.5'	1				X				X											X			
-7			S		X	AH - 12 0.5' - 1.0'	1				X				(X)											X			
-8			S		X	AH - 13 0 - 0.5'	1				X				X											X			
-9			S		X	AH - 13 0.5' - 1.0'	1				X															X			
-10	↓		S		X	AH - 14 0 - 0.5'	1				X				X											X			

RELINQUISHED BY: (Signature) Date: 9/19/06 Time: 2:45

RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) Ray Tejal / Eliot Harrison Date: 9/19/06 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: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature)

DATE: 9/19/06 TIME: 2:45

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.

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 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 8021B/602	MTBE 8020/602	TPH (8015 MOD.) TX1005 410.1	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. 8240/8260/624	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)
UE19008																													
-31	9/18/06		S		X	AH - 14 0.5' - 1.0'	1				X															X			
-32			S		X	AH - 15 0 - 0.5'	1				X				X											X			
-33			S		X	AH - 15 0.5' - 1.0'	1				X															X			
-34			S		X	AH - 16 0 - 0.5'	1				X				X											X			
-35			S		X	AH - 16 0.5' - 1.0'	1				X															X			

RELINQUISHED BY: (Signature) Matt Anderson Date: 9/19/06 Time: 2:45

RECEIVED BY: (Signature) Date: Time:

SAMPLED BY: (Print & Sign) Ricky Tuttle / Scott Harrison Date: 9/18/06 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: TX ZIP:

CONTACT: PHONE:

RECEIVED BY: (Signature) Debbie Kelly

DATE: 9/19/06 TIME: 2:45

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

nt: Highlander

e/ Time: 9/19/06 2:45

D #: 6I-190

als: CK

Sample Receipt Checklist

				Client Initials
Temperature of container/ cooler?	Yes	No	3.5 °C	
Shipping container in good condition?	Yes	No		
Custody Seals intact on shipping container/ cooler?	Yes	No	Not Present	
Custody Seals intact on sample bottles/ container?	Yes	No	Not Present	
Chain of Custody present?	Yes	No		
Sample Instructions complete of Chain of Custody?	Yes	No		
Chain of Custody signed when relinquished/ received?	Yes	No		
Chain of Custody agrees with sample label(s)?	Yes	No	ID written on Cont./ Lid	
Container label(s) legible and intact?	Yes	No	Not Applicable	
Sample matrix/ properties agree with Chain of Custody?	Yes	No		
Containers supplied by ELOT?	Yes	No		
Samples in proper container/ bottle?	Yes	No	See Below	
Samples properly preserved?	Yes	No	See Below	
Sample bottles intact?	Yes	No		
Preservations documented on Chain of Custody?	Yes	No		
Containers documented on Chain of Custody?	Yes	No		
Sufficient sample amount for indicated test(s)?	Yes	No	See Below	
All samples received within sufficient hold time?	Yes	No	See Below	
VOC samples have zero headspace?	Yes	No	Not Applicable	

Variance Documentation

ntact: _____ Contacted by: _____ Date/ Time: _____

arding: _____

ective Action Taken: _____

ck 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

Highlander Environmental Corp.

Midland, Texas 563-1713

CLIENT: _____ JOB NO. _____ PAGE: _____ OF _____

SUBJECT: _____ DATE: _____ NAME: _____

Lab # 611900 8

COG / Jalmat #7 well flowline Leak

Run TPH 8015 mod

AH-4 0.5' - 1.0'

AH-5 0.5' - 1.0'

AH-7 0.5' - 1.0'

AH-12 0.5' - 1.0'

Run BTEX

AH-1 1' - 1.5'

AH-1 2' - 2.5'

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

SITE INFORMATION

Type of Report: ASSESSMENT AND WORK PLAN

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:	Clay Osborne
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).

OCT 7
Received
Hobbs
OCD

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:	Diane Kuykendall		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) 683-7443		(432) 682- 4559
Fax:	(432) 683-7441		(432) 682- 3946
Email:	dkuykendall@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**