



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

June 16, 2006

COG Operating LLC., (COG)
550 W. Texas, Suite 1300
Midland, TX 79701

RE: Closure Approval with conditions
UL- K Sec18-T25S-R37E
Jalmat Yates Unit, Well #31
Dated: May 24, 2006

The New Mexico Oil Conservation Division, (OCD), personnel reviewed the closure plan submitted by Highlander Environmental Corp., (HEC), and referenced above. The plan is **hereby approved** according to the information provided, including the following:

1. Please ensure any future runoff or releases are contained and not allowed to flow into capped/encapsulated material.

Please be advised that OCD approval does not relieve COG of liability should operations result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve COG of responsibility for compliance with federal, state or local laws and/or regulations.

If you have any questions or need any assistance call: (505) 393-6161 x113 or email: psheeeley@state.nm.us

Sincerely,

Paul Sheeley-Environmental Engineer

Cc: Wayne Price - Environmental Bureau Chief
Chris Williams - District I Supervisor
Larry Johnson - Environmental Engineer
Cheryl O'Connor - Lawyer
Daniel Sanchez - Enforcement Office

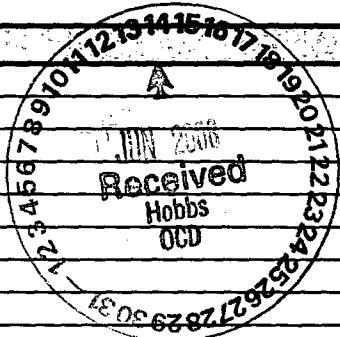
Application - pPAC0609644553
RP # 811

API# 30025264090000

SITE INFORMATION

General Site Information:

Site:	Jalmat Yates Unit #31
Company:	COG Operating Company
Section, Township and Range	Section 18, T25S, R37 E
Unit Letter:	K
Lease Number:	301048
County:	Lea
GPS:	32° 07' 38.2", 103° 12' 17.3"
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 (north) into lease, go 0.2 miles and turn right (east) and go 0.1 mile to Jalmat Yates Well #31


Release Data:

Date Released:	2/13/2005
Type Release:	produced water
Source of Contamination:	Well- Hole in Tubing
Fluid Released:	Volume Unknown
Fluids Recovered:	Surface - None

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	20
50-99 ft	10	
>100 ft.	0	Average Depth >50 BS
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	
Surface Body of Water:	Ranking Score	Site Data
<200 ft.	20	None
200 ft - 1,000 ft.	10	None
>1,000 ft.	0	
Total Ranking Score:	20	

Acceptable Soil RRAL (mg/kg)

Benzene	Total BTEX	TPH
10	50	100



Highlander Environmental Corp.

Midland, Texas

May 24, 2006

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

RE: Borehole Installation and Closure Plan for the Spill at the Jalmat Yates, Well #31, Section 18, Township 25 South, Range 37 East, Lea County, New Mexico, Operated by COG Operating LLC. (API #30-025-26409), Lease No. 301048

Dear Mr. Sheeley:

Highlander Environmental Corp. (Highlander) was contacted by COG Operating (COG) to assess the soil impact from a spill that occurred at the Jalmat Yates, Well #31 located in Section 18, Township 25 South, Range 37 East, Lea County, New Mexico. The Site location is shown on Figure 1.

Background and Site Inspection

As reported in the C-141, the spill occurred on February 13, 2005, due to a hole in the well tubing. The fluids from the release filled the well cellar and flowed east of the well location. An unknown quantity of produced water was released, impacting an area approximately 60' x 3'. The fluids also flowed down an apparent animal burrow. No fluids were recovered off the ground.

On April 1, 2005, Highlander personnel inspected the spill area. A pulling unit was on location and the well was being repaired at the time of the inspection. Spills were noted around the well's cellar. The cellar measured approximately 5' x 5' x 2' deep.

Groundwater and Regulatory

The Site is located in Section 18, Township 25 South, Range 37 East. The USGS database reported a depth to water at 51' in the southeast quarter of Section 18, Township 25 South, Range 37 East. The State of New Mexico Well Reports did not show any water wells in Section 18. However, there were water wells shown in Sections

19 and 20, Township 25 South, Range 37 East, with an average groundwater depth of approximately 34' to 44' below surface.

Published data from the "Geology and Groundwater Conditions in Southern New Mexico" showed wells in Sections 15 and 23, Township 25 South, Range 36 East with reported depths 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. A monitor well, located in the western edge of Section 18, reportedly had a water level of approximately 63.0' in 2004. The State of New Mexico Well Reports, USGS reports 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).

If additional groundwater data is obtained, and it is determined that the groundwater depth is greater than 50' below surface, the RRAL for TPH will be 1,000 mg/kg. However, based on the regional groundwater data, the proposed RRAL for TPH is 100 mg/kg.

Previous Correspondence

Based on the assessment work performed to date, it appears that some of the fluids from the release may have migrated through the subsurface into a closed reserve pit adjacent to the location. In order to assess the subsurface soils surrounding the reserve pit, COG proposed to install two (2) boreholes at the site. Prior to the installation of the boreholes, Highlander submitted a Work Plan titled, "Work Plan for the Spill at the Jalmat Yates, Well #31, Section 18, Township 25 South, Range 37 East, Lea County, New Mexico, Operated by COG Operating LLC. (API #30-025-26409), Lease No. 301048," dated April 10, 2006, to the NMOCD for review and approval. The work plan consisted of the installation of (2) boreholes, one each east and west of the reserve pit to assess the subsurface soils.

Borehole Installation

Upon approval from the NMOCD, on May 16, 2006, Highlander supervised the installation of the boreholes. Prior to the installation of the boreholes, a visual inspection was performed around the perimeter of the reserve pit. The edges of the pit were not definitely defined, however, pieces of exposed liner appeared to mark the approximate edges of the pit. The area of the reserve pit measured approximately 100' x 100'. One borehole (BH-1) was installed near the animal burrow outside west edge of the reserve pit. The remaining borehole (BH-2) was installed outside the east edge of the reserve pit. The borehole locations and the approximate edge of the reserve pit are shown on Figure 2.



The boreholes were installed using an air-rotary type drilling rig. Soil samples were collected at 5 foot intervals during drilling operations, field screened with a PID, and field screened for chloride. Soil samples were collected in five foot increments to a depth of 45' below ground surface, to where the field chloride testing indicated concentrations well below 250 mg/kg. The boreholes were then advanced to a depth of 50' below surface, to evaluate whether groundwater was to be encountered at a depth of 50' or less from the surface. No groundwater was encountered during the installation of the boreholes. The subsurface lithology consisted of silty/fine grain sand and caliche from approximate depths of 0-25' below surface. A clay formation was encountered at an approximately depth of 30.0' below surface, which extended down to the total depth of the boreholes.

The soil samples were field screened for chlorides to determine if impact extended to groundwater or showed distinctive decline with depth. Selected soil samples were analyzed for Total Petroleum Hydrocarbon (TPH) by method modified 8015 DRO/GRO, benzene, toluene, ethylbenzene, and xylene (BTEX) by method SW 846 5030/8021B, and chloride by method SW846-9252. All samples were collected and preserved in laboratory prepared sample containers with standard QA/QC procedures. All samples were shipped under proper chain-of-custody control and analyzed within the standard holding times. The results of the sampling are shown in Table 1. The boring logs are shown in Appendix B. The laboratory reports and chain of custody are shown in Appendix C.

All down hole equipment was washed between boreholes or sampling events using potable water and laboratory grade detergent. All down hole equipment (i.e., drill rods, drill bits, etc.) were thoroughly decontaminated between each use with a high-pressure hot water wash and rinse. Soil cuttings from drilling were stockpiled adjacent to the borehole. Following the completion of the drilling activities, all boreholes were grouted to surface.

Borehole Sample Results

Referring to Table 1, the samples selected for TPH and BTEX analysis were all below the reporting limit, with the exception of BH-1 (5-6'), where a trace of TPH was detected at 27.2 mg/kg.

The upper subsurface soils, at 5.0'-6.0' in both BH-1 and BH-2 did exhibit detectable chloride concentrations of 2,770 mg/kg and 2,020 mg/kg, however, these levels declined with depth with chloride concentrations of 528 mg/kg (20.0') and 70.9 mg/kg (15.0'), respectively. At 25.0'-30.0' below surface, the chloride concentrations did increase in both boreholes with chloride concentrations of 6,910 mg/kg (BH-1) and 4,830 mg/kg (BH-2). As the boreholes advanced deeper into the clay formation, concentrations declined below 250 mg/kg. The deepest samples at 45.0'-46.0' in BH-1 and BH-2 exhibited chloride concentrations of 33.4 mg/kg and 30.2 mg/kg, respectively.



While the chloride concentrations increased at or above the top of the clay formation, the clay formation appears to have retarded the migration of chloride. In addition, the groundwater depth in this area appears to be greater than 50.0' below surface. Based on the borehole data, the depth of chloride migration in the subsurface soil has been defined and does not appear to have impacted groundwater at the site at this time. To prevent further vertical migration of the chloride, COG proposes to cap the area of the closed reserved pit to ensure the chloride residue in the subsurface soils does not pose a potential future threat to groundwater.

Work Plan/Proposed Remedial Activity

Soil Capping

COG proposes to cap the reserve pit area with a 40 mil impervious, synthetic liner to encapsulate the impacted subsurface soil. Capping is a process used to cover contaminated soils to prevent the migration (movement) of the pollutants. This migration can be caused by rainwater or surface water moving over or vertically through the Site.

Based on the visual inspection and exposed liner at the surface, the area of the reserve pit is estimated at approximately 100' x 100'. To ensure proper capping, the reserve pit will need some preparation for the installation of the liner. The reserve pit will be excavated to a depth of 3.0' below surface (below root zone) and hauled to proper disposal. The total area prepared for capping will measure approximately 130' x 130' for proper coverage of the edges. The cap area is shown on Figure 3. If necessary, approximately 6" of sand will be placed on the bottom of the excavation to prevent damage to the liner if caliche (rock) formation is exposed. Once capped, the excavation will be backfilled with clean fill material.

If you require any additional information or have any questions or comments, please call.

Highlander Environmental Corp.

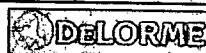
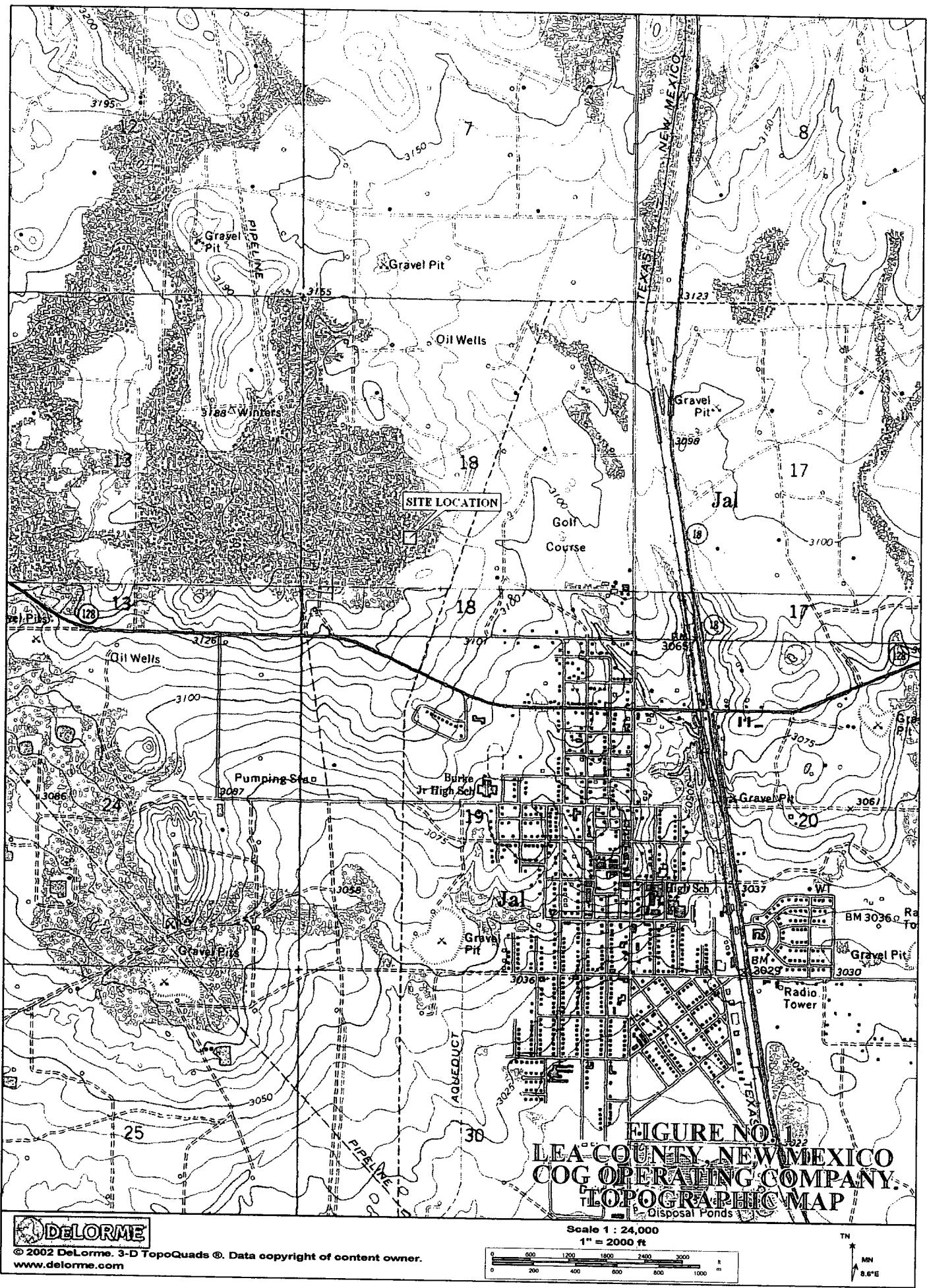
Ike Tavarez, P.G.
Project Manager/Senior Geologist

cc: COG – Erick Nelson

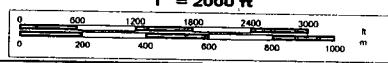


Highlander Environmental Corp.

Figures



© 2002 DeLorme. 3-D TopoQuads ®. Data copyright of content owner.
www.delorme.com



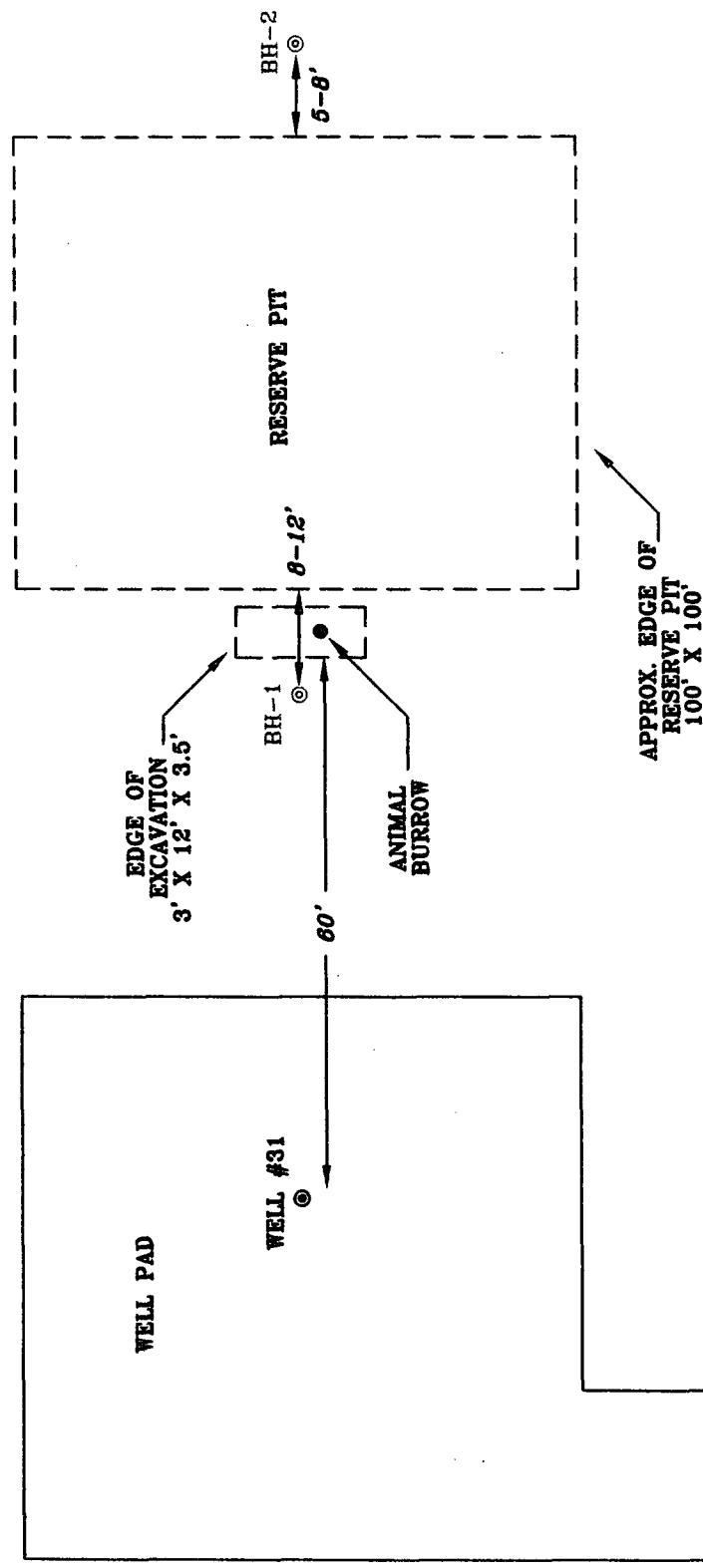


FIGURE NO. 2

LEA COUNTY, NEW MEXICO

COG OPERATING, LLC
JAIN MAT #31

**HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS**

NOT TO SCALE

BOREHOLE LOCATIONS

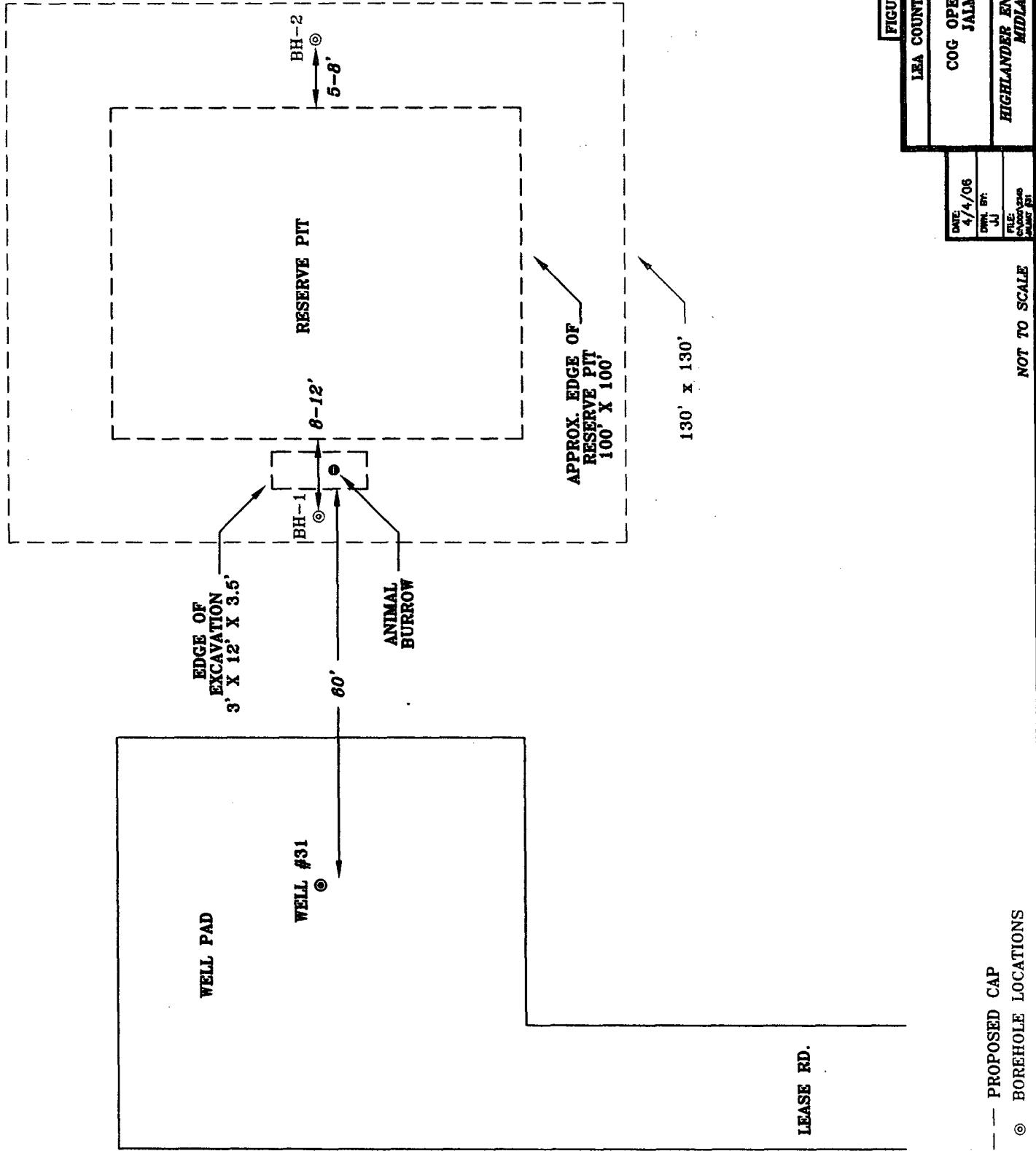


FIGURE NO. 3

LEA COUNTY, NEW MEXICO

COG OPERATING, LLC
JAIMAT #31

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

DATE: 4/4/06
DRAWN BY: JAI
FILE NUMBER: 04000000000000000000
SHEET NUMBER: 01

NOT TO SCALE

Tables

Table 1
COG Operating, LLC
Jalmat #31 Site
Lea County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft)	TPH (mg/kg)			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylene (mg/kg)	Chloride (mg/kg)
			C6-C12	C12-C35	Total					
BH-1	5/16/2006	5-6	<10.0	27.2	27.2	<0.025	<0.025	<0.025	<0.025	2,770
	5/16/2006	10-11	-	-	-	-	-	-	-	1,090
	5/16/2006	15-16	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	1,460
	5/16/2006	20-21	-	-	-	-	-	-	-	528
	5/16/2006	25-26	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	6,910
	5/16/2006	30-31	-	-	-	-	-	-	-	5,220
	5/16/2006	35-36	-	-	-	-	-	-	-	550
	5/16/2006	40-41	-	-	-	-	-	-	-	863
	5/16/2006	45-46	-	-	-	-	-	-	-	33.4
BH-2	5/16/2006	5-6	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	2,020
	5/16/2006	10-11	-	-	-	-	-	-	-	1,210
	5/16/2006	15-16	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	70.9
	5/16/2006	20-21	-	-	-	-	-	-	-	974
	5/16/2006	25-26	<10.0	<10.0	<10.0	<0.025	<0.025	<0.025	<0.025	4,830
	5/16/2006	30-31	-	-	-	-	-	-	-	4,430
	5/16/2006	35-36	-	-	-	-	-	-	-	2,130
	5/16/2006	40-41	-	-	-	-	-	-	-	260
	5/16/2006	45-46	-	-	-	-	-	-	-	30.2

(-) Not Analyzed

Appendix A

Water Well Data
Average Depth to Groundwater (ft)
COG Operating - Jalmat Yates Unit # 31

24 South			35 East		
6	5	4	3	2	1
7	8	9	10	11	12
			300		
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	3	2	1
		165			
7	8	9	10	11	12
18	17	16	15	14	13
			312		
19	20	21	22	23	24
				160	
30	29	28	27	26	25
31	32	33	54	34	35
			53		36

24 South			37 East		
6	5	111	4	3	2
		106			1
7	119	8	9	10	11
		90		120	
18	17	16	67	15	14
			124		13
19	20	21	69	22	23
			100		94
30	29	28	70	27	41
			25	89	90
31	32	33	34	35	36
			55		

25 South			35 East		
6	5	4	3	108	2
	165				1
7	8	9	10	11	12
18	17	16	15	14	13
	230				
19	20	21	22	23	24
		218			
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	11	12
			180		
18	17	16	15	14	13
			120		
19	20	21	22	23	24
			53.7		
30	29	28	27	26	25
31	32	33	34	35	36

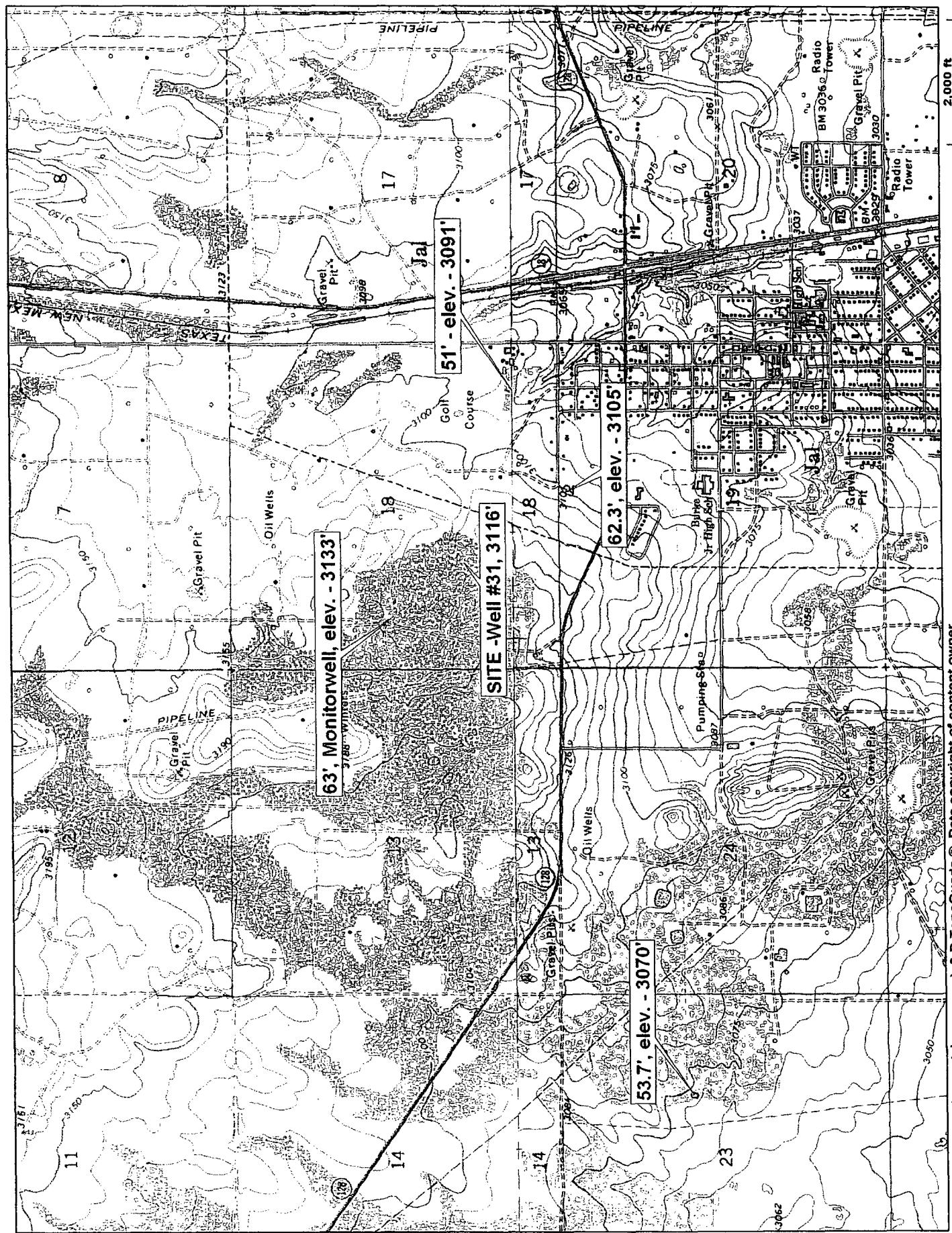
25 South			37 East		
6	5	4	3	2	1
					60
7	8	9	10	50	11
					12
18	SITE	17	62	16	15
	51			59.2	14
19	44	20	65	21	13
		26		22	73
62	34			23	81
30	29	28	27	26	24
			219		255
31	32	33	34	35	55
			185		36

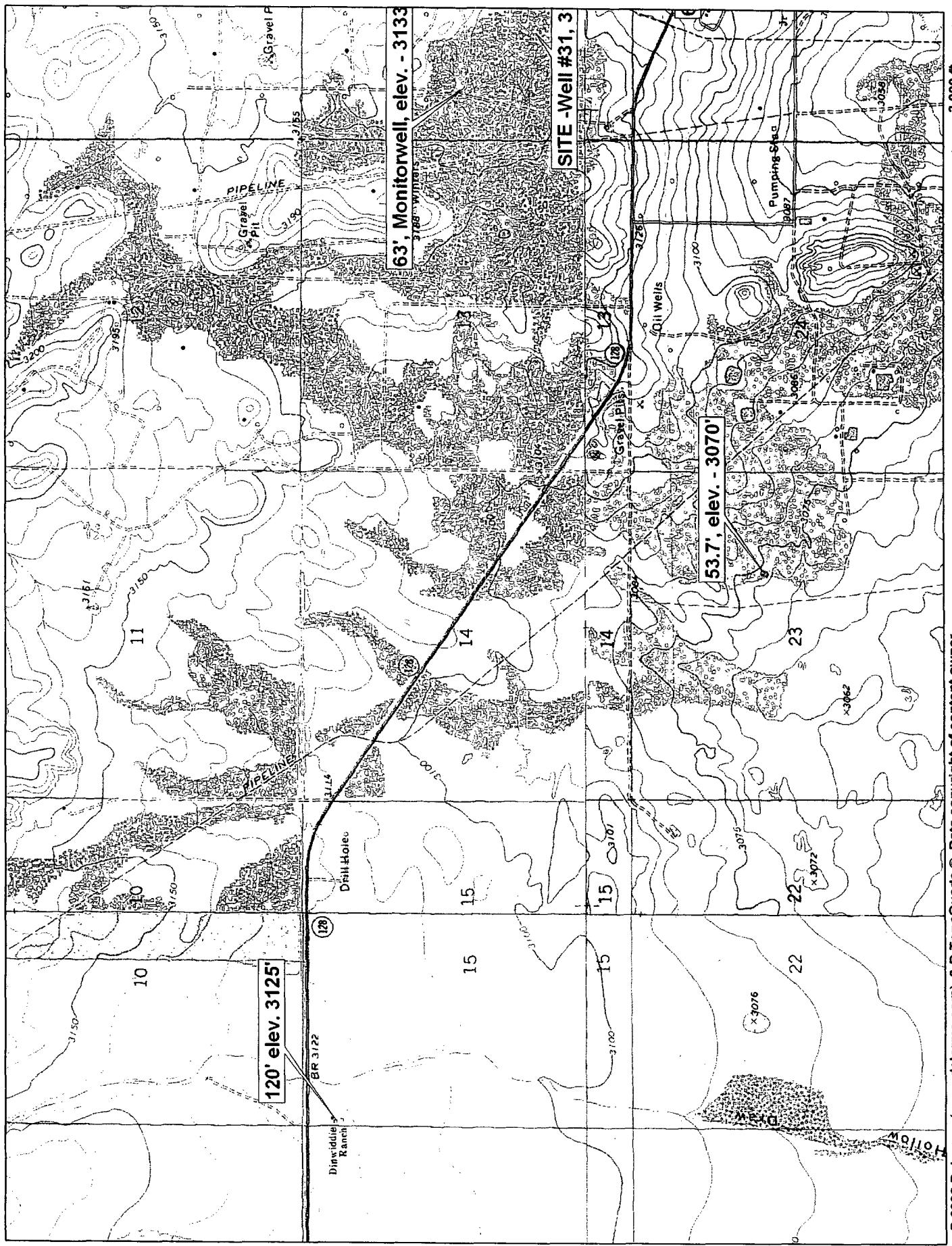
26 South			35 East		
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

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	24
			151		
30	29	28	27	26	25
31	32	33	34	35	36

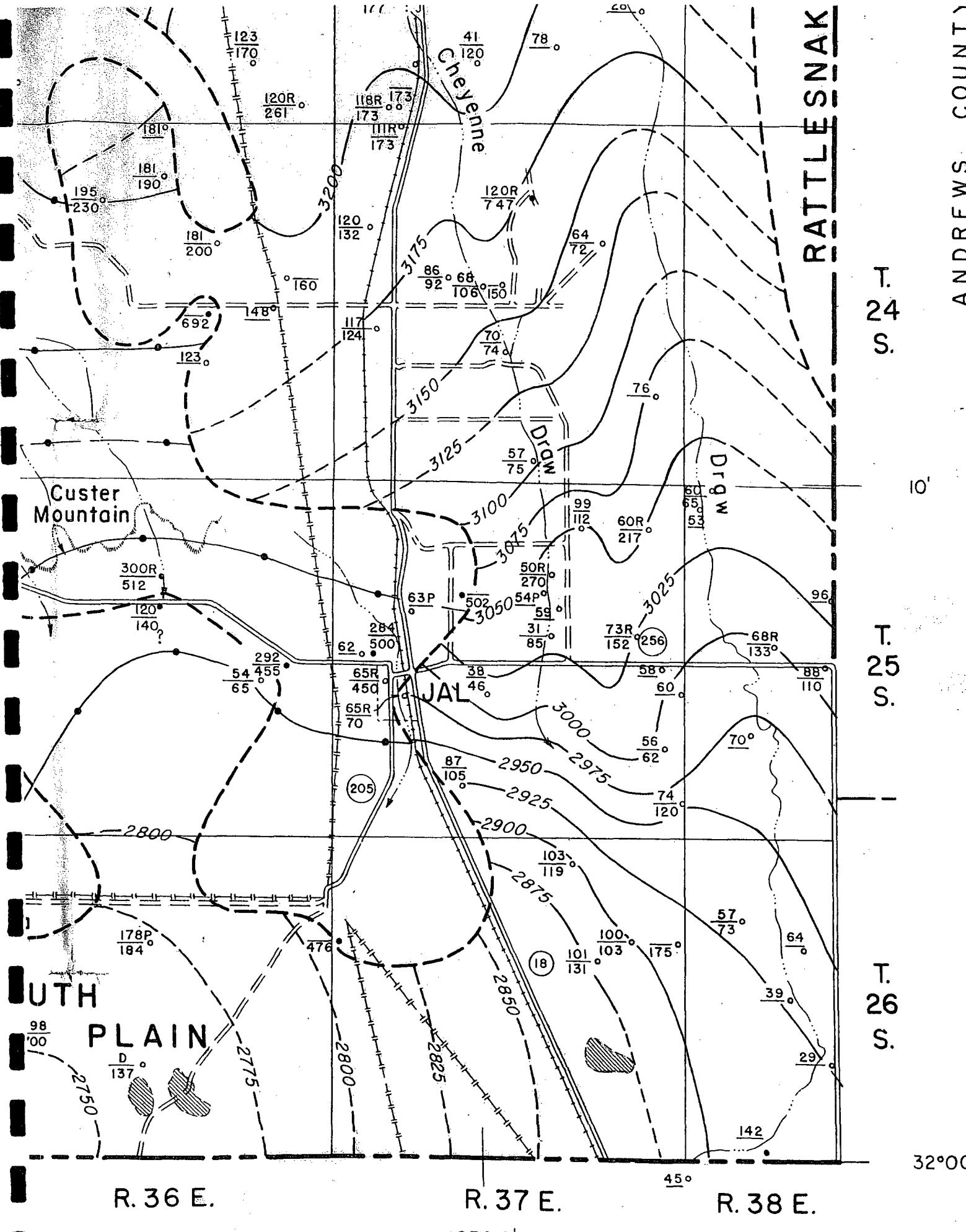
26 South			37 East		
6	5	4	3	2	1
7	196	8	9	85	10
					11
18	17	16	15	14	95
					13
19	20	21	22	23	24
	185				
30	29	86	28	27	26
			140		25
31	32	33	34	35	36

- 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)





ANDREWS COUNTY



R. 36 E.

R. 37 E.

45°
R. 38 E.

WINKLER COUNTY

Compiled by Alfred Clebsch, Jr.,
1960 using data collected -

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

Location No.	Owner	Aquifer	Water level								Remarks
			Depth of well (feet)	Altitude of well (feet)	Depth below land surface (feet)	Date measured	Year completed	Surface diameter of wells	Method of lift	Use of water	
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	—	—	—	8½	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	—	6½	Lw	I	Measurement made inside pipe column.
27.221	J. R. Wilson	To	—	3,320	122.9	3- 6-53	—	10	N	N	—
24.37.5.111	EPNG	To	173	3,275	111	9- 8-52	1952	10½	Te	In,D	Jal Plant 4, well 6.
7.431	Fowler Hair	To	132M	3,300	119.9	3- 6-53	—	6½	N	N	—
10.123	Trinity Production Co.	Tr	747	3,260	120	2- 5-53	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	6½	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- 5-53	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- 5-54	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	—	—	—	—	10½	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	Cased shothole.
6.134	—	To	—	3,095	53.1	2-25-53	—	3	N	N	EY 30 gpm.
9.343	—	To	—	3,130	95.7	2-25-53	—	6½	Lw	D,S	—

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

Location No.	Owner	Aquifer	Water level					Surface diameter of wells	Method of lift	Use of water	Remarks
			Depth of well (feet)	Altitude of well (feet)	Depth below land surface (feet)	Date measured	Year completed				
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	8½	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	Water level					Surface diameter of wells	Method of lift	Use of water	Remarks
			Depth of well (feet)	Altitude of well (feet)	Depth below land surface (feet)	Date measured	Year completed				
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	2-18-53	—	6	N	N	—

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 35E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

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

Record Count: 4

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
-----	-----	-----	-----	------	---	---	-------	-----	-----	-----

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

POD / Surface Data Report **Avg Depth to Water Report**

Water Column Report

Clear Form **iWATERS Menu** **Help**

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

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

POD / Surface Data Report**Avg Depth to Water Report****Water Column Report****Clear Form****iWATERS Menu****Help****POD / SURFACE DATA REPORT 03/08/2006**

DB File Nbr	(acre ft per annum)	Use	Diversion	Owner	(qua)	POD Number	(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	

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 24S Range: 35E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
CP	24S	35E	10				1	300	300	300

Record Count: 1

**New Mexico Office of the State Engineer
POD Reports and Downloads**

Township: 24S Range: 36E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

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

Record Count: 8

**New Mexico Office of the State Engineer
POD Reports and Downloads**

Township: 24S Range: 37E Sections:

NAD27 X:

Y:

Zone:



Search Radius:

County:



Basin:



Number:

Suffix:

Owner Name: (First)

(Last)

Non-Domestic

Domestic

All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

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

Record Count: 6

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 26S Range: 35E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

[POD / Surface Data Report](#)

[Avg Depth to Water Report](#)

[Water Column Report](#)

[Clear Form](#)

[iWATERS Menu](#)

[Help](#)

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
-----	-----	-----	-----	------	---	---	-------	-----	-----	-----

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 26S Range: 36E Sections:

NAD27 X:

Y:

Zone:



Search Radius:

County:



Basin:



Number:

Suffix:

Owner Name: (First)

(Last)

Non-Domestic

Domestic

All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
-----	-----	-----	-----	------	---	---	-------	-----	-----	-----

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 26S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) _____ (Last) _____ Non-Domestic Domestic
 All

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

Water Column Report

Clear Form

iWATERS Menu

Help

AVERAGE DEPTH OF WATER REPORT 03/08/2006

(Depth Water in Feet)

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
-----	-----	-----	-----	------	---	---	-------	-----	-----	-----

No Records found, try again

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

Record Count: 56

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 25S Range: 37E Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

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

POD / Surface Data Report	Avg Depth to Water Report	Water Column Report
Clear Form	iWATERS Menu	Help

POD / SURFACE DATA REPORT 03/08/2006

(acre ft per annum)

DB File Nbr	Use	Diversion	Owner	INC.
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)

Source	Tws	Rng	Sec	q	q	q	q
Shallow	25S	37E	20	2	3	1	
Shallow	25S	37E	20	2	4	3	
Shallow	25S	37E	20	2	4	1	
Shallow	25S	37E	21	2	4	3	
Shallow	25S	37E	22	1	2	2	
Shallow	25S	37E	10	4	3	4	
Shallow	25S	37E	10	4	3	3	
Shallow	25S	37E	03	2	4	2	
Shallow	25S	37E	03	4	2	1	
Shallow	25S	37E	29	2	3		
Shallow	25S	37E	29	2	3		
Shallow	25S	37E	19	2	2		
Shallow	25S	37E	16	4	4	4	
Shallow	25S	37E	20	1			
Shallow	25S	37E	19	2			
Shallow	25S	37E	19	2			

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

Record Count: 56

Water Resources

Data Category:
Ground WaterGeographic 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

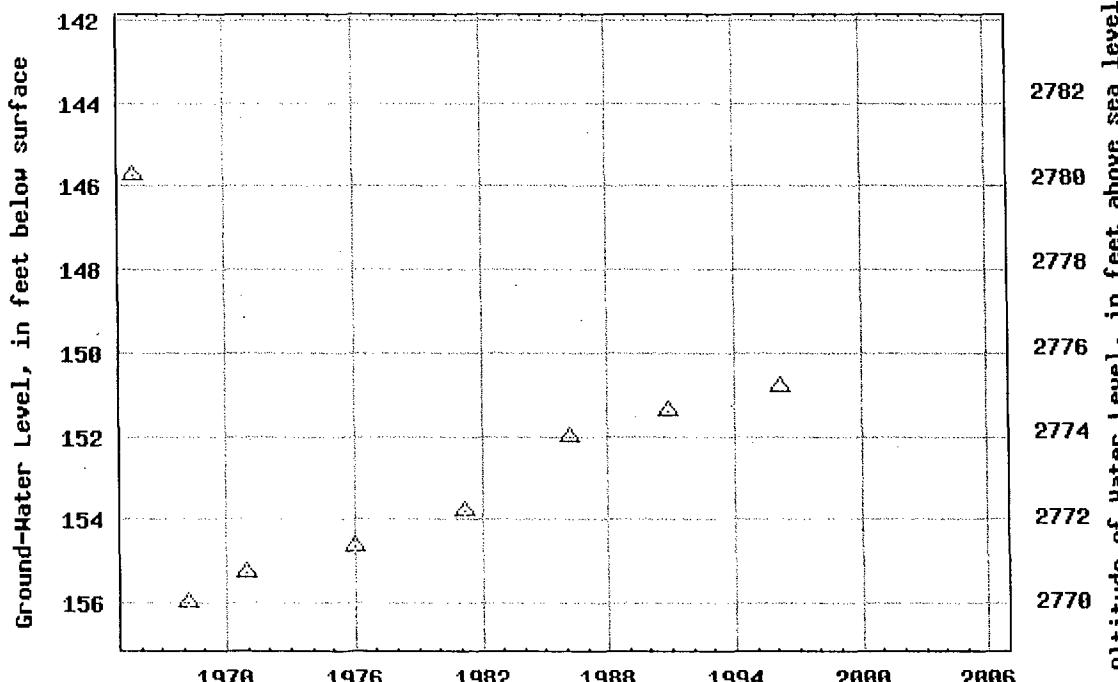
The depth of the well is 200 feet below land surface.

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

USGS 320149103134201 26S.36E.23.222322



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

Water Resources

Data Category:
Ground WaterGeographic 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

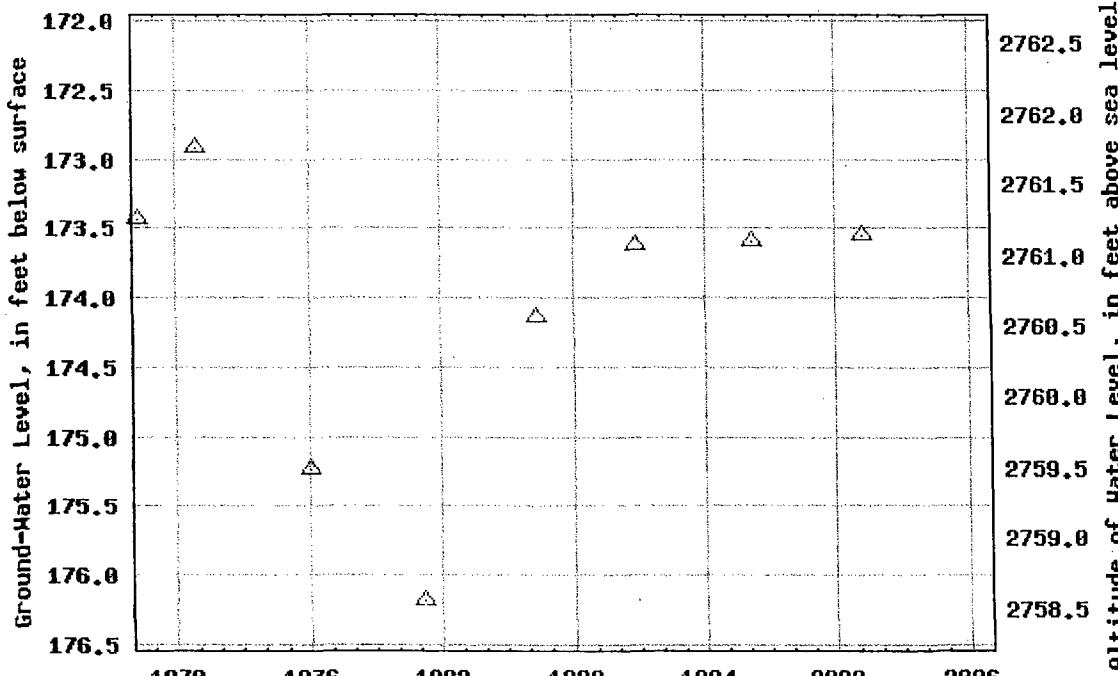
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 320251103154201 26S.36E.09.44421B



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

Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

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

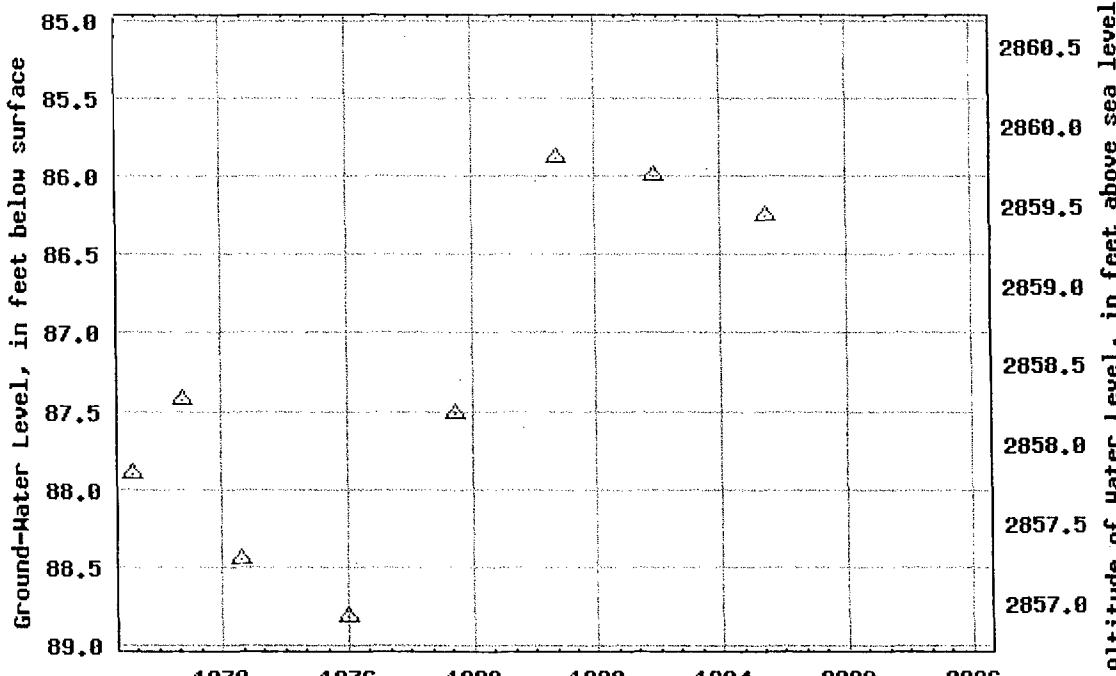
The depth of the well is 115 feet below land surface.

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](#)

USGS 320042103103901 26S.37E.29.24230



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

[Navigation icons]

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

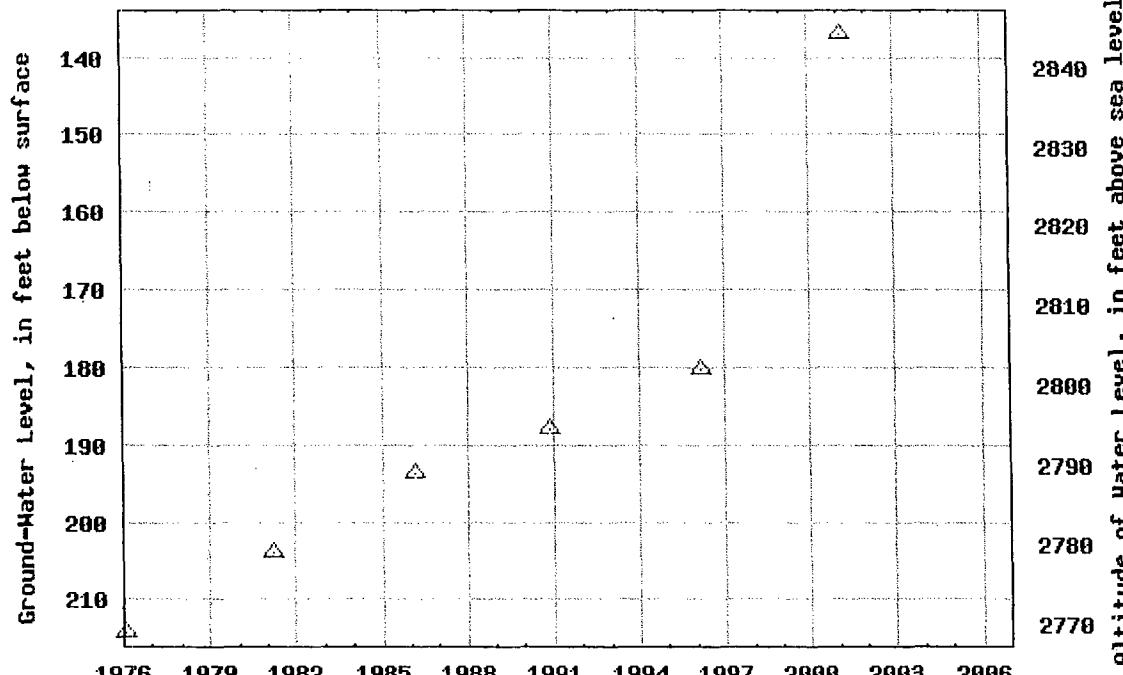
Hydrologic Unit Code 13070007

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](#)**USGS 320046103085101 26S.37E.27.23212**

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

Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

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

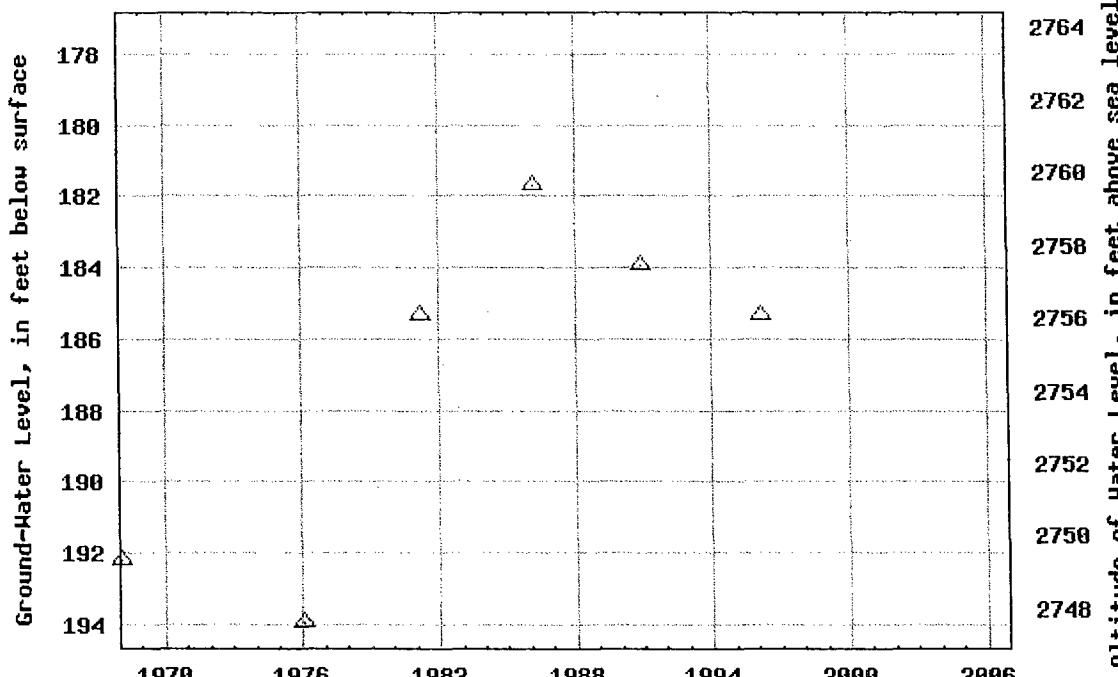
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 320104103120301 26S.37E.19.433143



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

Water Resources

Data Category:
Ground WaterGeographic 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

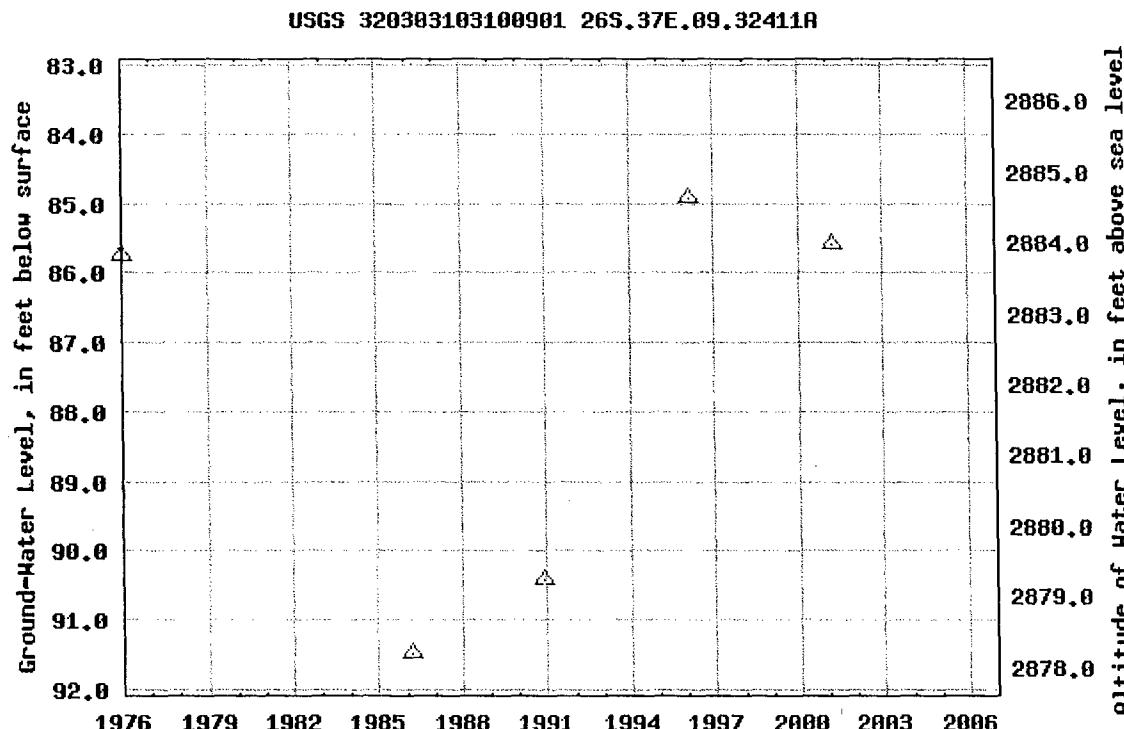
Latitude 32°03'03", Longitude 103°10'09" NAD27

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 WaterGeographic 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

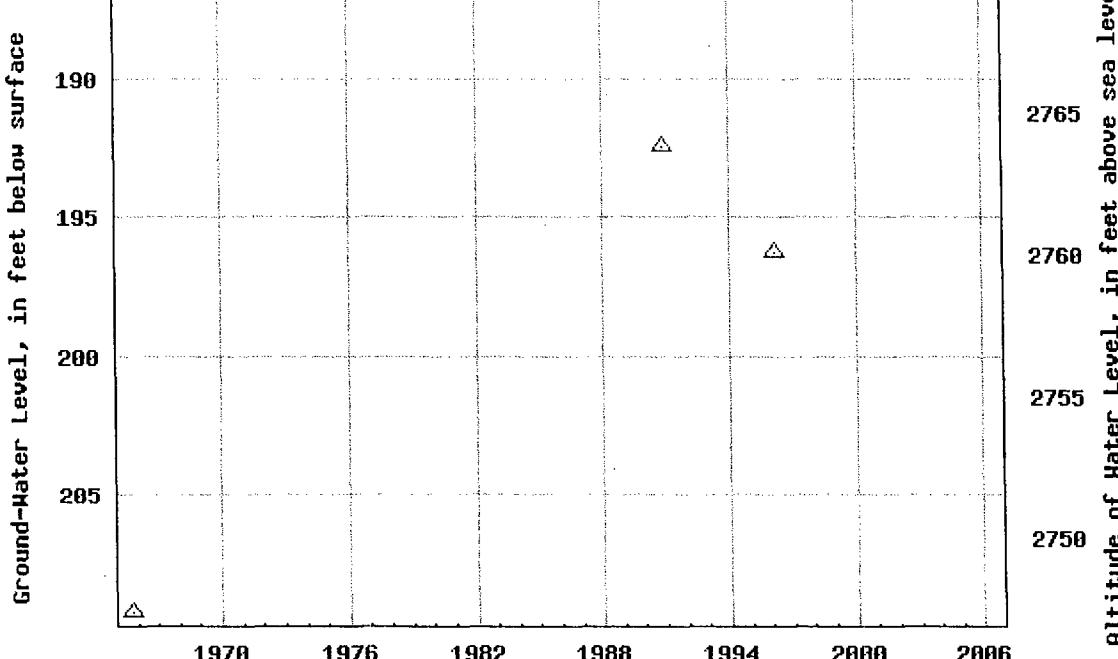
Latitude 32°02'59", Longitude 103°12'22" NAD27

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](#)

USGS 320259103122201 26S.37E.07.314424



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

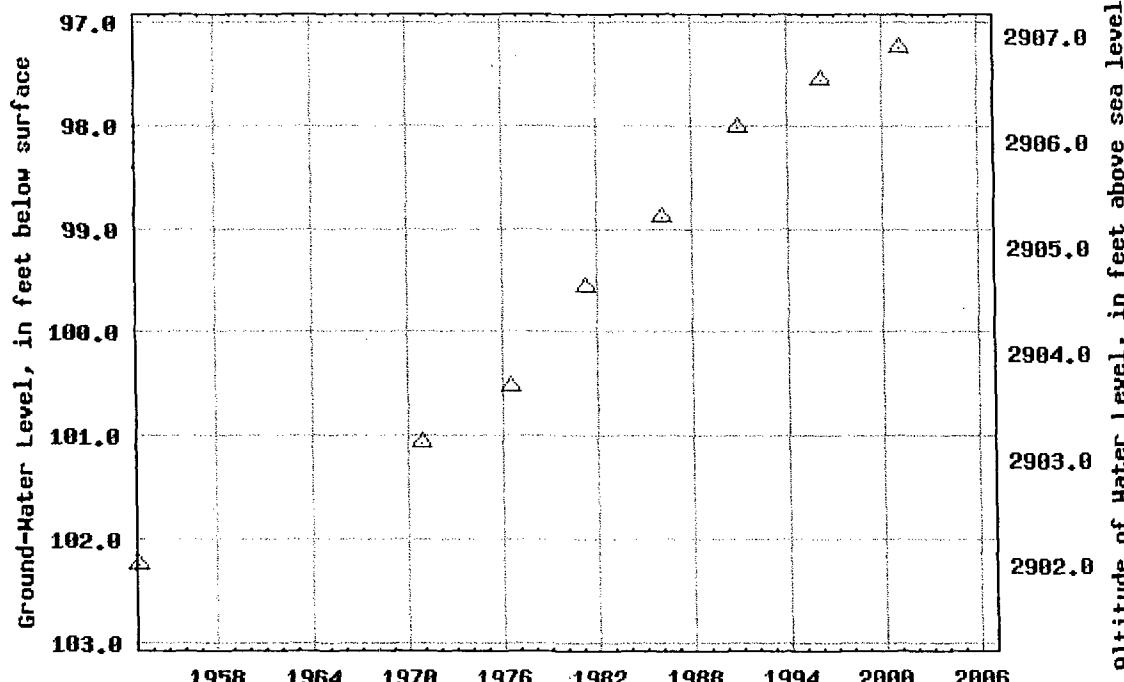
[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

USGS 320251103071401 26S.37E.12.33243



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

Water Resources

Data Category:
Ground WaterGeographic 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

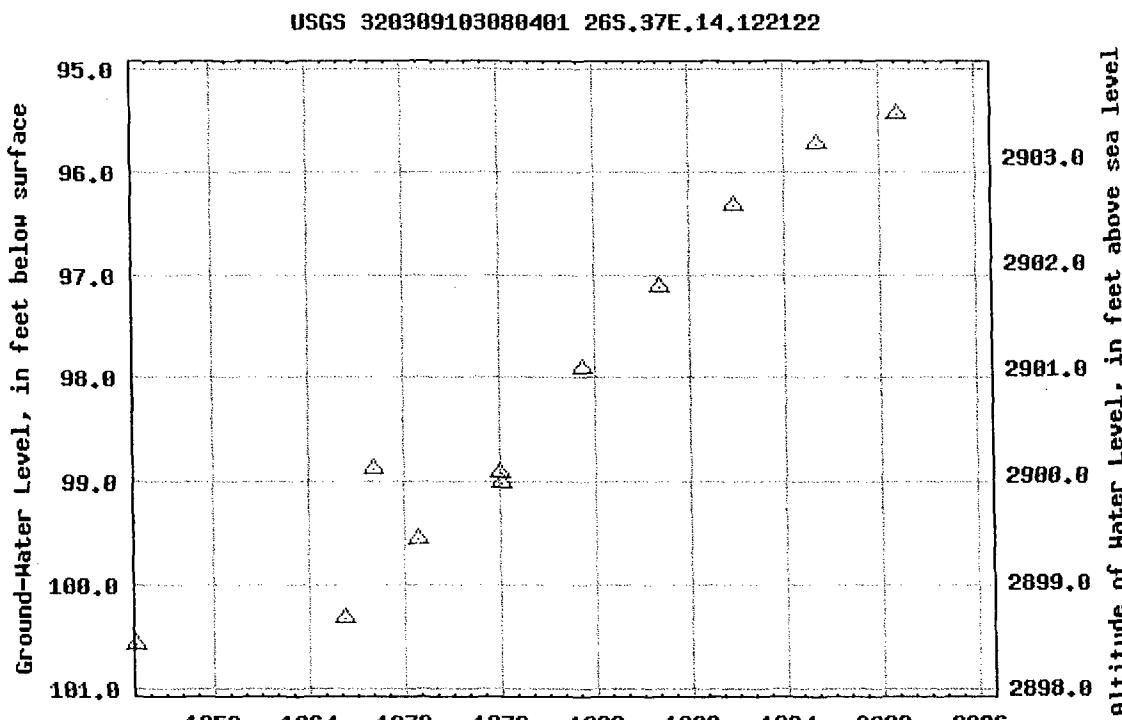
Latitude 32°03'09", Longitude 103°08'04" NAD27

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 WaterGeographic 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

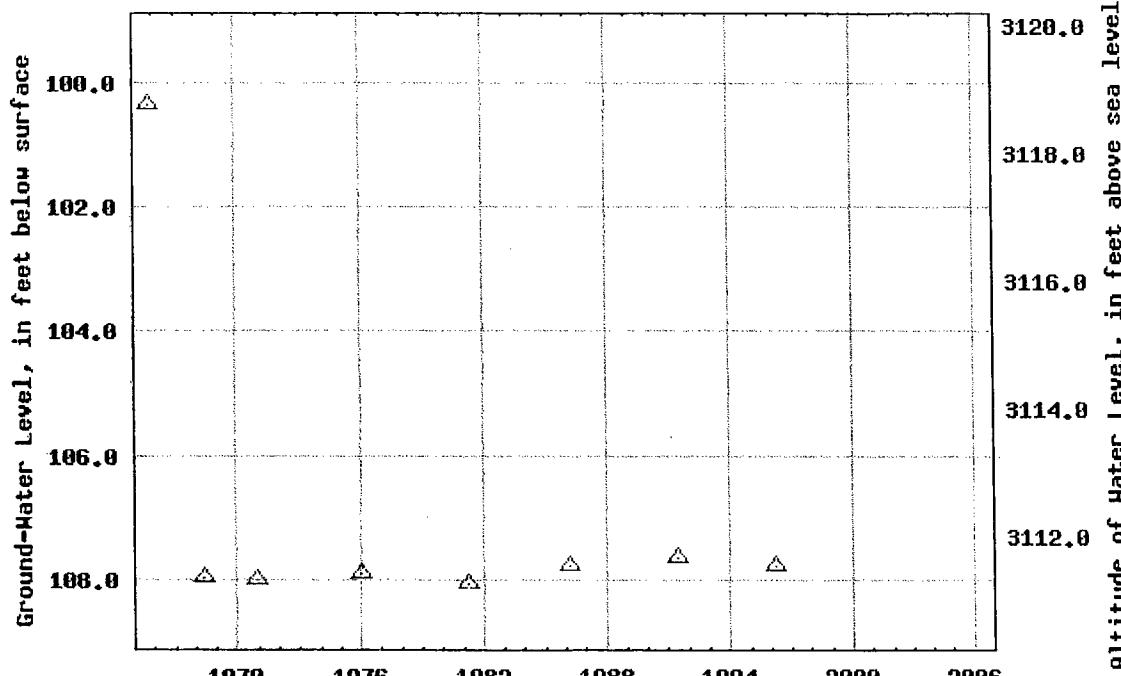
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 320918103211701 25S.35E.03.233244



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

Water Resources

Data Category:
Ground WaterGeographic 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

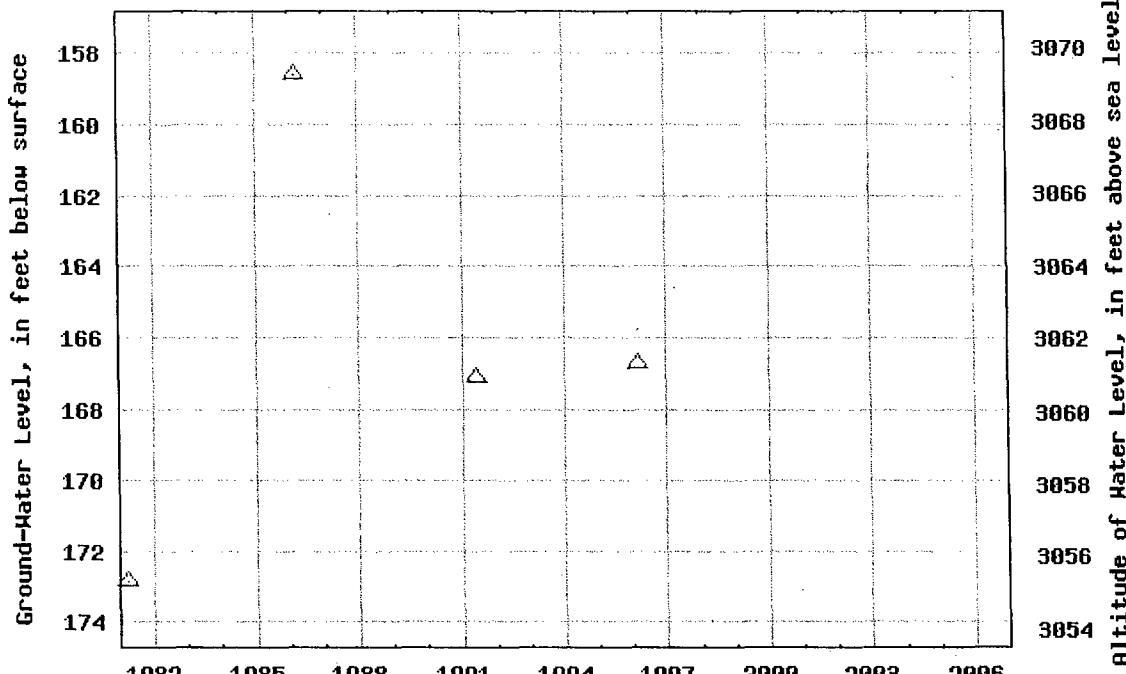
The depth of the well is 275 feet below land surface.

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

USGS 320721103221201 25S.35E.21.122212



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

Water Resources

Data Category:
Ground WaterGeographic 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.

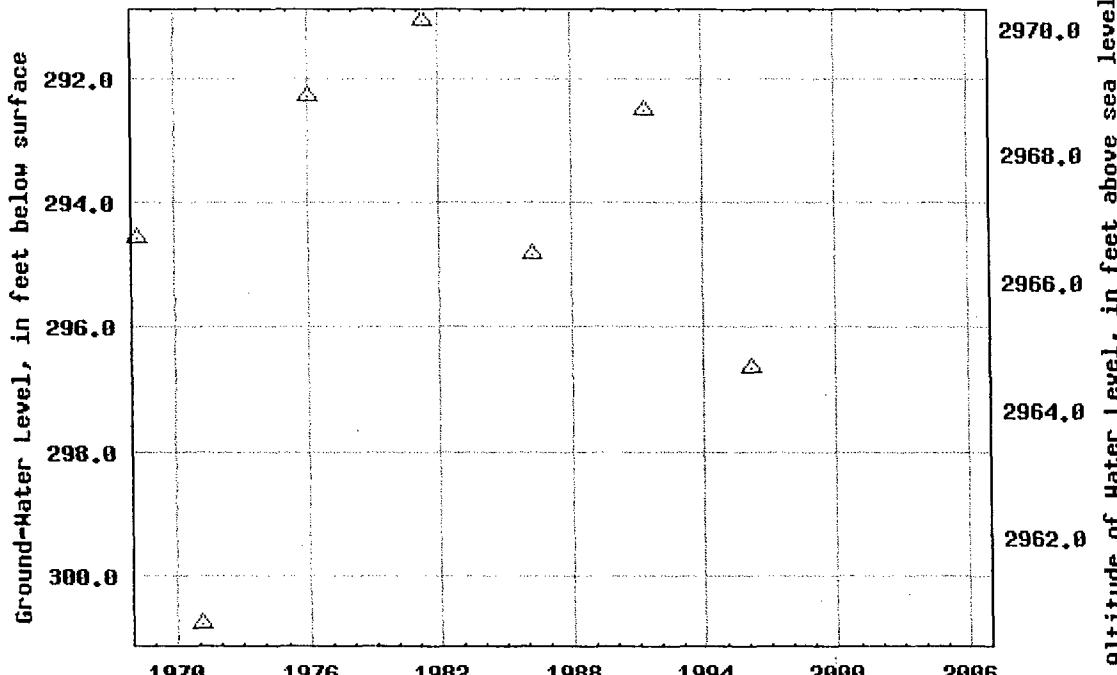
This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local
aquifer.**Output formats**

Table of data

Tab-separated data

Graph of data

Reselect period

USGS 320916103182501 25S.36E.06.13442

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

Water Resources

Data Category:
Ground WaterGeographic 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

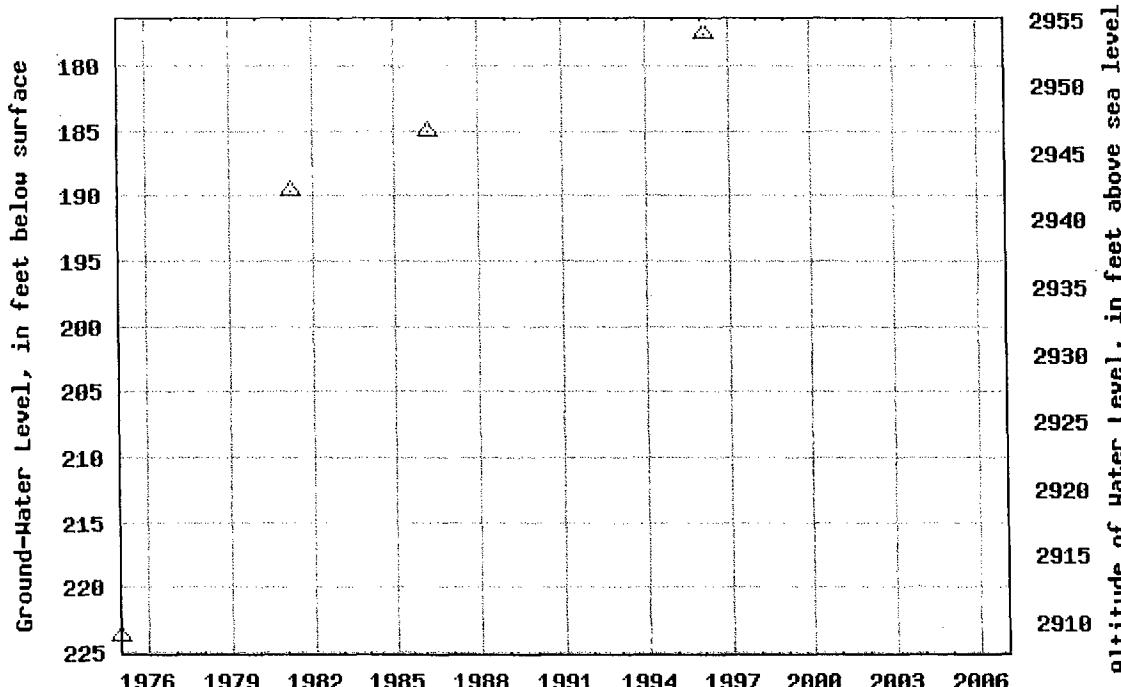
The depth of the well is 512 feet below land surface.

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

USGS 320813103152901 25S.36E.10.31431



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

Water Resources

Data Category:
Ground WaterGeographic 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

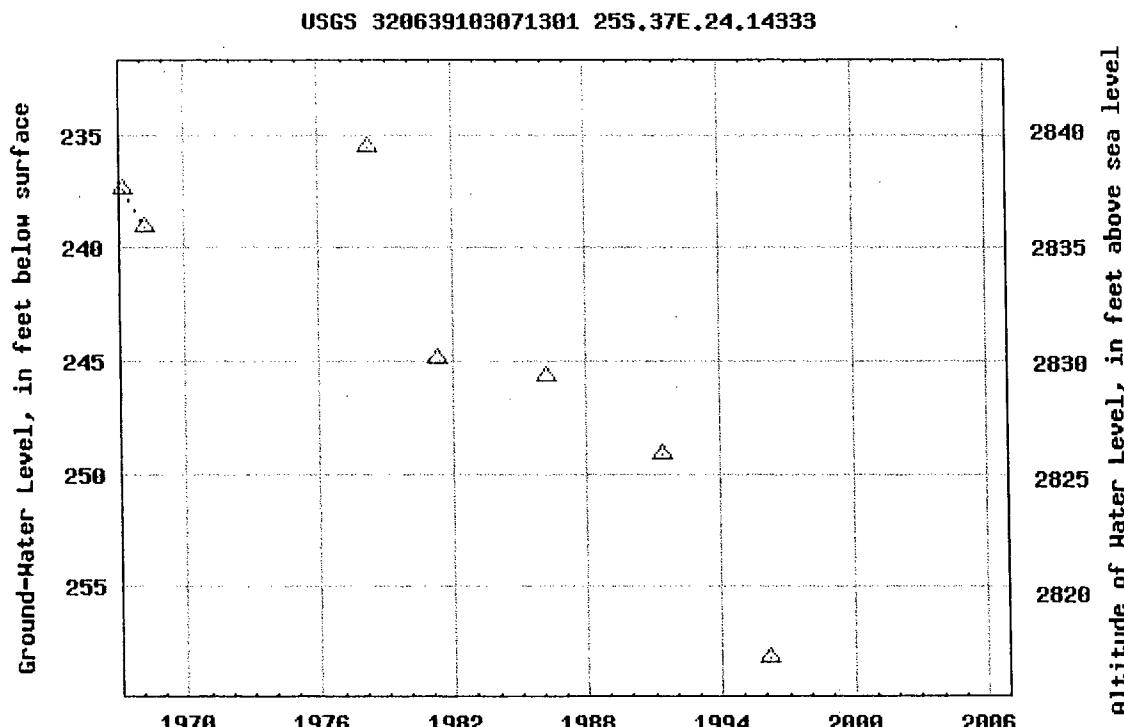
Lea County, New Mexico

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 WaterGeographic 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

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.

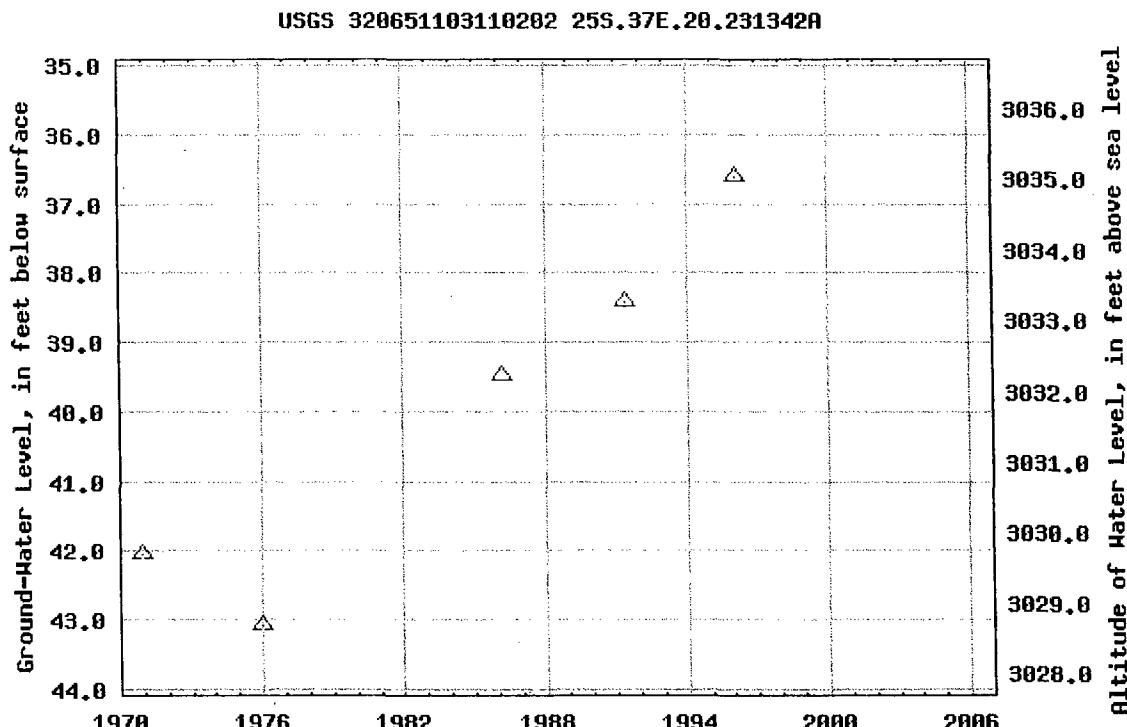
Output formats

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 WaterGeographic 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

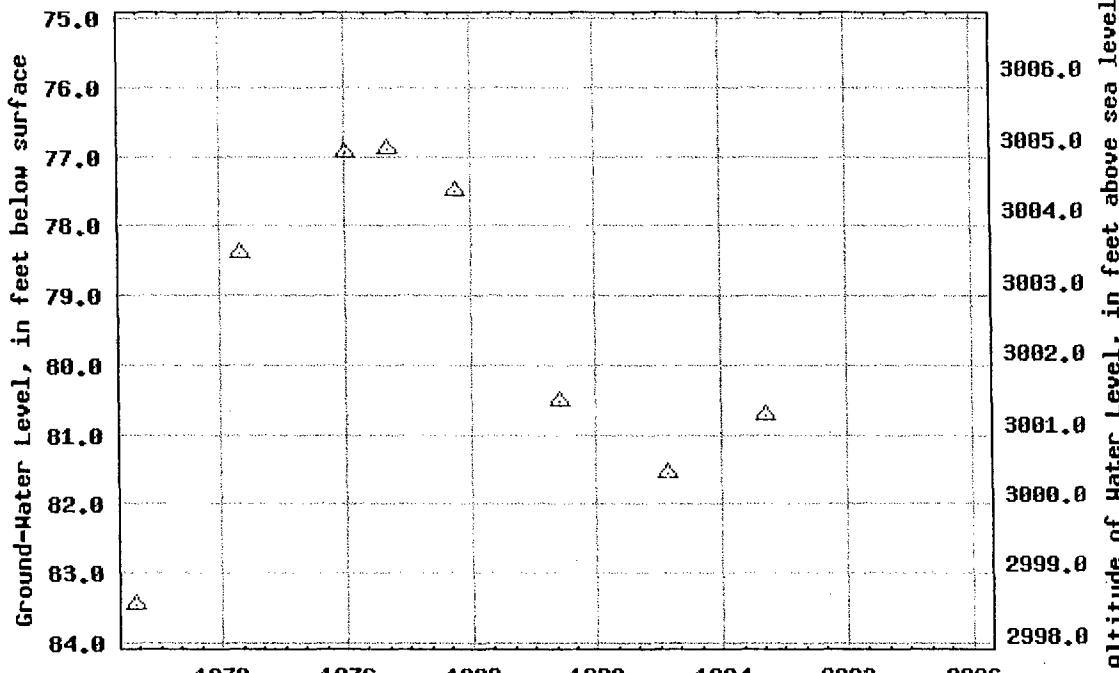
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 320724103071502 25S.37E.13.312434



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.

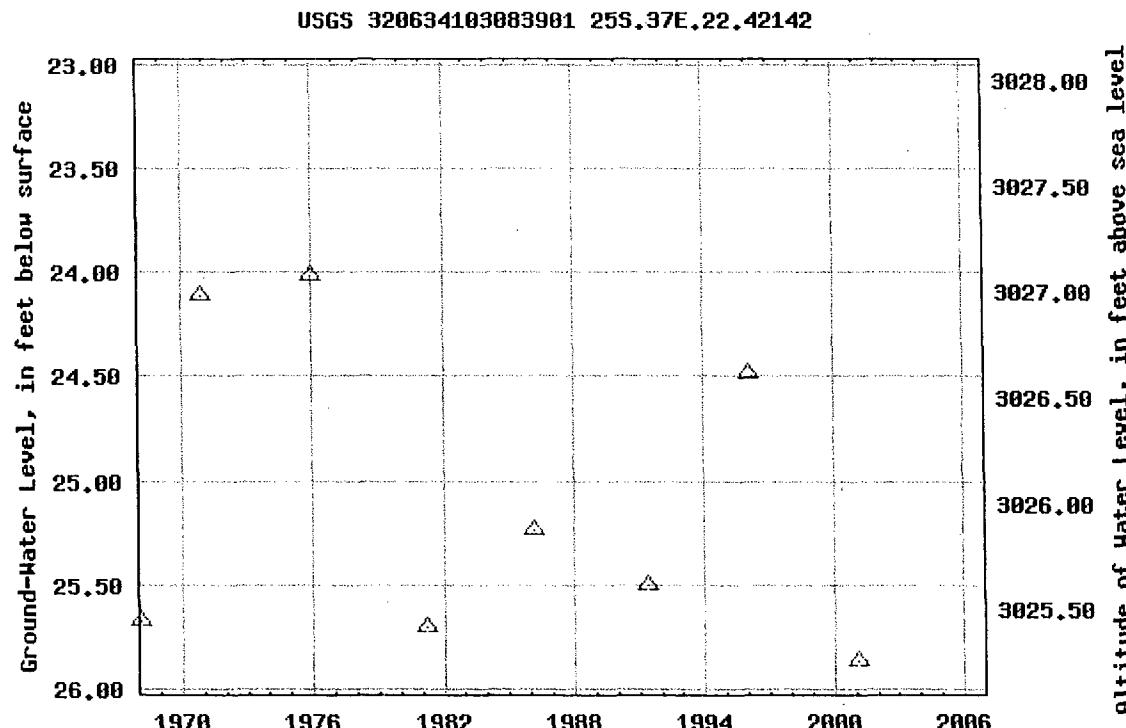
[Output formats](#)

[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

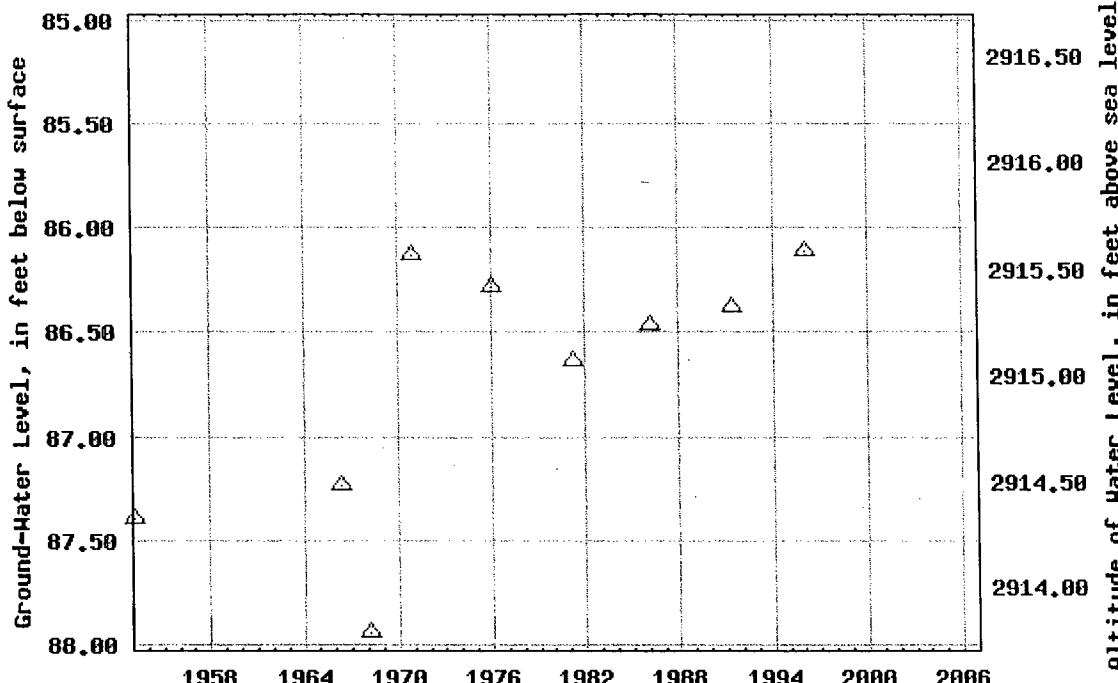
The depth of the well is 105 feet below land surface.

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](#)

USGS 320510103101301 25S.37E.33.11444



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

Water Resources

Data Category:
Ground WaterGeographic 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

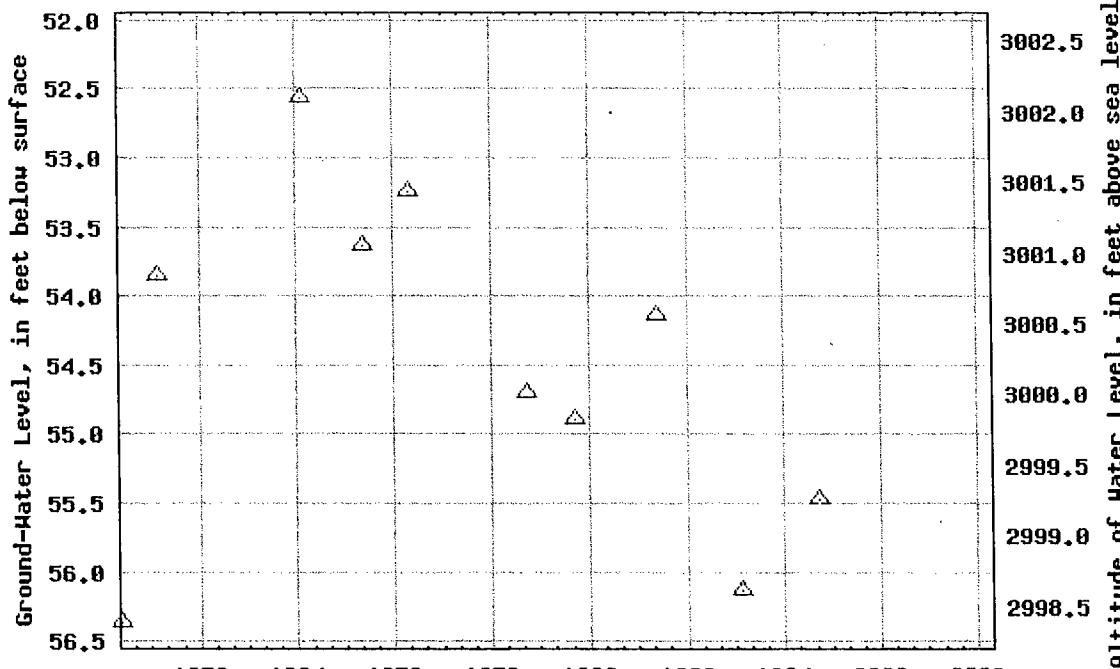
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 320547103065702 25S.37E.25.23332A



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

Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320550103081001

Save file of selected sites to local disk for future upload

USGS 320550103081001 25S.37E.26.143232

Available data for this site

Ground-water: Levels

GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°05'50", Longitude 103°08'10" NAD27

Land-surface elevation 3,027.60 feet above sea level NGVD29

The depth of the well is 106 feet below land surface.

This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND
OTHER SURFACE DEPOSITS (110AVMB) local aquifer.

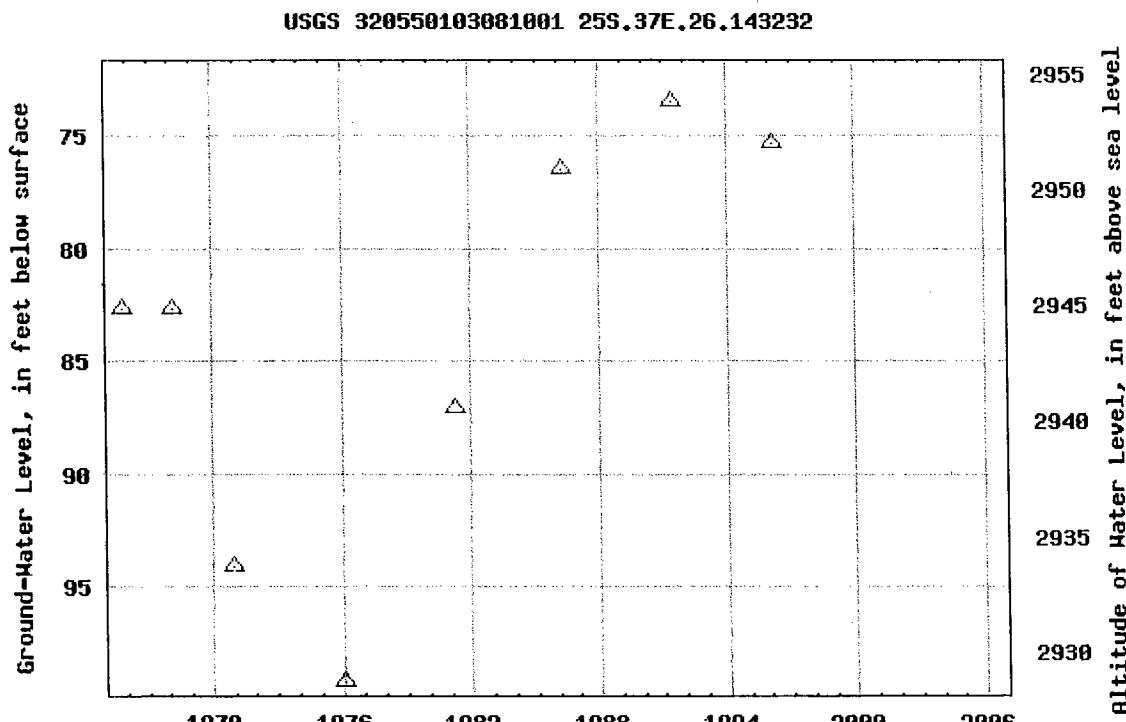
Output formats

Table of data

Tab-separated data

Graph of data

Reselect period



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



Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

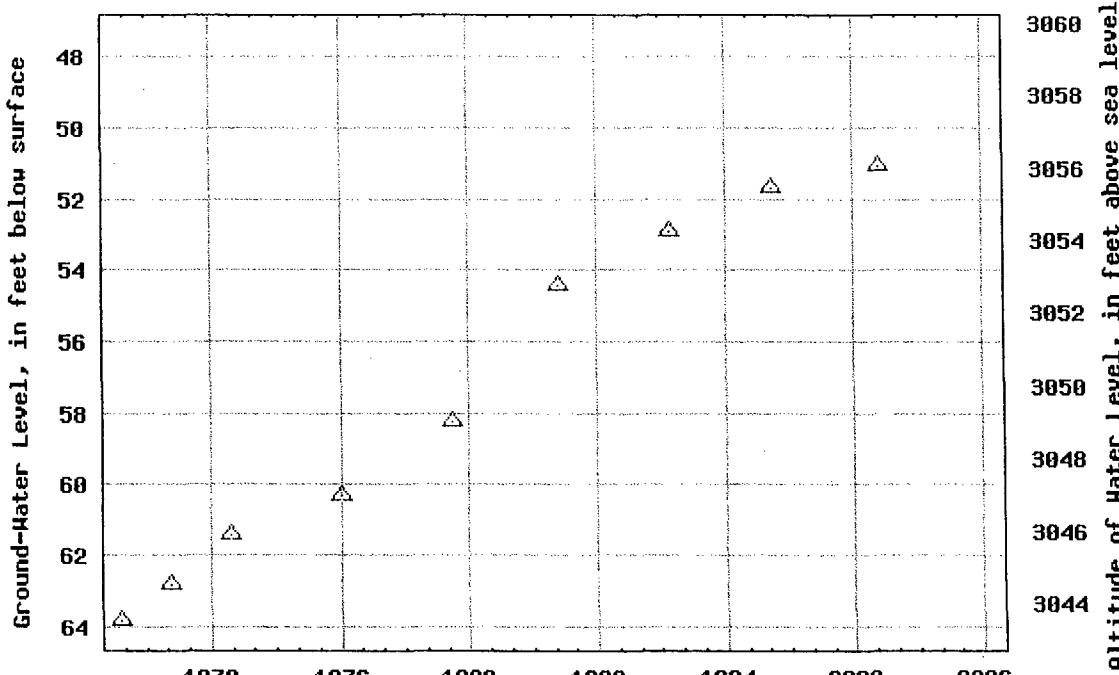
Ground-water: Levels

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

USGS 320730103114801 25S.37E.18.421110



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

Water Resources

Data Category:
Ground WaterGeographic 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

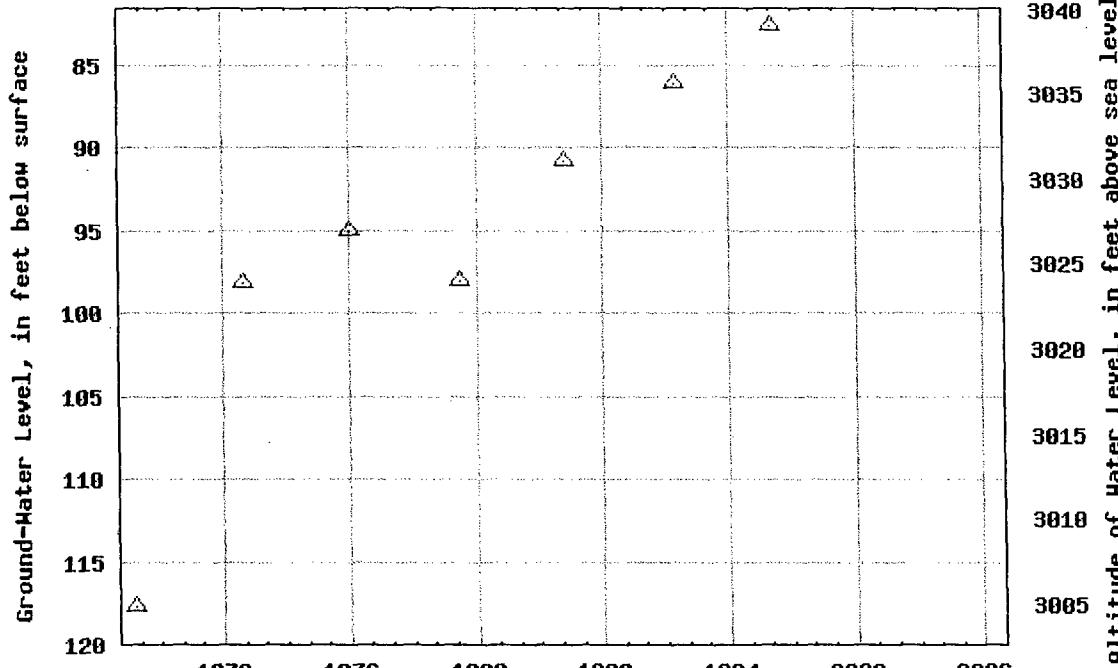
The depth of the well is 192 feet below land surface.

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

USGS 320823103082901 25S.37E.11.133343



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

Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico go

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site_no list = • 320850103080501

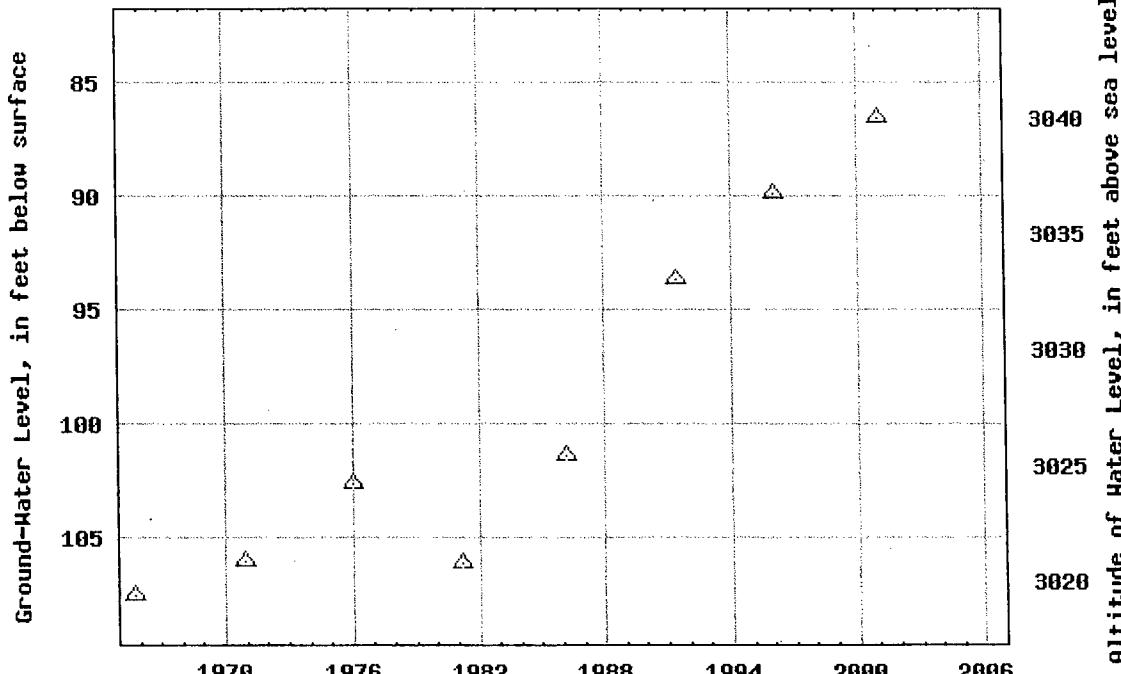
[Save file of selected sites to local disk for future upload](#)**USGS 320850103080501 25S.37E.02.344141****Available data for this site**

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

USGS 320850103080501 25S.37E.02.344141

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

Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

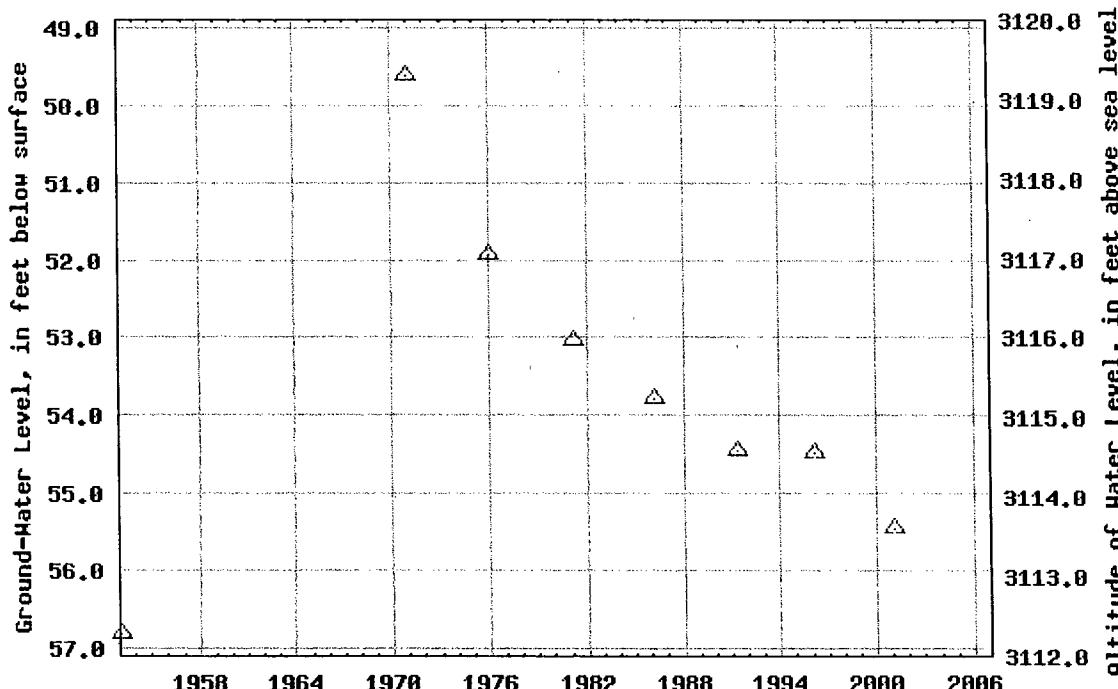
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 321003103085201 24S.37E.34.412331



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](#)

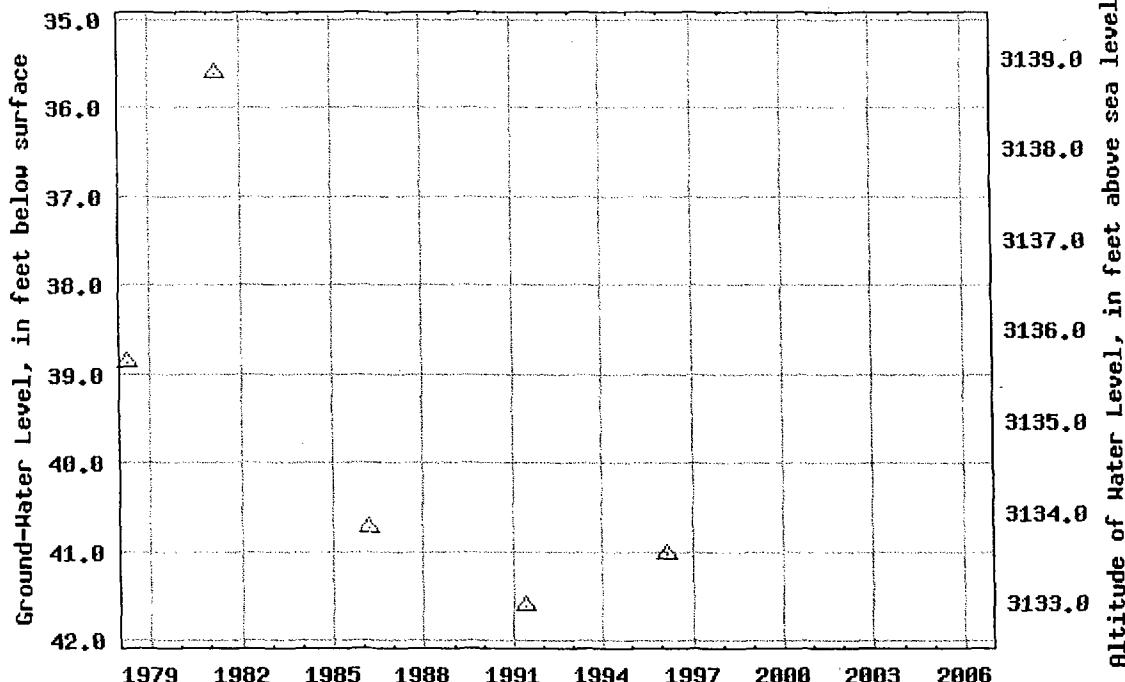
[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

USGS 321050103090301 24S.37E.27.344333



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



Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

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

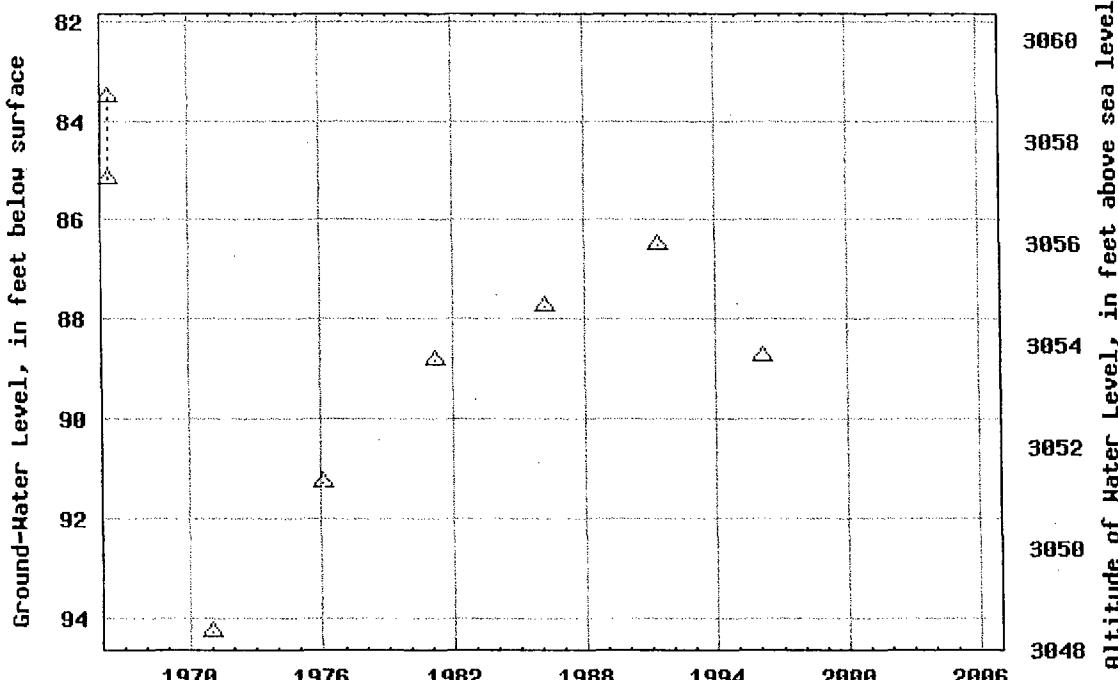
The depth of the well is 135 feet below land surface.

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](#)

USGS 321105103064901 24S.37E.25.234121



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

Water Resources

Data Category:
Ground WaterGeographic 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

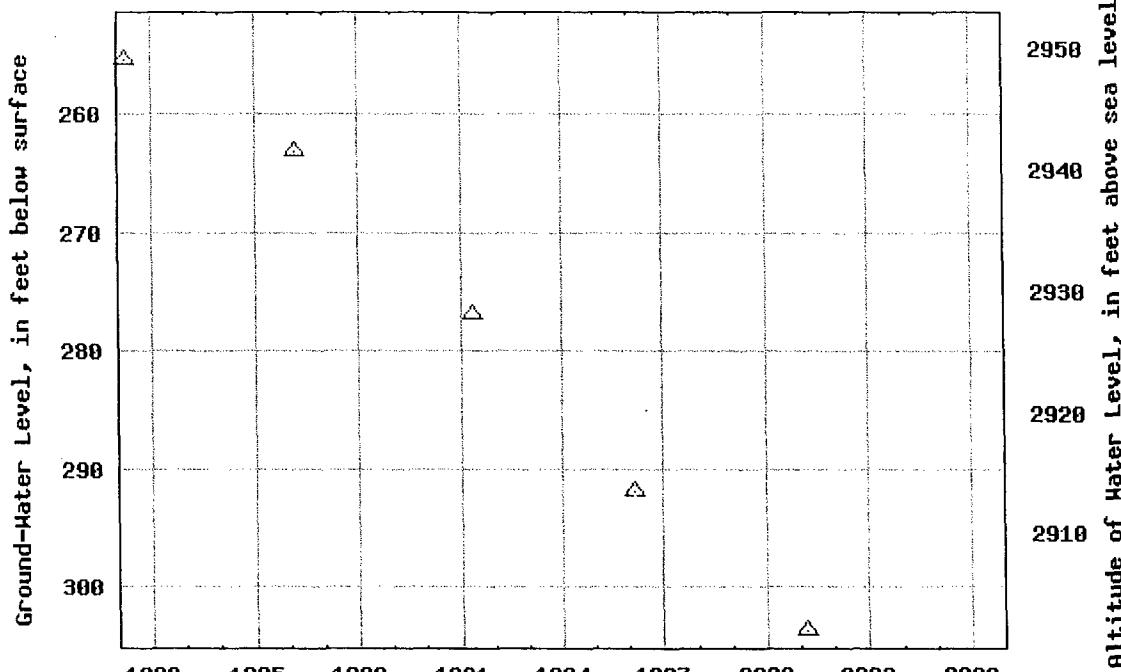
The depth of the well is 770 feet below land surface.

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

USGS 321125103093001 24S.37E.28.242233



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

Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

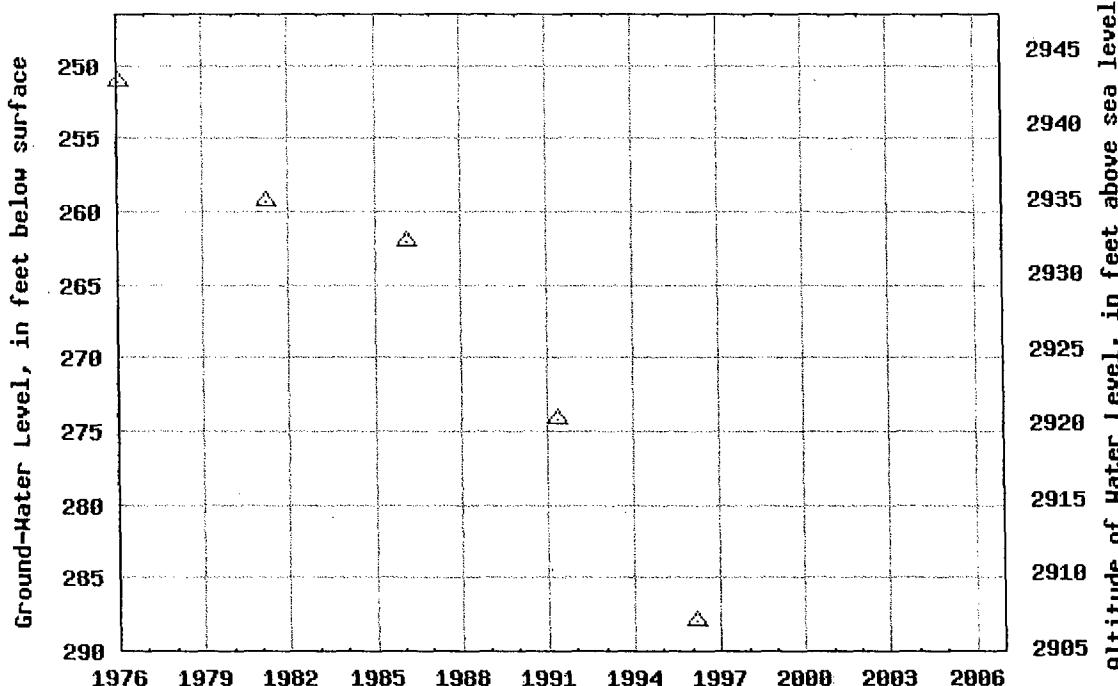
Table of data

Tab-separated data

Graph of data

Reselect period

USGS 321045103092301 24S.37E.27.332111



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



Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

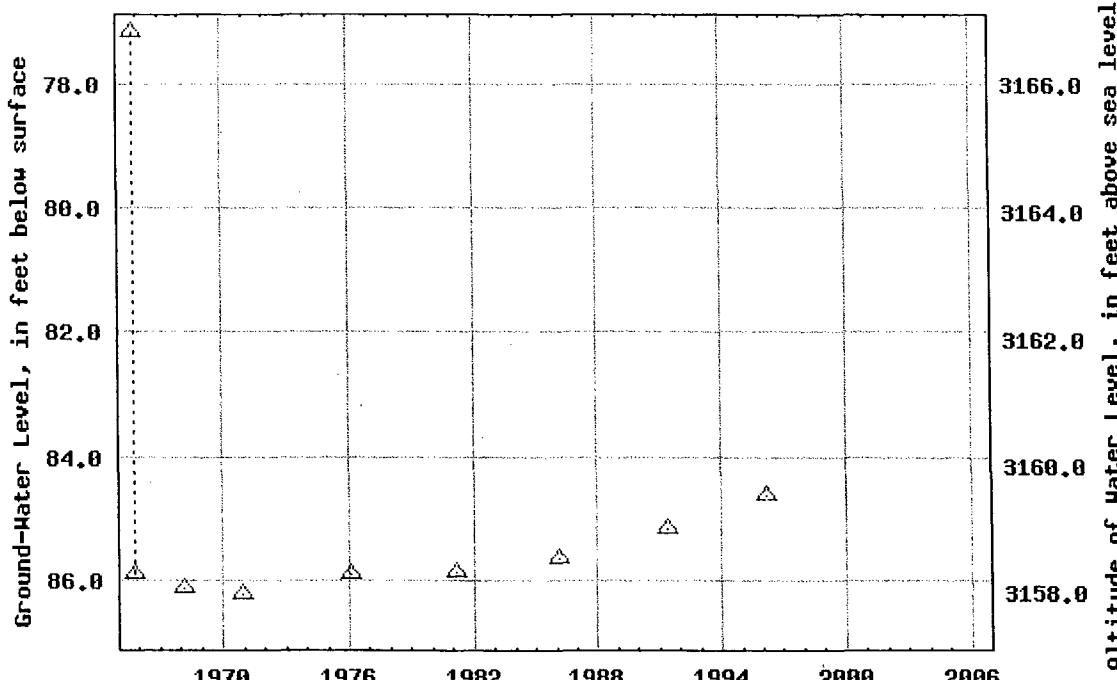
The depth of the well is 150 feet below land surface.

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](#)

USGS 321235103094701 24S.37E.16.42313



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

Water Resources

Data Category:
Ground WaterGeographic Area:
New Mexico

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

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°13'12", Longitude 103°08'06" NAD27

Land-surface elevation 3,203.80 feet above sea level NGVD29

The depth of the well is 80 feet below land surface.

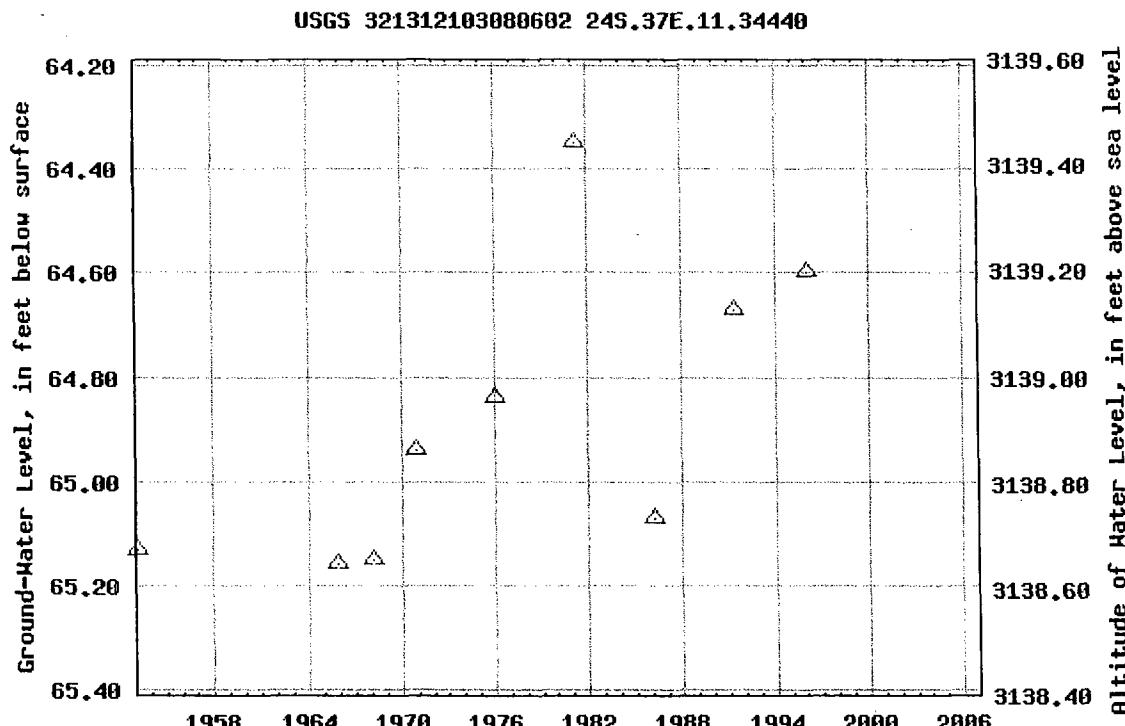
This well is completed in the ALLUVIUM,BOLSON DEPOSITS AND
OTHER SURFACE DEPOSITS (110AVMB) local aquifer.**Output formats**

Table of data

Tab-separated data

Graph of data

Reselect period



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

Water Resources

Data Category:
Ground WaterGeographic 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.

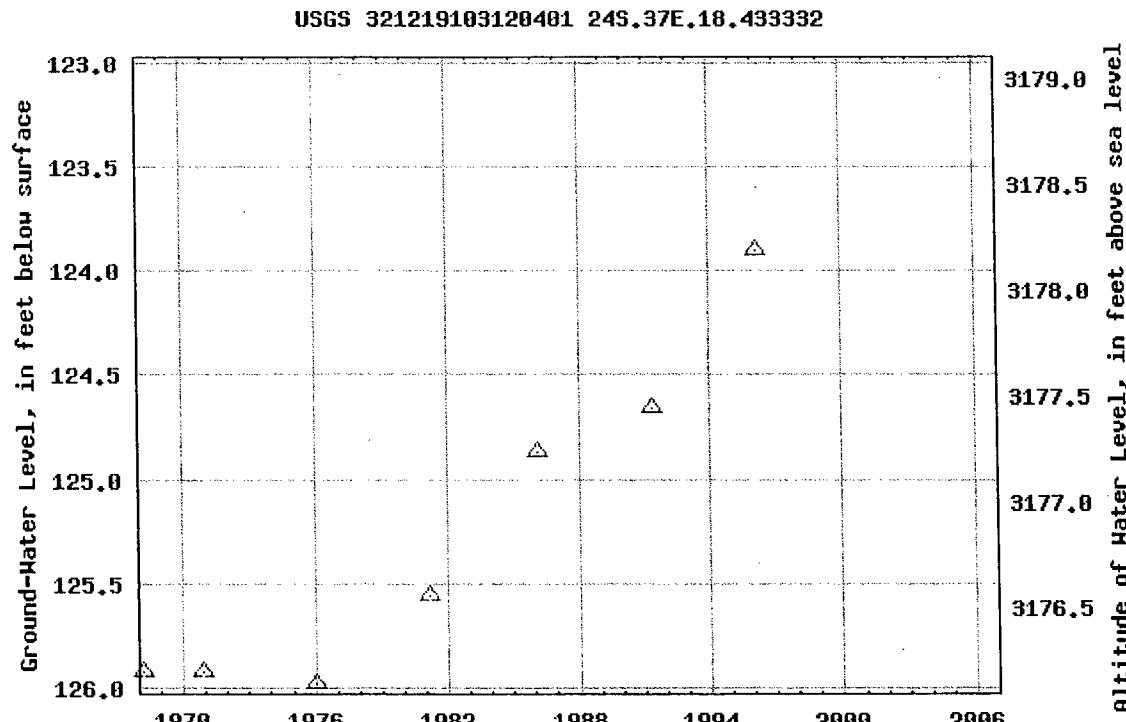
Output formats

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 WaterGeographic 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

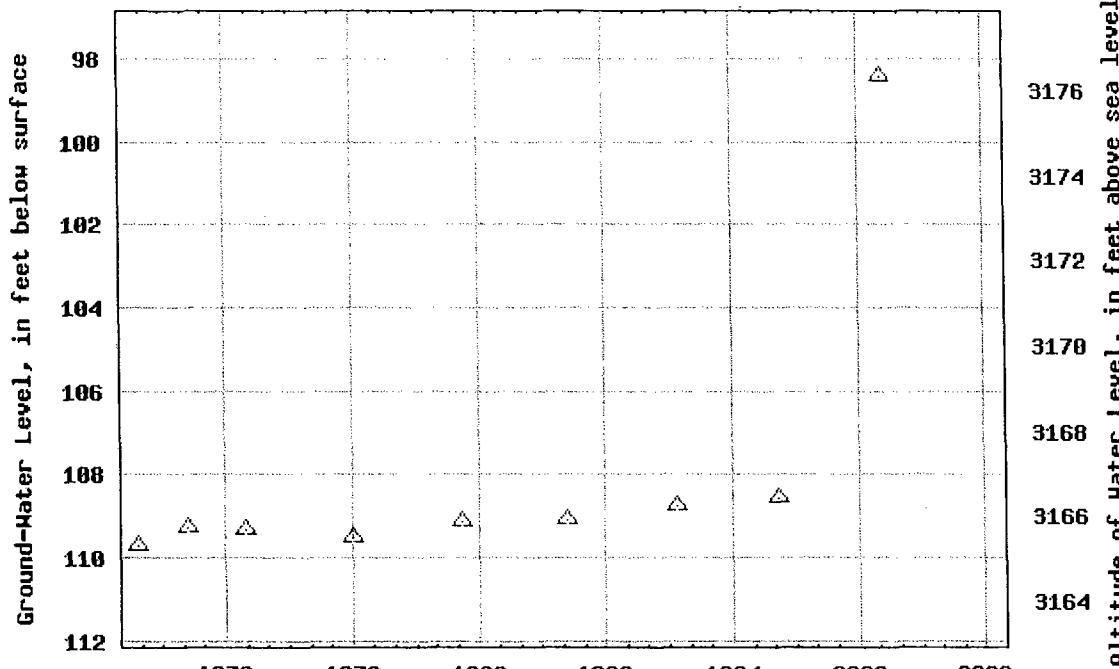
The depth of the well is 160 feet below land surface.

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

USGS 321316103094001 24S.37E.09.444111



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

NWIS

Water Resources

Data Category:
Ground WaterGeographic 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

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.

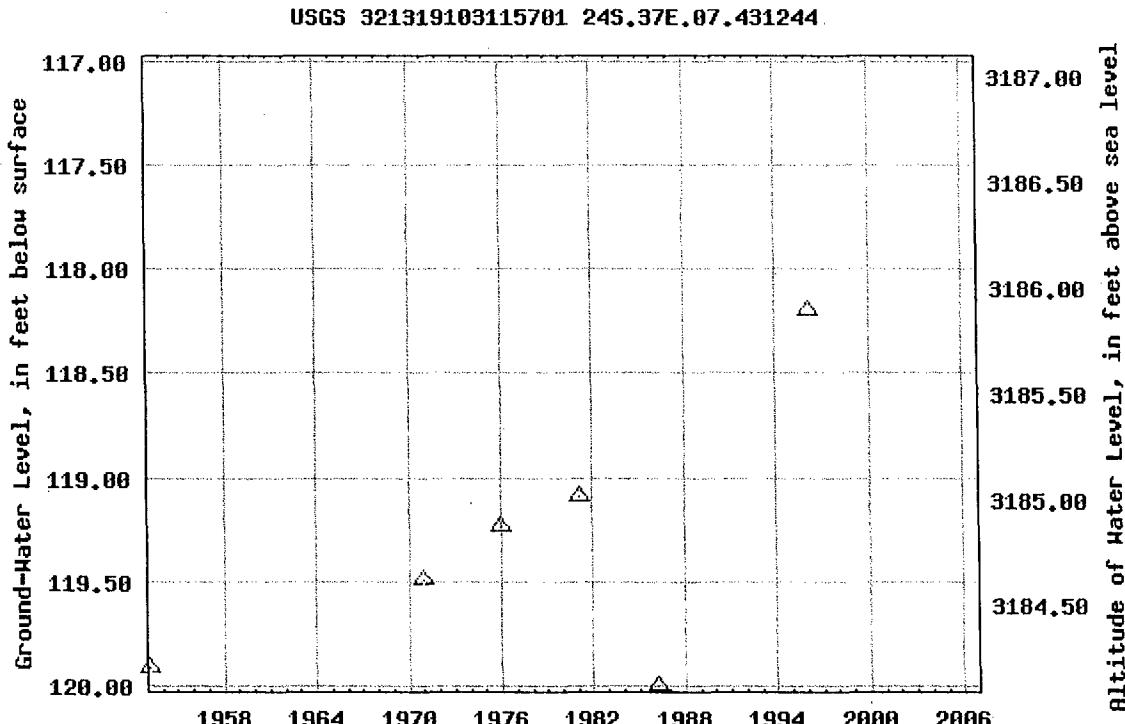
Output formats

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 WaterGeographic Area:
New Mexico

Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

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

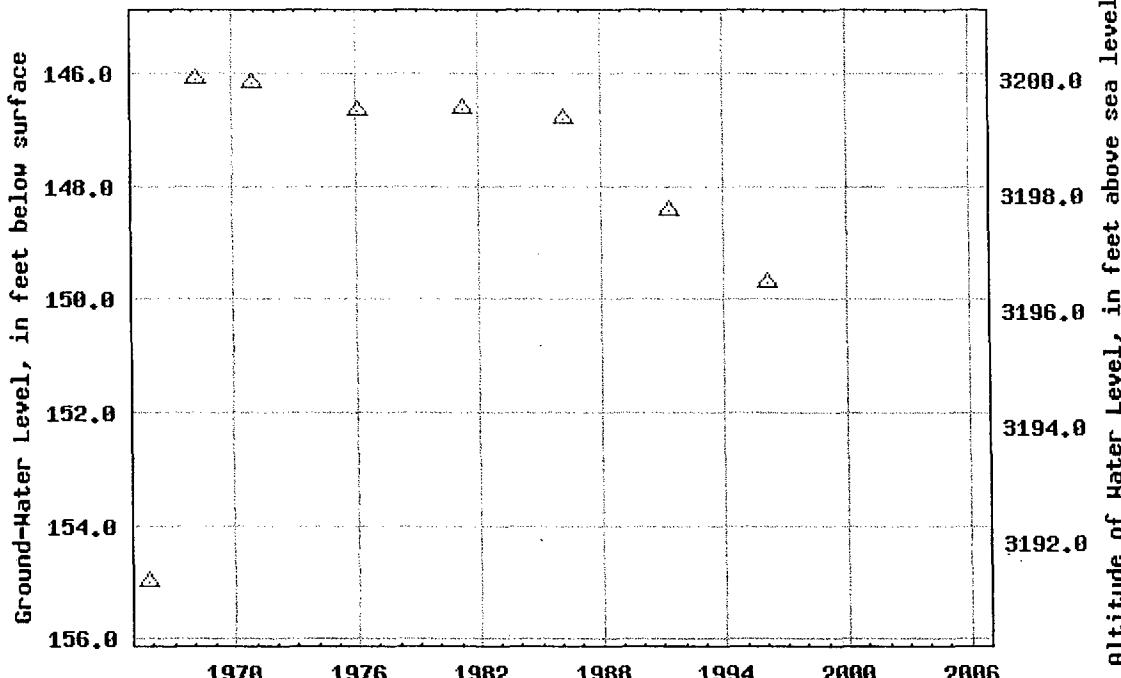
Lea County, New Mexico

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****USGS 321215103134302 24S.36E.23.222132**

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](#)

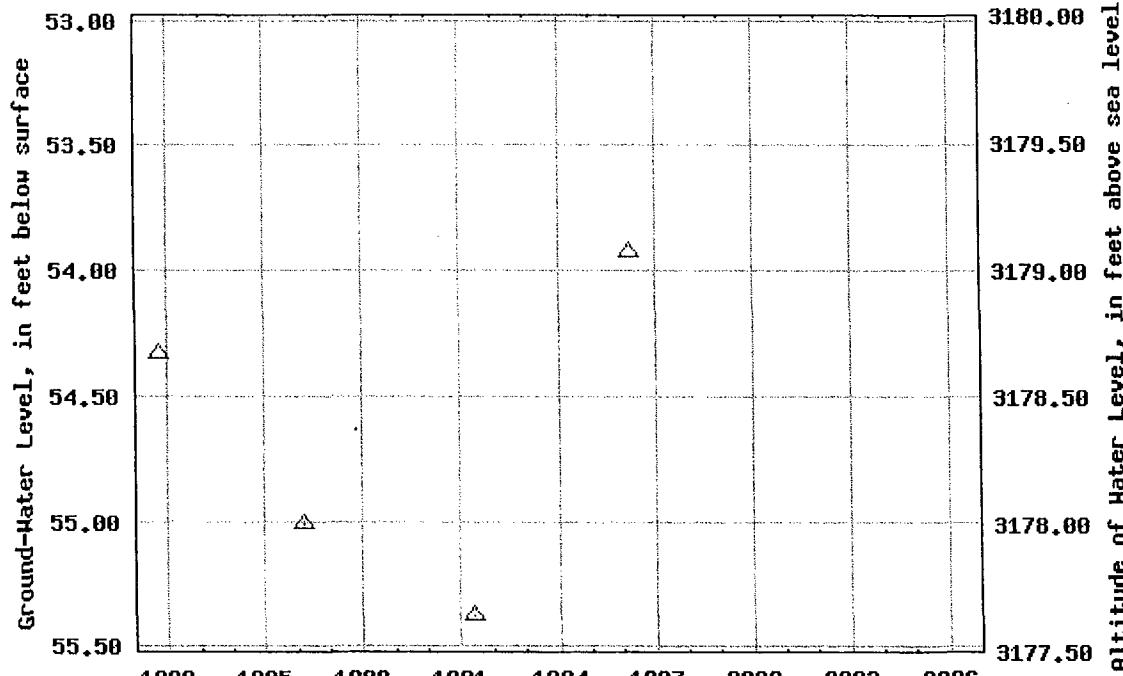
[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)

USGS 321024103162901 24S.36E.33.13343



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

Appendix B

SAMPLE LOG

Boring/Well: BH-1
Project Number: 2345
Client: COG
Site Location: Jalmat Well #31
Location: Lea County, New Mexico
Total Depth 50'
Date Installed: 5/16/2006

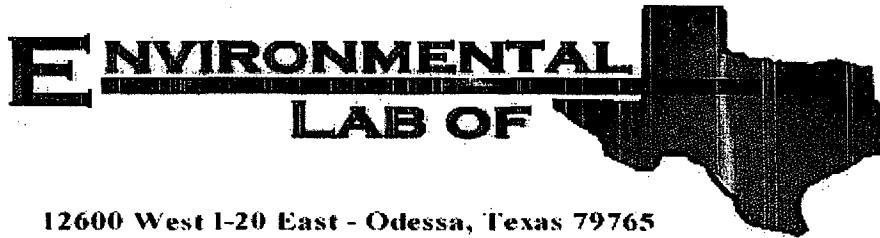
DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-3	-	Lt. brown, fine grain sand, some traces of caliche
3-5	-	White, caliche and tan, fine grain sand
5-6	8.0	Tan, fine grain sand and some white caliche, sandy with depth
10-11	5.9	Tan, fine grain sand and tan, gravel
15-16	5.6	Lt reddish, fine grain to silty sand, some gravel, streaks of compacted layers
20-21	6.8	Lt reddish, fine grain to silty sand, streaks of compacted layers
25-26	5.7	Lt. green and tan, silty sand, some clay matrix,
30-31	4.9	Red, clay, dense, dry
35-36	2.8	Red, clay, dense, dry, with alternating layers red and lt. green clays
40-41	6.3	Red, clay, dense, dry, alternating layers of red and lt. green clays
45-46	4.6	Red, clay, dense, dry, with alternating layers of red and lt. green clays
50-51	2.3	Lt. green, clay, dense, dry, alternating layers of red and green clays

SAMPLE LOG

Boring/Well: BH-2
Project Number: 2345
Client: COG
Site Location: Jalmat Well #31
Location: Lea County, New Mexico
Total Depth 50'
Date Installed: 5/16/2006

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-3	-	Lt. brown, fine grain sand, some traces of caliche
3-5	-	White, caliche and tan, fine grain sand
5-6	1.8	Tan, fine grain sand and some white caliche, sandy with depth
10-11	1.2	Tan, fine grain sand and tan, gravel
15-16	1.0	Lt reddish, fine grain to silty sand, some gravel, streaks of compacted layers
20-21	2.1	Lt reddish, fine grain to silty sand, streaks of compacted layers
25-26	1.8	Reddish -tan, silty sand and some traces of caliche and clay matrix,
30-31	1.3	Lt. green and tan, silty sand and clay matrix,
35-36	1.0	Lt. green, clay, dense, dry, alternating layers red and lt. red clays
40-41	2.0	Lt. green, clay, dense, dry, alternating layers red and lt. green clays
45-46	1.2	Red, clay, dense, dry, alternating layers red and lt. green clays
50-51'	0.8	Lt. green, clay, dense, dry, alternating layers red and lt. green clays

Appendix C



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 #31

Project Number: 2345

Location: Lea Co., NM

Lab Order Number: 6E18002

Report Date: 05/22/06

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH-1 (5-6)	6E18002-01	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (10-11)	6E18002-02	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (15-16)	6E18002-03	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (20-21)	6E18002-04	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (25-26)	6E18002-05	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (30-31)	6E18002-06	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (35-36)	6E18002-07	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (40-41)	6E18002-08	Soil	05/16/06 00:00	05/17/06 17:25
BH-1 (45-46)	6E18002-09	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (5-6)	6E18002-11	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (10-11)	6E18002-12	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (15-16)	6E18002-13	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (20-21)	6E18002-14	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (25-26)	6E18002-15	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (30-31)	6E18002-16	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (35-36)	6E18002-17	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (40-41)	6E18002-18	Soil	05/16/06 00:00	05/17/06 17:25
BH-2 (45-46)	6E18002-19	Soil	05/16/06 00:00	05/17/06 17:25

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (5-6) (6E18002-01) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE61802	05/18/06	05/18/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		106 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.0 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE61809	05/18/06	05/19/06	EPA 8015M	
Carbon Ranges C12-C28	27.2	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	27.2	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		97.2 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		101 %	70-130		"	"	"	"	
BH-1 (15-16) (6E18002-03) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE61802	05/18/06	05/18/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		106 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		81.5 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE61809	05/18/06	05/19/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		99.6 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		101 %	70-130		"	"	"	"	
BH-1 (25-26) (6E18002-05) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE61802	05/18/06	05/18/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		104 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		85.2 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE61809	05/18/06	05/19/06	EPA 8015M	

Environmental Lab of Texas

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 #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (25-26) (6E18002-05) Soil									
Carbon Ranges C12-C28	ND	10.0	mg/kg dry	1	EE61809	05/18/06	05/19/06	EPA 8015M	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	"
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	"
<i>Surrogate: 1-Chlorooctane</i>		98.0 %	70-130	"	"	"	"	"	"
<i>Surrogate: 1-Chlorooctadecane</i>		102 %	70-130	"	"	"	"	"	"
BH-2 (5-6) (6E18002-11) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE61802	05/18/06	05/18/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	"
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	"
Xylene (o)	ND	0.0250	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		108 %	80-120	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>		94.2 %	80-120	"	"	"	"	"	"
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE61809	05/18/06	05/19/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	"
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	"
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	"
<i>Surrogate: 1-Chlorooctane</i>		96.4 %	70-130	"	"	"	"	"	"
<i>Surrogate: 1-Chlorooctadecane</i>		97.6 %	70-130	"	"	"	"	"	"
BH-2 (15-16) (6E18002-13) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE61802	05/18/06	05/18/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	"
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	"
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	"
Xylene (o)	ND	0.0250	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		99.5 %	80-120	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>		80.8 %	80-120	"	"	"	"	"	"
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	1	EE61809	05/18/06	05/19/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	"
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	"
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	"
<i>Surrogate: 1-Chlorooctane</i>		94.6 %	70-130	"	"	"	"	"	"
<i>Surrogate: 1-Chlorooctadecane</i>		97.6 %	70-130	"	"	"	"	"	"

Environmental Lab of Texas

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 #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-2 (25-26) (6E18002-15) Soil									
Benzene	ND	0.0250	mg/kg dry	25	EE61802	05/18/06	05/18/06	EPA 8021B	
Toluene	ND	0.0250	"	"	"	"	"	"	
Ethylbenzene	ND	0.0250	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0250	"	"	"	"	"	"	
Xylene (o)	ND	0.0250	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		109 %	80-120		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		92.8 %	80-120		"	"	"	"	
Carbon Ranges C6-C12	ND	10.0	mg/kg dry	I	EE61809	05/18/06	05/19/06	EPA 8015M	
Carbon Ranges C12-C28	ND	10.0	"	"	"	"	"	"	
Carbon Ranges C28-C35	ND	10.0	"	"	"	"	"	"	
Total Hydrocarbon nC6-nC35	ND	10.0	"	"	"	"	"	"	
<i>Surrogate: 1-Chlorooctane</i>		102 %	70-130		"	"	"	"	
<i>Surrogate: 1-Chlorooctadecane</i>		104 %	70-130		"	"	"	"	

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-1 (5-6) (6E18002-01) Soil									
Chloride	2770	50.0	mg/kg	100	EE62001	05/19/06	05/19/06	EPA 300.0	
% Moisture	13.2	0.1	%	1	EE61910	05/18/06	05/19/06	% calculation	
BH-1 (10-11) (6E18002-02) Soil									
Chloride	1090	20.0	mg/kg	40	EE62001	05/19/06	05/19/06	EPA 300.0	
BH-1 (15-16) (6E18002-03) Soil									
Chloride	1460	25.0	mg/kg	50	EE62001	05/19/06	05/19/06	EPA 300.0	
% Moisture	6.2	0.1	%	1	EE61910	05/18/06	05/19/06	% calculation	
BH-1 (20-21) (6E18002-04) Soil									
Chloride	528	10.0	mg/kg	20	EE62001	05/19/06	05/19/06	EPA 300.0	
BH-1 (25-26) (6E18002-05) Soil									
Chloride	6910	100	mg/kg	200	EE62001	05/19/06	05/19/06	EPA 300.0	
% Moisture	10.7	0.1	%	1	EE61910	05/18/06	05/19/06	% calculation	
BH-1 (30-31) (6E18002-06) Soil									
Chloride	5220	100	mg/kg	200	EE62001	05/19/06	05/19/06	EPA 300.0	
BH-1 (35-36) (6E18002-07) Soil									
Chloride	550	10.0	mg/kg	20	EE62001	05/19/06	05/19/06	EPA 300.0	
BH-1 (40-41) (6E18002-08) Soil									
Chloride	863	10.0	mg/kg	20	EE62001	05/19/06	05/19/06	EPA 300.0	
BH-1 (45-46) (6E18002-09) Soil									
Chloride	33.4	10.0	mg/kg	20	EE62001	05/19/06	05/19/06	EPA 300.0	
BH-2 (5-6) (6E18002-11) Soil									
Chloride	2020	50.0	mg/kg	100	EE62001	05/19/06	05/19/06	EPA 300.0	
% Moisture	6.9	0.1	%	1	EE61910	05/18/06	05/19/06	% calculation	

Environmental Lab of Texas

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 #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
BH-2 (10-11) (6E18002-12) Soil									
Chloride	1210	20.0	mg/kg	40	EE62001	05/19/06	05/19/06	EPA 300.0	
BH-2 (15-16) (6E18002-13) Soil									
Chloride	70.9	5.00	mg/kg	10	EE62002	05/21/06	05/21/06	EPA 300.0	
% Moisture	2.4	0.1	%	1	EE61910	05/18/06	05/19/06	% calculation	
BH-2 (20-21) (6E18002-14) Soil									
Chloride	974	50.0	mg/kg	100	EE62002	05/21/06	05/21/06	EPA 300.0	
BH-2 (25-26) (6E18002-15) Soil									
Chloride	4830	100	mg/kg	200	EE62002	05/21/06	05/21/06	EPA 300.0	
% Moisture	10.6	0.1	%	1	EE61910	05/18/06	05/19/06	% calculation	
BH-2 (30-31) (6E18002-16) Soil									
Chloride	4430	50.0	mg/kg	100	EE62002	05/21/06	05/21/06	EPA 300.0	
BH-2 (35-36) (6E18002-17) Soil									
Chloride	2130	50.0	mg/kg	100	EE62002	05/21/06	05/21/06	EPA 300.0	
BH-2 (40-41) (6E18002-18) Soil									
Chloride	260	10.0	mg/kg	20	EE62002	05/21/06	05/21/06	EPA 300.0	
BH-2 (45-46) (6E18002-19) Soil									
Chloride	30.2	5.00	mg/kg	10	EE62002	05/21/06	05/21/06	EPA 300.0	

Environmental Lab of Texas

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.

Page 6 of 13

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
Batch EE61802 - EPA 5030C (GC)										
Blank (EE61802-BLK1) Prepared: 05/18/06 Analyzed: 05/19/06										
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: <i>a,a,a</i> -Trifluorotoluene	45.3		ug/kg	40.0		113	80-120			
Surrogate: <i>4</i> -Bromofluorobenzene	36.2		"	40.0		90.5	80-120			
LCS (EE61802-BS1) Prepared: 05/18/06 Analyzed: 05/19/06										
Benzene	1.06	0.0250	mg/kg wet	1.25		84.8	80-120			
Toluene	1.05	0.0250	"	1.25		84.0	80-120			
Ethylbenzene	1.15	0.0250	"	1.25		92.0	80-120			
Xylene (p/m)	2.54	0.0250	"	2.50		102	80-120			
Xylene (o)	1.23	0.0250	"	1.25		98.4	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	43.9		ug/kg	40.0		110	80-120			
Surrogate: <i>4</i> -Bromofluorobenzene	36.0		"	40.0		90.0	80-120			
Calibration Check (EE61802-CCV1) Prepared: 05/18/06 Analyzed: 05/19/06										
Benzene	42.2		ug/kg	50.0		84.4	80-120			
Toluene	41.7		"	50.0		83.4	80-120			
Ethylbenzene	51.3		"	50.0		103	80-120			
Xylene (p/m)	92.9		"	100		92.9	80-120			
Xylene (o)	47.0		"	50.0		94.0	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	43.0		"	40.0		108	80-120			
Surrogate: <i>4</i> -Bromofluorobenzene	42.0		"	40.0		105	80-120			
Matrix Spike (EE61802-MS1) Source: 6E17002-01 Prepared: 05/18/06 Analyzed: 05/19/06										
Benzene	1.09	0.0250	mg/kg dry	1.26	ND	86.5	80-120			
Toluene	1.08	0.0250	"	1.26	ND	85.7	80-120			
Ethylbenzene	1.19	0.0250	"	1.26	ND	94.4	80-120			
Xylene (p/m)	2.62	0.0250	"	2.52	ND	104	80-120			
Xylene (o)	1.26	0.0250	"	1.26	ND	100	80-120			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	44.7		ug/kg	40.0		112	80-120			
Surrogate: <i>4</i> -Bromofluorobenzene	38.2		"	40.0		95.5	80-120			

Environmental Lab of Texas

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.

Page 7 of 13

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

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 EE61802 - EPA 5030C (GC)									
Matrix Spike Dup (EE61802-MSD1)									
Source: 6E17002-01 Prepared: 05/18/06 Analyzed: 05/19/06									
Benzene	1.07	0.0250	mg/kg dry	1.26	ND	84.9	80-120	1.87	20
Toluene	1.08	0.0250	"	1.26	ND	85.7	80-120	0.00	20
Ethylbenzene	1.22	0.0250	"	1.26	ND	96.8	80-120	2.51	20
Xylene (p/m)	2.64	0.0250	"	2.52	ND	105	80-120	0.957	20
Xylene (o)	1.30	0.0250	"	1.26	ND	103	80-120	2.96	20
Surrogate: <i>a,a,a-Tri</i> fluorotoluene	43.2		ug/kg	40.0		108	80-120		
Surrogate: <i>4-Bromo</i> fluorobenzene	38.8		"	40.0		97.0	80-120		
Batch EE61809 - Solvent Extraction (GC)									
Blank (EE61809-BLK1)									
Prepared & Analyzed: 05/18/06									
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 Hydrocarbon nC6-nC35	ND	10.0	"						
Surrogate: <i>1-Chlorooctane</i>	62.6		mg/kg	50.0		125	70-130		
Surrogate: <i>1-Chlorooctadecane</i>	63.5		"	50.0		127	70-130		
LCS (EE61809-BS1)									
Prepared & Analyzed: 05/18/06									
Carbon Ranges C6-C12	566	10.0	mg/kg wet	500		113	75-125		
Carbon Ranges C12-C28	573	10.0	"	500		115	75-125		
Total Hydrocarbon nC6-nC35	1140	10.0	"	1000		114	75-125		
Surrogate: <i>1-Chlorooctane</i>	63.2		mg/kg	50.0		126	70-130		
Surrogate: <i>1-Chlorooctadecane</i>	57.1		"	50.0		114	70-130		
Calibration Check (EE61809-CCV1)									
Prepared: 05/18/06 Analyzed: 05/19/06									
Carbon Ranges C6-C12	256		mg/kg	250		102	80-120		
Carbon Ranges C12-C28	285		"	250		114	80-120		
Total Hydrocarbon nC6-nC35	541		"	500		108	80-120		
Surrogate: <i>1-Chlorooctane</i>	46.8		"	50.0		93.6	70-130		
Surrogate: <i>1-Chlorooctadecane</i>	46.9		"	50.0		93.8	70-130		

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

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 EE61809 - Solvent Extraction (GC)

Matrix Spike (EE61809-MS1)	Source: 6E18011-02		Prepared & Analyzed: 05/18/06						
Carbon Ranges C6-C12	590	10.0	mg/kg dry	535	ND	110	75-125		
Carbon Ranges C12-C28	613	10.0	"	535	ND	115	75-125		
Total Hydrocarbon nC6-nC35	1200	10.0	"	1070	ND	112	75-125		
Surrogate: 1-Chlorooctane	56.9		mg/kg	50.0		114	70-130		
Surrogate: 1-Chlorooctadecane	49.9		"	50.0		99.8	70-130		
Matrix Spike Dup (EE61809-MSD1)	Source: 6E18011-02		Prepared & Analyzed: 05/18/06						
Carbon Ranges C6-C12	599	10.0	mg/kg dry	535	ND	112	75-125	1.51	20
Carbon Ranges C12-C28	625	10.0	"	535	ND	117	75-125	1.94	20
Total Hydrocarbon nC6-nC35	1220	10.0	"	1070	ND	114	75-125	1.65	20
Surrogate: 1-Chlorooctane	57.7		mg/kg	50.0		115	70-130		
Surrogate: 1-Chlorooctadecane	51.5		"	50.0		103	70-130		

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

**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	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	---------	-----------	-------

Batch EE61910 - General Preparation (Prep)

Blank (EE61910-BLK1)					Prepared: 05/18/06 Analyzed: 05/19/06					
% Solids	100		%							
Duplicate (EE61910-DUP1)		Source: 6E12001-21			Prepared: 05/18/06 Analyzed: 05/19/06					
% Solids	92.1		%		92.0			0.109	20	
Duplicate (EE61910-DUP2)		Source: 6E18006-02			Prepared: 05/18/06 Analyzed: 05/19/06					
% Solids	90.0		%		90.3			0.333	20	
Duplicate (EE61910-DUP4)		Source: 6E18008-29			Prepared: 05/18/06 Analyzed: 05/19/06					
% Solids	95.5		%		95.2			0.315	20	
Duplicate (EE61910-DUP5)		Source: 6E18009-14			Prepared: 05/18/06 Analyzed: 05/19/06					
% Solids	89.7		%		89.9			0.223	20	
Duplicate (EE61910-DUP6)		Source: 6E18010-11			Prepared: 05/18/06 Analyzed: 05/19/06					
% Solids	93.8		%		93.8			0.00	20	

Batch EE62001 - Water Extraction

Blank (EE62001-BLK1)					Prepared & Analyzed: 05/19/06					
Chloride	ND	0.500	mg/kg							
LCS (EE62001-BS1)					Prepared & Analyzed: 05/19/06					
Chloride	10.0	0.500	mg/kg	10.0		100	80-120			
Calibration Check (EE62001-CCV1)					Prepared & Analyzed: 05/19/06					
Chloride	10.7		mg/kg	10.0		107	80-120			

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

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 EE62001 - Water Extraction										
Duplicate (EE62001-DUP1)										
Chloride	931	20.0	mg/kg		912			2.06	20	
Duplicate (EE62001-DUP2)										
Chloride	1440	25.0	mg/kg		1460			1.38	20	
Matrix Spike (EE62001-MS1)										
Chloride	1430	20.0	mg/kg	400	912	130	80-120			S-07
Matrix Spike (EE62001-MS2)										
Chloride	2080	25.0	mg/kg	500	1460	124	80-120			S-07
Batch EE62002 - Water Extraction										
Blank (EE62002-BLK1)										
Chloride	ND	0.500	mg/kg							
LCS (EE62002-BS1)										
Chloride	10.3	0.500	mg/kg	10.0		103	80-120			
Calibration Check (EE62002-CCV1)										
Chloride	10.5		mg/L	10.0		105	80-120			
Duplicate (EE62002-DUP1)										
Chloride	4890	100	mg/kg		4830			1.23	20	
Duplicate (EE62002-DUP2)										
Chloride	374	10.0	mg/kg		373			0.268	20	

Environmental Lab of Texas

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.

Page 11 of 13

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

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 EE62002 - Water Extraction

Matrix Spike (EE62002-MS1)	Source: 6E18002-15	Prepared & Analyzed: 05/21/06					
Chloride	7160	100	mg/kg	2000	4830	116	80-120

Matrix Spike (EE62002-MS2)	Source: 6E18005-01	Prepared & Analyzed: 05/21/06					
Chloride	601	10.0	mg/kg	200	373	114	80-120

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

Project: COG/ Jalmat #31
Project Number: 2345
Project Manager: Ike Tavarez

Fax: (432) 682-3946
Reported:
05/22/06 15:05

Notes and Definitions

S-07	Recovery outside Laboratory historical or method prescribed limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By:

Date: 5/22/2006

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murray, 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.

Environmental Lab of Texas

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.

Page 13 of 13

Analysis Request and Chain of Custody Record

HIGHWAY & WATER ENVIRONMENTAL CORP.

1910 N. Big Spring St.
Midland, Texas 79705

Fax (432) 682-3946

14371-687-4559

CLIENT NAME: CC	SITE MANAGER: HC Morris			
PROJECT NO.: 2345	PROJECT NAME: OC/Talmant #31, loc w.			
LAB I.D. NUMBER: LOC 18002	DATE: 10/05/01	TIME: 10:00 AM	MATRIX: GRAB	SAMPLE IDENTIFICATION
-01	5-16-06	5	BH-1	(5-6)
-02		5	BH-1	(10-11)
-03		5	BH-1	(15-16)
-04		5	BH-1	(20-21)
-05		5	BH-1	(25-26)
-06		5	BH-1	(30-31)
-07		5	BH-1	(35-36)
-08		5	BH-1	(40-41)
-09		5	BH-1	(45-46)
-10		5	BH-1	(50-51)
RElinquished by: (Signature) <i>E.C.</i>		Date: 5-11-02	RECEIVED BY: (Signature) <i>HC</i>	
		Time: 5:25		
RElinquished by: (Signature) <i>E.C.</i>		Date: 5-11-02	RECEIVED BY: (Signature) <i>HC</i>	
		Time: 5:25		
RElinquished by: (Signature) <i>E.C.</i>		Date: 5-11-02	RECEIVED BY: (Signature) <i>HC</i>	
		Time: 5:25		
RECEIVING LABORATORY: OC	STATE: FL	ZIP: 33455	DATE: 5/11/02	
ADDRESS: 1000 N.W. 10th Street	PHONE: (305) 236-1000			
CONTACT: John				
SAMPLE CONDITION WHEN RECEIVED:		MATRIX: H-Factor	A-Air: SD-Solid	
		S-Sed	SL-Shudge	
		O-Other		

Please ENVI and all owners - Johnson retains title to copy - Return original copy to Flecklander Environmental Corp.

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Highlander Environmental

Date/Time: 05-17-06 @ 1725

Order #: 6E18002

Initials: JMM

Sample Receipt Checklist

	(Yes)	No	HS	C
Temperature of container/cooler?	(Yes)	No		
Shipping container/cooler in good condition?	(Yes)	No		
Custody Seals intact on shipping container/cooler?	Yes	No	Not present	
Custody Seals intact on sample bottles?	Yes	No	Not present	
Chain of custody present?	(Yes)	No		
Sample Instructions complete on Chain of Custody?	(Yes)	No		
Chain of Custody signed when relinquished and received?	(Yes)	No		
Chain of custody agrees with sample label(s)?	(Yes)	No		
Container labels legible and intact?	(Yes)	No		
Sample Matrix and properties same as on chain of custody?	(Yes)	No		
Samples in proper container/bottle?	(Yes)	No		
Samples properly preserved?	(Yes)	No		
Sample bottles intact?	(Yes)	No		
Reservations documented on Chain of Custody?	(Yes)	No		
Containers documented on Chain of Custody?	(Yes)	No		
Sufficient sample amount for indicated test?	(Yes)	No		
All samples received within sufficient hold time?	(Yes)	No		
OC samples have zero headspace?	(Yes)	No	Nct Applicable	

Other observations:

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____
regarding: _____

Corrective Action Taken: