

***WATER-LEVEL DATA FROM WELLS IN THE
VICINITY OF THE WASTE ISOLATION PILOT PLANT,
SOUTHEASTERN NEW MEXICO***

By Steven F. Richey

U.S. GEOLOGICAL SURVEY
Open-File Report 87-120

Prepared in cooperation with the

U.S. DEPARTMENT OF ENERGY



Albuquerque, New Mexico

1987

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CONTENTS

	Page
Abstract	1
Introduction	1
Well-numbering system	3
Measurement methods	5
Air line	5
Lynes Pressure Sentry System	5
M-scope	5
Steel tape	6
Winch	6

FIGURES

Figure 1. Map showing general location of the Waste Isolation Pilot Plant (WIPP) and wells in which water levels were measured	2
2. Diagram showing the system of numbering wells in this report	4

TABLES

Tables 1-8. Water-level records for:

1. Well AEC-8, lower Delaware sand (economic usage) of the Bell Canyon Formation	7
2. Well AEC-8, upper Delaware sand (economic usage) of the Bell Canyon Formation	9
3. Well H-1, Magenta Dolomite Member of the Rustler Formation	11
4. Well H-1, Culebra Dolomite Member of the Rustler Formation	15
5. Well H-1, Magenta Dolomite and Culebra Dolomite Members of the Rustler Formation	19
6. Well H-2A, Magenta Dolomite Member of the Rustler Formation	20
7. Well H-2B, Magenta Dolomite Member of the Rustler Formation	24
8. Well H-2B, Culebra Dolomite Member of the Rustler Formation	26

TABLES - Continued

Page

Tables 9-29. Water-level records for:

9.	Well H-2B, Magenta Dolomite and Culebra Dolomite Members of the Rustler Formation	27
10.	Well H-2C, Culebra Dolomite Member of the Rustler Formation	30
11.	Well H-2C, Rustler Formation-Salado Formation contact zone	34
12.	Well H-3, Magenta Dolomite Member of the Rustler Formation	36
13.	Well H-3, Culebra Dolomite Member of the Rustler Formation	40
14.	Well H-3, Magenta Dolomite and Culebra Dolomite Members of the Rustler Formation	44
15.	Well H-4A, Magenta Dolomite Member of the Rustler Formation	45
16.	Well H-4B, Culebra Dolomite Member of the Rustler Formation	47
17.	Well H-4C, Rustler Formation-Salado Formation contact zone	49
18.	Well H-5A, Magenta Dolomite Member of the Rustler Formation	50
19.	Well H-5B, Culebra Dolomite Member of the Rustler Formation	51
20.	Well H-5C, Rustler Formation-Salado Formation contact zone	53
21.	Well H-6A, Magenta Dolomite Member of the Rustler Formation	54
22.	Well H-6B, Culebra Dolomite Member of the Rustler Formation	55
23.	Well H-6C, Rustler Formation-Salado Formation contact zone	57
24.	Well H-7A, Magenta Dolomite Member of the Rustler Formation	58
25.	Well H-7B, Culebra Dolomite Member of the Rustler Formation	59
26.	Well H-7C, Rustler Formation-Salado Formation contact zone	61
27.	Well H-8A, Magenta Dolomite Member of the Rustler Formation	62
28.	Well H-8B, Culebra Dolomite Member of the Rustler Formation	63
29.	Well H-8C, Rustler Formation-Salado Formation contact zone	65

TABLES - Continued

	Page
Tables 30-51. Water-level records for:	
30. Well H-9A, Magenta Dolomite Member of the Rustler Formation	66
31. Well H-9B, Culebra Dolomite Member of the Rustler Formation	68
32. Well H-9C, Rustler Formation-Salado Formation contact zone	70
33. Well H-10A, Magenta Dolomite Member of the Rustler Formation	71
34. Well H-10B, Culebra Dolomite Member of the Rustler Formation	73
35. Well H-10C, Rustler Formation-Salado Formation contact zone	75
36. Well P-14, Culebra Dolomite Member of the Rustler Formation	76
37. Well P-14, Rustler Formation-Salado Formation contact zone	78
38. Well P-15, Culebra Dolomite Member of the Rustler Formation	80
39. Well P-15, Rustler Formation-Salado Formation contact zone	82
40. Well P-17, Culebra Dolomite Member of the Rustler Formation	84
41. Well P-17, Rustler Formation-Salado Formation contact zone	85
42. Well P-18, Culebra Dolomite Member of the Rustler Formation	86
43. Well P-18, Rustler Formation-Salado Formation contact zone	88
44. Well WIPP-16, breccia	90
45. Well WIPP-25, Magenta Dolomite Member of the Rustler Formation	91
46. Well WIPP-25, Culebra Dolomite Member of the Rustler Formation	92
47. Well WIPP-25, Rustler Formation-Salado Formation contact zone	93
48. Well WIPP-26, Magenta Dolomite Member of the Rustler Formation	94
49. Well WIPP-26, Culebra Dolomite Member of the Rustler Formation	95
50. Well WIPP-26, Rustler Formation-Salado Formation contact zone	96
51. Well WIPP-27, Magenta Dolomite Member of the Rustler Formation	97

TABLES - Concluded

	Page
Tables 52-61. Water-level records for:	
52. Well WIPP-27, Culebra Dolomite Member of the Rustler Formation	98
53. Well WIPP-27, Rustler Formation-Salado Formation contact zone	99
54. Well WIPP-28, Magenta Dolomite Member of the Rustler Formation	100
55. Well WIPP-28, Culebra Dolomite Member of the Rustler Formation	101
56. Well WIPP-28, Rustler Formation-Salado Formation contact zone	102
57. Well WIPP-29, Culebra Dolomite Member of the Rustler Formation	103
58. Well WIPP-29, Rustler Formation-Salado Formation contact zone	104
59. Well WIPP-30, Magenta Dolomite Member of the Rustler Formation	105
60. Well WIPP-30, Culebra Dolomite Member of the Rustler Formation	106
61. Well WIPP-30, Rustler Formation-Salado Formation contact zone	107

CONVERSION FACTORS

In this report, figures for measurements are given in inch-pound units only. The following table contains factors for converting to metric units.

<u>Multiply inch-pound units</u>	<u>By</u>	<u>To obtain metric units</u>
inch	25.40	millimeter
foot	0.3048	meter
gallon	3.785	liter

The use of brand names in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

Sea level: In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)-- a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Mean Sea Level of 1929."

WATER-LEVEL DATA FROM WELLS IN THE VICINITY OF
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ABSTRACT

The U.S. Geological Survey monitored water levels in wells in the vicinity of the Waste Isolation Pilot Plant in southeastern New Mexico during 1977 to 1985. Water-level data are presented, as are brief descriptions of measurement methods used.

INTRODUCTION

The U.S. Geological Survey, at the request of the U.S. Department of Energy, is investigating the geohydrology of the area in the vicinity of the Waste Isolation Pilot Plant (WIPP) in southeastern New Mexico (fig. 1). The WIPP is a storage facility constructed in bedded salts of the Permian Salado Formation in which defense-associated transuranic wastes will be deposited. Water levels in three primary water-bearing zones were monitored: the Magenta Dolomite Member of the Rustler Formation, the Culebra Dolomite Member of the Rustler Formation, and the Rustler Formation-Salado Formation contact zone. In addition, water levels in the upper and lower Delaware sands (economic usage) were monitored in one well. Water-level measurements in this report do not necessarily reflect static conditions because perturbations to the water-bearing zones caused by well completion and testing, particularly in the Rustler-Salado contact zone, may take months or years to return to normal. This report presents water-level data collected during monitoring conducted from 1977 to 1985 (tables 1 through 61).

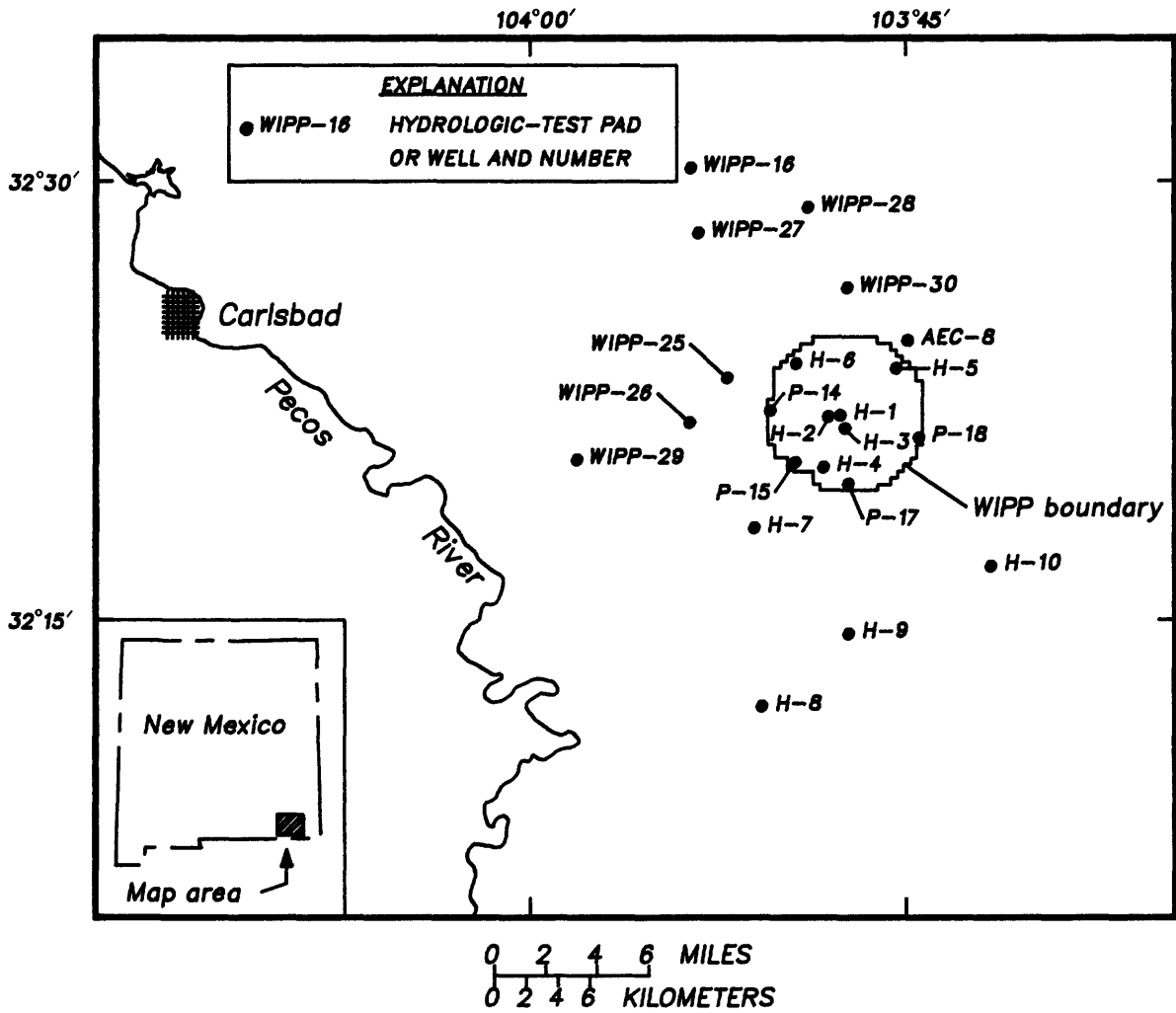


Figure 1.—General location of the Waste Isolation Pilot Plant (WIPP) and wells in which water levels were measured.

Several series of wells were monitored. AEC-8 is one of a series of wells originally drilled to obtain lithologic and stratigraphic data. AEC-8 was later deepened and completed to enable monitoring of water-bearing zones. The "H" series was drilled specifically to obtain geohydrologic data in the vicinity of WIPP. With the exception of wells H-1 and H-3, "H" series wells were drilled in sets of three at a pad. Each well at a pad was completed in a different zone of interest: well "A" was completed in the Magenta Dolomite Member of the Rustler Formation, well "B" was completed in the Culebra Dolomite Member of the Rustler Formation, and well "C" was completed in the Rustler Formation-Salado Formation contact zone. Exceptions are H-2B, which was completed in both the Magenta Dolomite and the Culebra Dolomite Members of the Rustler Formation, and H-2C, completed in both the Culebra Dolomite Member of the Rustler Formation and the Rustler Formation-Salado Formation contact zone. At a given pad, these wells generally are 50 to 100 feet apart. The "WIPP" series of wells consists of single wells drilled to obtain geologic data. They were secondarily completed for hydrologic testing and monitoring, with each well completed in all three zones of interest where they were present. The "P" series of wells consists of single wells drilled to define the extent of potash deposits in the vicinity of WIPP. They were secondarily completed for hydrologic testing and monitoring of the Culebra Dolomite Member of the Rustler Formation and the Rustler Formation-Salado Formation contact zone.

WELL-NUMBERING SYSTEM

The system of numbering wells in this report is based on the common subdivision of public lands into sections. The well number consists of five segments separated by periods (fig. 2). The first segment is the township number, the second segment is the range number, and the third segment is the section number. Because all township blocks in the vicinity of the WIPP are south of the New Mexico Base Line and east of the New Mexico Principal Meridian, the letters "S" and "E" indicating direction are not used in this report. Hence, the number 22.31.11 is assigned to any well located in sec. 11, T. 22 S., R. 31 E. The fourth and fifth segments of the well number represent the number of feet from the indicated section line to the well. For example, "0935FNL.1979FWL" describes a well that is 935 feet along a perpendicular extended from the north section line and 1,979 feet along a perpendicular extended from the west section line.

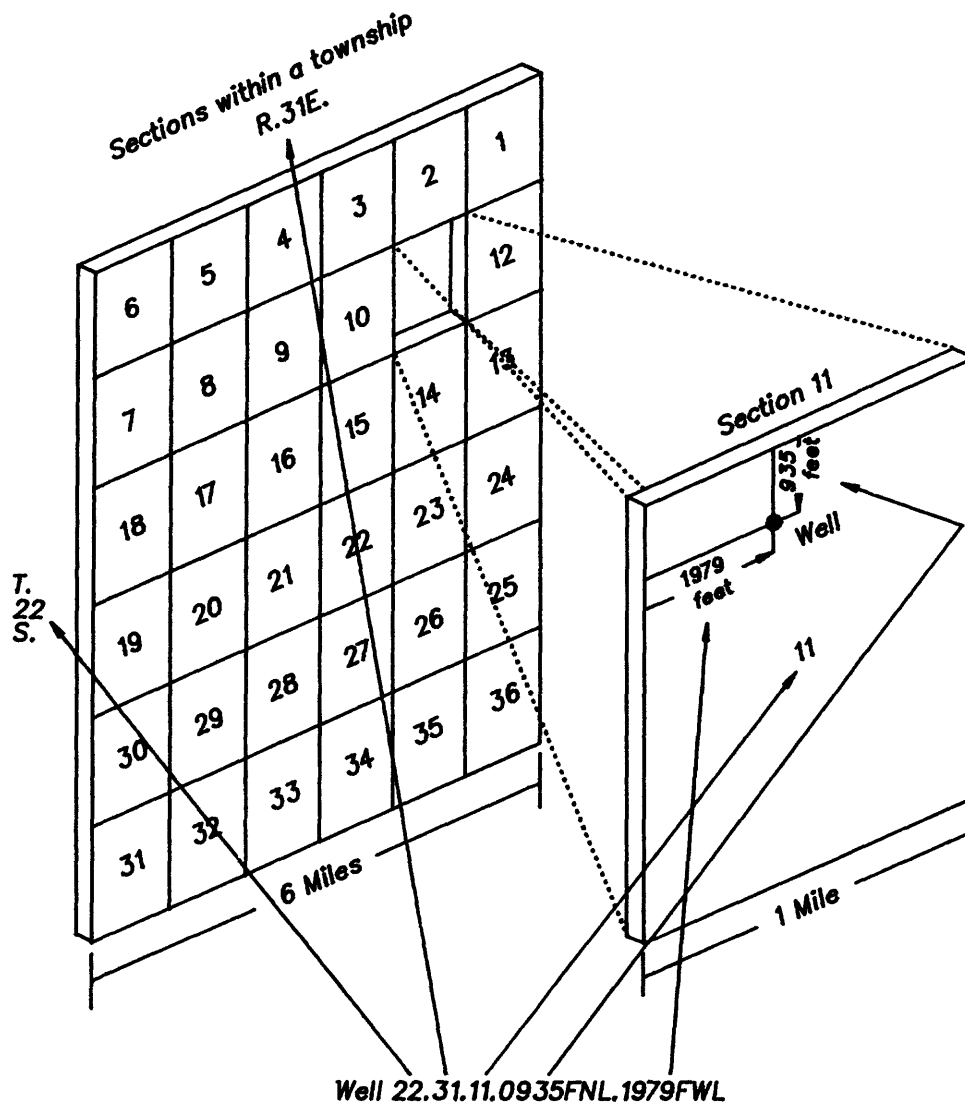


Figure 2.—System of numbering wells in this report.

MEASUREMENT METHODS

A variety of methods was used to measure water levels. The particular method utilized at a given time depended on several factors, including the amount of condensation in the well, well-head configuration, depth to water, rate of water-level change, and availability of equipment.

Air Line

An air-line measurement system was implemented by installing tubing in the well to below the water level. A pressure transducer was connected to the tubing near the well head. The pressure that the transducer sensed was converted to freshwater head. The freshwater head was then subtracted from the length of air line to give the depth to water. Air-line measurements are not corrected for fluid density and are reported to the nearest foot.

Lynes Pressure Sentry System

A Lynes Pressure Sentry System was installed by placing a Lynes-Sentry pressure probe downhole below the water level. The pressure at the probe was converted to feet of freshwater head. The freshwater head was then subtracted from the depth of the probe to determine the depth to water. Lynes Pressure Sentry System measurements are not corrected for fluid density and are reported to the nearest foot.

M-Scope

The M-scope is a device consisting of a spool of two-conductor wire, a meter, and a battery. A probe on the end of the wire completes an electrical circuit when it is submerged, causing a deflection of the meter. Depth to water was obtained by determining the length of wire needed for the probe to make contact with the water in the well. M-scope measurements are reported to the nearest foot.

Steel Tape

Steel-tape measurements were performed using a reel containing calibrated steel tape. The tape was lowered down the well until the first few feet were submerged, and the footage was recorded at the measuring point at the surface. The tape was then raised to the surface where the length of wet tape was recorded. This wet-tape footage was subtracted from the footage held at the measuring point to get the depth below the measuring point, which was then corrected to land-surface datum. Steel-tape measurements are reported to the nearest 0.1 foot.

Winch

Winch measurements were performed by lowering a transducer on the end of a logging cable down the well until it contacted the water surface. The footage was then read off of a digital footage counter on the winch. Winch measurements are reported to the nearest foot.

Table 1. Water-level records for well AEC-8, lower Delaware sand (economic usage) of the Bell Canyon Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.11.0935FNL.1979FWL
 Total depth: 4,910.0 Land-surface altitude: 3,531.5

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 4/77	687	L
11/30/77	615	M
1/ 8/78	591	A
2/ 3/78	584	A
3/ 2/78	580	A
4/ 4/78	577	A
5/ 3/78	574	A
6/ 1/78	573	A
7/ 6/78	572	A
8/ 1/78	570	A
9/ 6/78	570	A
10/ 3/78	570	A
11/ 8/78	570	A
12/ 6/78	570	A
1/16/79	568	A
2/11/79	568	A
3/ 5/79	569	A
6/ 5/79	568	A
7/10/79	568	A
8/ 7/79	568	A
9/ 7/79	567	A
10/ 5/79	567	A
11/ 1/79	567	A
12/ 4/79	567	A
5/ 7/80	567	A
6/10/80	567	A
7/ 1/80	567	A
8/ 9/80	568	A
10/ 7/80	567	A
11/ 5/80	568	A

Table 1. Water-level records for well AEC-8, lower Delaware sand
(economic usage) of the Bell Canyon Formation
- Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
12/ 4/80	568	A
3/ 9/81	568	A
5/ 5/81	567	A
7/ 8/81	568	A
10/ 1/81	569	A
1/21/82	568	A
5/26/82	576.7	S
8/19/82	576.8	S
1/19/83	568	A Measured at 1240.
1/19/83	577.0	S Measured at 1245.
8/24/83	576.9	S

Table 2. Water-level records for well AEC-8, upper Delaware sand (economic usage) of the Bell Canyon Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.11.0935FNL.1979FWL

Total depth: 4,910.0 Land-surface altitude: 3,531.5

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 4/77	570	L
11/30/77	560	A
1/ 8/78	554	A
2/ 3/78	556	A
3/ 2/78	555	A
4/ 4/78	555	A
5/ 3/78	554	A
6/ 1/78	554	A
7/ 6/78	553	A
8/ 1/78	553	A
9/ 6/78	553	A
10/ 3/78	553	A
11/ 8/78	553	A
12/ 6/78	553	A
1/16/79	553	A
2/11/79	553	A
3/ 5/79	554	A
6/ 5/79	553	A
7/10/79	553	A
8/ 7/79	553	A
9/ 7/79	552	A
10/ 5/79	552	A
11/ 1/79	552	A
12/ 4/79	552	A
5/ 7/80	554	A
6/10/80	553	A
7/ 1/80	553	A
8/ 9/80	553	A
10/ 7/80	553	A
11/ 5/80	553	A

Table 2. Water-level records for well AEC-8, upper Delaware sand
 (economic usage) of the Bell Canyon Formation
 - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
12/ 4/80	553	A
3/ 9/81	553	A
5/ 5/81	553	A
7/ 8/81	553	A
10/ 1/81	553	A
1/21/82	553	A
5/26/82	560.6	S
8/19/82	553	A
1/19/83	553	A

Table 3. Water-level records for well H-1, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 22.31.29.0623FNL.1083FEL
Total depth: 856.0 Land-surface altitude: 3,396.8

Date	Water level, in feet below land surface	Measurement code and remarks
5/10/77	342	M
5/25/77	269.9	S
6/23/77	257.3	S
8/ 4/77	254	M
9/ 3/77	252	M
10/ 3/77	249	M
11/ 3/77	251	M
12/ 1/77	250	M
1/ 8/78	248	A
2/ 3/78	250	A
3/ 3/78	250	A
4/ 6/78	249.4	S
5/ 3/78	249.2	S
6/ 2/78	248	A
7/ 6/78	248	A
8/ 2/78	248	A
9/ 6/78	248	A
10/ 3/78	247	A
11/ 7/78	247	A
1/16/79	247	A
2/10/79	247.8	S
3/ 5/79	247.2	S
3/13/79	247.0	S
10/ 6/80	259.8	S
11/ 4/80	258.7	S
12/ 4/80	259.1	S
1/ 5/81	258.5	S
2/ 4/81	258.0	S
3/ 5/81	257.3	S
4/ 2/81	256.8	S

Table 3. Water-level records for well H-1, Magenta Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
5/ 4/81	256.3	S
6/ 1/81	255.8	S
7/ 6/81	255.4	S
7/23/81	255.3	S
7/29/81	255.3	S
8/ 3/81	255.1	S
8/10/81	255.1	S
8/21/81	254.9	S
9/ 2/81	254.7	S
10/ 6/81	254.7	S
10/14/81	254.7	S
10/28/81	255.2	S
11/ 4/81	255.1	S
11/12/81	256.3	S
11/19/81	255.4	S
11/25/81	255.5	S
12/ 2/81	255.6	S
12/11/81	255.8	S
12/16/81	255.8	S
12/23/81	255.7	S
12/30/81	255.6	S
1/14/82	255.7	S
1/19/82	255.6	S
1/22/82	255.5	S
1/27/82	255.5	S
2/ 4/82	255.4	S
2/11/82	255.4	S
2/18/82	255.5	S
2/25/82	255.7	S
3/ 4/82	255.7	S

Table 3. Water-level records for well H-1, Magenta Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
3/10/82	256.0	S
3/15/82	256.0	S
3/25/82	259.7	S
4/ 2/82	256.7	S
4/12/82	257.0	S
4/16/82	257.1	S
4/23/82	257.7	S
4/27/82	257.7	S
5/ 6/82	258.0	S
5/12/82	258.1	S
5/19/82	258.3	S
5/26/82	258.6	S
6/ 4/82	258.9	S
6/14/82	259.2	S
6/18/82	258.3	S
6/30/82	259.7	S
7/ 7/82	259.9	S
7/16/82	260.1	S
7/23/82	260.4	S
8/ 4/82	260.7	S
8/11/82	260.9	S
8/19/82	261.0	S
8/26/82	261.2	S
9/ 2/82	261.3	S
9/13/82	261.5	S
9/23/82	261.8	S
9/30/82	261.8	S
10/ 8/82	261.9	S
10/19/82	262.2	S
10/29/82	262.4	S

Table 3. Water-level records for well H-1, Magenta Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 5/82	262.5	S
11/12/82	262.5	S
11/22/82	262.6	S
12/ 2/82	262.6	S
12/13/82	262.9	S
12/23/82	262.8	S
12/29/82	262.9	S
1/ 7/83	263.0	S
1/19/83	263.0	S
1/26/83	263.1	S
2/ 2/83	263.1	S
2/11/83	263.3	S
2/22/83	263.4	S
3/ 4/83	263.5	S
3/10/83	263.7	S
3/16/83	263.7	S
4/28/83	264.1	S
5/20/83	264.3	S
6/22/83	264.5	S
7/12/83	264.9	S
8/ 5/83	265.1	S
8/25/83	265.3	S
9/29/83	265.5	S
11/21/83	266.4	S
1/24/84	265.8	S

Table 4. Water-level records for well H-1, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.0623FNL.1083FEL

Total depth: 856.0 Land-surface altitude: 3,396.8

Date	Water level, in feet below land surface	Measurement code and remarks
3/17/77	408	M
5/25/77	390	M
6/23/77	389.3	S
8/ 4/77	392	M
9/ 4/77	389	M
10/ 2/77	390	M
11/ 4/77	389.5	S
12/ 1/77	389.4	S
1/ 8/78	389.5	S
2/ 3/78	389.4	S
3/ 3/78	389.2	S
4/ 6/78	389.1	S
5/ 3/78	388.7	S
6/ 2/78	388.3	S
7/ 6/78	388.0	S
8/ 2/78	387.9	S
9/ 6/78	387.3	S
10/ 3/78	386.6	S
11/ 7/78	386.1	S
1/ 5/79	384.5	S
2/10/79	383.0	S
3/ 5/79	382.5	S
3/13/79	382.3	S
4/16/80	354	W
5/ 6/80	374	W
6/11/80	382	W
7/ 1/80	382	W
8/ 8/80	380.8	S
9/ 7/80	380.7	S
10/ 6/80	380.7	S

Table 4. Water-level records for well H-1, Culebra Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 4/80	381.2	S
12/ 4/80	381.0	S
1/ 5/81	380.8	S
2/ 4/81	380.6	S
3/ 5/81	380.4	S
4/ 2/81	380.2	S
5/ 4/81	379.9	S
6/ 1/81	379.7	S
7/ 6/81	379.8	S
7/23/81	379.7	S
7/29/81	379.7	S
8/ 3/81	379.7	S
8/10/81	379.7	S
8/21/81	380.5	S
10/ 6/81	405.2	S
10/14/81	408.5	S
10/28/81	413.3	S
11/ 4/81	413.6	S
11/12/81	409.6	S
11/19/81	402.2	S
11/25/81	394.7	S
12/ 2/81	384.8	S
12/11/81	372.8	S
12/16/81	368.3	S
12/23/81	365.8	S
12/30/81	365.8	S
1/14/82	368.4	S
1/19/82	369.5	S
1/22/82	370.3	S
1/27/82	372.0	S

Table 4. Water-level records for well H-1, Culebra Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
2/ 4/82	375.3	S
2/11/82	378.6	S
2/18/82	382.9	S
2/25/82	387.3	S
3/ 4/82	391.3	S
3/10/82	396.8	S
3/15/82	397.0	S
3/25/82	401.1	S
4/ 2/82	404.0	S
4/12/82	406.9	S
4/16/82	407.9	S
4/23/82	409.5	S
4/27/82	410.3	S
5/ 6/82	411.9	S
5/12/82	412.8	S
5/19/82	413.7	S
5/26/82	414.6	S
6/ 4/82	415.6	S
6/14/82	416.5	S
6/18/82	417.0	S
6/30/82	417.7	S
7/ 7/82	418.2	S
7/16/82	418.7	S
7/23/82	419.3	S
8/ 4/82	420.1	S
8/11/82	420.3	S
8/19/82	420.6	S
8/26/82	421.0	S
9/ 2/82	421.2	S
9/13/82	421.5	S

Table 4. Water-level records for well H-1, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
9/23/82	421.6	S
9/30/82	421.8	S
10/ 8/82	422.0	S
10/19/82	422.1	S
10/29/82	422.3	S
11/ 5/82	422.4	S
11/12/82	422.5	S
11/22/82	422.6	S
12/ 2/82	422.7	S
12/13/82	422.9	S
12/23/82	423.1	S
12/29/82	423.2	S
1/ 7/83	423.4	S
1/19/83	423.3	S
1/26/83	423.6	S
2/ 2/83	423.7	S
2/11/83	423.8	S
2/22/83	423.8	S
3/ 4/83	423.9	S
3/10/83	423.9	S
3/16/83	424.0	S
4/28/83	424.2	S
5/20/83	424.3	S
6/22/83	426.1	S
7/12/83	427.5	S
8/ 5/83	428.2	S
8/25/83	428.3	S
9/29/83	427.9	S
11/21/83	428.0	S
1/24/84	433.8	S

Table 5. Water-level records for well H-1, Magenta Dolomite and Culebra Dolomite Members of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.0623FNL.1083FEL

Total depth: 856.0 Land-surface altitude: 3,396.8

Date	Water level, in feet below land surface	Measurement code and remarks
2/28/80	257.1	S
3/ 2/80	260.8	S
3/14/80	257.4	S
3/24/80	257.7	S

Table 6. Water-level records for well H-2A, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 22.31.29.0726FNL.1698FWL

Total depth: 563.0 Land-surface altitude: 3,376.8

Date	Water level, in feet below land surface	Measurement code and remarks
2/22/77	553	M
3/ 1/77	476	M
4/ 1/77	340	M
5/ 6/77	294	M
5/25/77	280.2	S
6/23/77	263.4	S
8/ 4/77	252.5	S
9/ 4/77	249	M
10/ 3/77	249.1	S
11/ 3/77	248.7	S
11/30/77	248.2	S
1/ 8/78	245.8	S
2/ 3/78	244.5	S
3/ 3/78	242.9	S
4/ 4/78	241.2	S
5/ 3/78	239.5	S
6/ 2/78	238.2	S
7/ 6/78	237.0	S
8/ 2/78	236.2	S
9/ 6/78	235.5	S
10/ 3/78	234.9	S
11/ 7/78	234.3	S
1/ 5/79	233.4	S
2/10/79	233.1	S
2/13/79	237.0	S
2/23/79	304	W
5/ 8/79	244	W
7/11/79	235	W
8/ 7/79	234	W
9/ 7/79	232	W

Table 6. Water-level records for well H-2A, Magenta Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
10/ 9/79	232	W
11/ 1/79	230.8	S
12/ 4/79	240.4	S
1/ 2/80	248.5	S
1/15/80	249.6	S
1/18/80	249.8	S
1/25/80	250.1	S
7/ 7/81	228.9	S
7/15/81	229.1	S
7/23/81	229.3	S
7/29/81	229.4	S
8/ 3/81	229.3	S
8/10/81	229.5	S
8/21/81	229.3	S
9/ 1/81	229.6	S
9/15/81	229.8	S
10/ 6/81	239.3	S
10/14/81	242.7	S
10/21/81	245.4	S
10/28/81	247.8	S
11/ 4/81	249.8	S
11/12/81	251.9	S
11/19/81	253.3	S
11/25/81	254.4	S
12/ 1/81	255.5	S
12/11/81	256.7	S
12/16/81	257.1	S
12/23/81	257.7	S
12/30/81	258.1	S
1/27/82	259.1	S

Table 6. Water-level records for well H-2A, Magenta Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
2/ 4/82	261.4	S
2/11/82	261.7	S
2/18/82	261.0	S
2/25/82	260.4	S
3/ 4/82	260.5	S
3/10/82	262.7	S
3/15/82	262.7	S
3/25/82	266.3	S
4/ 2/82	269.3	S
4/12/82	262.0	S
4/16/82	262.1	S
4/23/82	262.4	S
4/27/82	262.8	S
5/ 6/82	262.9	S
5/12/82	263.1	S
5/19/82	263.3	S
5/26/82	263.5	S
6/ 4/82	263.8	S
6/11/82	264.0	S
6/18/82	264.1	S
6/30/82	264.5	S
7/ 7/82	264.7	S
7/16/82	265.0	S
7/23/82	265.1	S
8/ 4/82	265.4	S
8/11/82	265.6	S
8/19/82	265.6	S
8/26/82	265.3	S
9/ 2/82	266.0	S
9/13/82	266.2	S

Table 6. Water-level records for well H-2A, Magenta Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
9/23/82	266.4	S
9/30/82	266.5	S
10/ 8/82	266.5	S
10/19/82	266.6	S
10/29/82	266.9	S
11/ 5/82	267.0	S
11/12/82	267.1	S
11/22/82	267.2	S
12/ 2/82	267.3	S
12/13/82	267.5	S
12/23/82	267.6	S
12/29/82	267.7	S
1/ 7/83	267.9	S
1/19/83	268.0	S
1/26/83	268.0	S
2/ 2/83	267.9	S
2/11/83	267.6	S
2/22/83	268.0	S
3/ 4/83	268.0	S
3/10/83	268.3	S
3/16/83	268.2	S
4/28/83	268.6	S
5/20/83	268.8	S
6/22/83	269.0	S

Table 7. Water-level records for well H-2B, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.0696FNL.1661FWL
Total depth: 661.0 Land-surface altitude: 3,376.7

Date	Water level, in feet below land surface	Measurement code and remarks
5/ 6/77	350	M
5/25/77	291	M
6/23/77	283	M
8/ 4/77	286	M
9/ 4/77	291	M
10/ 3/77	296	M
11/ 3/77	292	M
11/30/77	284	M
1/ 8/78	275	A
2/ 3/78	271	A
3/ 3/78	265	A
3/14/78	263	A
4/ 4/78	260	A
5/ 3/78	257	A
6/ 2/78	250	A
7/ 6/78	247	A
8/ 2/78	245	A
9/ 6/78	244	A
10/ 3/78	242	A
11/ 7/78	242	A
1/16/79	242	A
2/10/79	243.5	S
2/13/79	243.5	S Measured at 0940.
2/13/79	248.4	S Measured at 1156.
2/13/79	243.6	S Measured at 1305.

Table 7. Water-level records for well H-2B, Magenta Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks	
2/13/79	243.6	S	Measured at 1550.
2/14/79	243.9	S	Measured at 0850.
2/14/79	244.0	S	Measured at 1752.
2/15/79	244.2	S	
2/16/79	244.0	S	
2/17/79	243.3	S	
2/18/79	243.1	S	

Table 8. Water-level records for well H-2B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.0696FNL.1661FWL

Total depth: 661.0 Land-surface altitude: 3,376.7

Date	Water level, in feet below land surface	Measurement code and remarks
2/21/77	352	M
5/25/77	350.8	S
6/23/77	350.7	S
8/ 4/77	349.2	S
9/ 4/77	363	M
10/ 2/77	351	M
11/ 4/77	353	M
11/30/77	352	M
1/ 8/78	351.9	S
2/ 3/78	351.9	S
3/ 3/78	351.8	S
4/ 4/78	352.0	S
5/ 3/78	351.8	S
6/ 2/78	352.0	S
7/ 6/78	351.9	S
8/ 2/78	351.8	S
9/ 6/78	351.6	S
10/ 3/78	351.4	S
11/ 7/78	351.1	S
1/ 5/79	350.3	S
2/10/79	350.2	S
2/14/79	350.1	S
2/16/79	350.3	S
2/17/79	350.2	S
2/18/79	350.1	S
5/ 8/79	352	W
7/11/79	351	W
8/ 7/79	352	W
9/ 7/79	352	W
10/ 9/79	350	W
11/ 1/79	348.7	S

Table 9. Water-level records for well H-2B, Magenta Dolomite and
Culebra Dolomite Members of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 22.31.29.0696FNL.1661FWL

Total depth: 661.0 Land-surface altitude: 3,376.7

Date	Water level, in feet below land surface	Measurement code and remarks
10/21/81	351.3	S
10/28/81	352.2	S
11/ 4/81	353.2	S
11/12/81	353.5	S
11/19/81	352.8	S
11/25/81	351.8	S
12/ 1/81	350.2	S
12/11/81	347.7	S
12/16/81	346.1	S
12/23/81	344.2	S
12/30/81	343.0	S
1/27/82	341.8	S
2/ 4/82	343.0	S
2/11/82	342.3	S
2/18/82	342.8	S
2/25/82	343.7	S
3/ 4/82	344.2	S
3/10/82	345.1	S
3/15/82	345.8	S
3/25/82	346.6	S
4/ 2/82	347.6	S
4/12/82	348.6	S
4/16/82	348.8	S
4/23/82	349.7	S
4/27/82	349.8	S
5/ 6/82	350.4	S
5/12/82	350.7	S
5/19/82	351.2	S
5/26/82	351.5	S
6/ 4/82	352.0	S

Table 9. Water-level records for well H-2B, Magenta Dolomite and Culebra Dolomite Members of the Rustler Formation
- Continued

Date	Water level, in feet below land surface	Measurement code and remarks
6/14/82	352.5	S
6/18/82	352.6	S
6/30/82	353.1	S
7/ 7/82	353.3	S
7/16/82	353.7	S
7/23/82	354.0	S
8/ 4/82	354.4	S
8/11/82	354.6	S
8/19/82	354.8	S
8/26/82	355.0	S
9/ 2/82	355.1	S
9/13/82	355.2	S
9/23/82	355.5	S
9/30/82	355.5	S
10/ 8/82	355.6	S
10/19/82	355.8	S
10/29/82	356.1	S
11/ 5/82	356.2	S
11/12/82	356.2	S
11/22/82	356.3	S
12/ 2/82	356.5	S
12/13/82	357.0	S
12/23/82	357.1	S
12/29/82	357.3	S
1/ 7/83	357.4	S
1/19/83	357.5	S
1/26/83	357.4	S
2/ 2/83	357.4	S
2/11/83	357.4	S
2/22/83	357.4	S

Table 9. Water-level records for well H-2B, Magenta Dolomite and Culebra Dolomite Members of the Rustler Formation
- Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
3/ 4/83	357.3	S
3/10/83	357.5	S
3/16/83	357.3	S
4/28/83	357.4	S
5/20/83	357.4	S
6/22/83	357.8	S

Table 10. Water-level records for well H-2C, Culebra Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.0637FNL.1709FWL

Total depth: 795.0 Land-surface altitude: 3,376.8

Date	Water level, in feet below land surface	Measurement code and remarks
3/16/77	352	M
3/27/77	352	M
4/ 7/77	348	M
5/ 6/77	352	M
5/25/77	348.8	S
6/23/77	354	M
8/ 4/77	354	M
9/ 4/77	350	M
10/ 6/77	356	M
11/ 3/77	355	M
11/30/77	355	M
1/ 8/78	355	A
2/ 3/78	356	A
3/ 3/78	356	A
4/ 4/78	356	A
5/ 3/78	356	A
6/ 2/78	356	A
7/ 6/78	356	A
8/ 2/78	355	A
9/ 6/78	356	A
10/ 3/78	355	A
11/ 7/78	355	A
1/16/79	354	A
2/10/79	350.4	S
2/14/79	350.2	S
2/16/79	350.4	S
2/18/79	350.4	S
2/20/79	351.5	S
2/21/79	350.7	S Measured at 0845.
2/21/79	350.3	S Measured at 1015.

Table 10. Water-level records for well H-2C, Culebra Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
2/22/79	348.6	S
2/23/79	355.7	S
2/26/79	351.4	S
10/21/81	354.7	S
10/28/81	356.4	S
11/ 4/81	350.5	S
11/12/81	357.7	S
11/19/81	356.7	S
11/25/81	355.8	S
12/ 1/81	353.9	S
12/11/81	351.3	S
12/16/81	349.6	S
12/23/81	346.4	S
12/30/81	344.4	S
1/27/82	344.9	S
2/ 4/82	344.8	S
2/11/82	345.5	S
2/18/82	346.0	S
2/25/82	340.9	S
3/ 4/82	345.4	S
3/10/82	346.5	S
3/15/82	346.0	S
3/25/82	344.9	S
4/ 2/82	351.1	S
4/12/82	351.7	S
4/16/82	352.4	S
4/23/82	353.3	S
4/27/82	353.5	S
5/ 6/82	354.2	S
5/12/82	354.6	S

Table 10. Water-level records for well H-2C, Culebra Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
5/19/82	355.0	S
5/26/82	355.4	S
6/ 4/82	355.9	S
6/14/82	356.2	S
6/18/82	356.5	S
6/30/82	357.2	S
7/ 7/82	357.3	S
7/16/82	357.8	S
7/23/82	358.1	S
8/ 4/82	356.9	S
8/11/82	356.8	S
8/19/82	359.0	S
8/26/82	359.2	S
9/ 2/82	359.4	S
9/13/82	359.5	S
9/23/82	359.8	S
9/30/82	359.8	S
10/ 8/82	360.0	S
10/19/82	360.2	S
10/29/82	360.4	S
11/ 5/82	360.6	S
11/12/82	360.6	S
11/22/82	360.8	S
12/ 2/82	361.0	S
12/13/82	361.4	S
12/23/82	361.7	S
12/29/82	361.8	S
1/ 7/83	362.0	S
1/19/83	362.2	S
1/26/83	362.1	S

Table 10. Water-level records for well H-2C, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
2/ 2/83	362.0	S
2/11/83	362.1	S
2/22/83	362.1	S
3/ 4/83	362.1	S
3/10/83	362.0	S
3/16/83	362.1	S
4/28/83	361.6	S
5/20/83	362.2	S
5/24/83	362.2	S
6/22/83	362.6	S

Table 11. Water-level records for well H-2C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.0637FNL.1709FWL

Total depth: 795.0 Land-surface altitude: 3,376.8

Date	Water level, in feet below land surface	Measurement code and remarks
3/25/77	753	M
4/ 1/77	768	M
5/ 6/77	751	M
5/25/77	746	M
8/ 4/77	689	M
9/ 4/77	640	M
10/ 2/77	606	M
11/ 4/77	567	M
11/30/77	540	M
1/ 8/78	498	A
2/ 3/78	474	A
3/ 3/78	451	A
4/ 4/78	425	A
5/ 3/78	405	A
6/ 2/78	387	A
7/ 6/78	369	A
8/ 2/78	356	A
9/ 6/78	342	A
10/ 3/78	332	A
11/ 7/78	322	A
1/16/79	303	A
2/10/79	344.1	S
2/14/79	343.5	S
2/16/79	343.2	S
2/18/79	342.8	S
2/23/79	343.8	S
2/24/79	343.6	S
2/26/79	359.4	S
2/27/79	359.2	S
5/ 8/79	559	W

Table 11. Water-level records for well H-2C, Rustler Formation-Salado Formation contact zone - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
7/11/79	484	W
8/ 7/79	460	W
9/ 7/79	436	W
10/ 9/79	412	W
11/ 1/79	400.6	S

Table 12. Water-level records for well H-3, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.2085FSL.0138FEL

Total depth: 894.0 Land-surface altitude: 3,389.5

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	299	M
6/23/77	249.7	S
8/ 4/77	248	M
9/ 3/77	249	M
10/ 3/77	248	M
11/ 3/77	245	M
12/ 1/77	245	M
1/ 8/78	244	A
2/ 3/78	244	A
3/ 3/78	245	A
4/ 6/78	242	A
5/ 3/78	242	A
6/ 2/78	241	A
7/ 6/78	242	A
8/ 2/78	240	A
9/ 6/78	240	A
10/ 3/78	239	A
11/ 7/78	238	A
1/ 5/79	240	A
2/10/79	240.7	S
3/ 5/79	240.5	S
4/ 6/79	240	A
4/21/79	239.5	S
4/23/79	239.7	S
5/ 2/79	239.5	S
7/11/79	240	A
8/ 6/79	240.0	S
10/ 6/80	259.3	S
11/ 4/80	255.4	S
12/ 4/80	252.8	S

Table 12. Water-level records for well H-3, Magenta Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
1/ 5/81	251.0	S
2/ 4/81	249.7	S
3/ 5/81	248.4	S
4/ 2/81	247.6	S
5/ 4/81	246.7	S
6/ 1/81	246.2	S
7/ 6/81	245.7	S
8/ 3/81	245.3	S
9/ 2/81	244.8	S
10/ 7/81	244.4	S
10/14/81	244.2	S
10/28/81	244.4	S
11/ 4/81	244.1	S
11/12/81	244.1	S
11/19/81	243.9	S
11/25/81	243.8	S
12/ 2/81	243.8	S
12/11/81	243.8	S
12/16/81	243.7	S
12/23/81	243.7	S
12/30/81	243.7	S
1/14/82	243.6	S
1/19/82	243.5	S
1/22/82	243.4	S
1/27/82	243.5	S
2/ 4/82	243.4	S
2/11/82	243.3	S
2/18/82	247.2	S
2/25/82	243.4	S
3/ 4/82	243.1	S

Table 12. Water-level records for well H-3, Magenta Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
3/10/82	245.1	S
3/15/82	243.1	S
3/25/82	243.1	S
4/ 2/82	243.0	S
4/12/82	243.0	S
4/16/82	242.8	S
4/23/82	243.2	S
4/27/82	242.9	S
5/ 6/82	243.0	S
5/12/82	242.8	S
5/19/82	241.9	S
5/26/82	242.9	S
6/ 4/82	243.0	S
6/11/82	243.0	S
6/18/82	242.9	S
6/30/82	243.0	S
7/ 7/82	243.0	S
7/16/82	243.0	S
7/23/82	243.1	S
8/ 4/82	243.1	S
8/11/82	243.2	S
8/19/82	243.1	S
8/26/82	243.2	S
9/ 2/82	243.2	S
9/13/82	243.1	S
9/23/82	243.3	S
9/30/82	243.2	S
10/ 8/82	243.1	S
10/19/82	243.3	S
10/29/82	243.3	S

Table 12. Water-level records for well H-3, Magenta Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 5/82	243.4	S
11/12/82	243.4	S
11/22/82	243.3	S
12/ 2/82	243.1	S
12/13/82	243.3	S
12/23/82	243.2	S
12/29/82	243.4	S
1/ 7/83	243.3	S
1/19/83	243.4	S
1/26/83	243.3	S
2/ 2/83	243.1	S
2/11/83	243.2	S
2/22/83	243.3	S
3/ 4/83	243.1	S
3/10/83	243.4	S
3/16/83	243.2	S
4/28/83	243.4	S
5/20/83	243.5	S
6/22/83	243.7	S
7/12/83	243.8	S
8/ 5/83	243.9	S
8/25/83	243.9	S
9/29/83	244.0	S
11/21/83	240.2	S

Table 13. Water-level records for well H-3, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.29.2085FSL.0138FEL

Total depth: 894.0 Land-surface altitude: 3,389.5

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	405.1	S
6/23/77	405.2	S
8/ 4/77	404.8	S
9/ 4/77	404	M
9/28/77	407	M
11/ 4/77	404.9	S
12/ 1/77	404.5	S
1/ 8/78	404.6	S
2/ 3/78	404.2	S
3/ 3/78	403.8	S
4/ 4/78	403.5	S
5/ 3/78	402.8	S
6/ 2/78	402.7	S
7/ 6/78	402.2	S
8/ 2/78	401.8	S
9/ 6/78	401.4	S
10/ 3/78	401.0	S
11/ 7/78	400.4	S
1/ 5/79	399.0	S
2/10/79	398.8	S
3/ 5/79	398.7	S
7/11/79	397.7	S
8/ 6/79	397.8	S
9/ 7/80	390	W
10/ 6/80	394	W
11/ 4/80	393.3	S
12/ 4/80	392.7	S
1/ 5/81	392.4	S
2/ 4/81	392.2	S
3/ 5/81	391.9	S

Table 13. Water-level records for well H-3, Culebra Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
4/ 2/81	391.8	S
5/ 4/81	391.5	S
6/ 1/81	391.4	S
7/ 6/81	391.5	S
8/ 3/81	391.2	S
9/ 2/81	391.6	S
10/ 7/81	394.5	S
10/14/81	394.9	S
10/28/81	395.9	S
11/ 4/81	396.1	S
11/12/81	396.2	S
11/19/81	395.9	S
11/25/81	394.9	S
12/ 2/81	394.3	S
12/11/81	393.0	S
12/16/81	392.3	S
12/23/81	391.7	S
12/30/81	391.0	S
1/14/82	390.6	S
1/19/82	390.5	S
1/22/82	390.5	S
1/27/82	390.4	S
2/ 4/82	390.7	S
2/11/82	390.8	S
2/18/82	391.2	S
2/25/82	391.8	S
3/ 4/82	391.8	S
3/10/82	392.4	S
3/15/82	392.4	S
3/25/82	393.5	S

Table 13. Water-level records for well H-3, Culebra Dolomite
Member of the Rustler Formation - Continued

Date	Water level, in feet below land surface	Measurement code and remarks
4/ 2/82	393.5	S
4/12/82	394.0	S
4/16/82	394.1	S
4/23/82	394.8	S
4/27/82	394.7	S
5/ 6/82	395.2	S
5/12/82	395.1	S
5/19/82	395.4	S
5/26/82	395.6	S
6/ 4/82	396.1	S
6/11/82	396.1	S
6/18/82	396.4	S
6/30/82	396.6	S
7/ 7/82	396.9	S
7/16/82	397.1	S
7/23/82	397.3	S
8/ 4/82	397.5	S
8/11/82	397.6	S
8/19/82	397.8	S
8/26/82	397.7	S
9/ 2/82	398.0	S
9/13/82	398.1	S
9/23/82	398.1	S
9/30/82	398.2	S
10/ 8/82	398.1	S
10/19/82	398.4	S
10/29/82	398.6	S
11/ 5/82	398.6	S
11/12/82	398.9	S
11/22/82	398.5	S

Table 13. Water-level records for well H-3, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
12/ 2/82	398.5	S
12/13/82	398.5	S
12/23/82	398.6	S
12/29/82	399.0	S
1/ 7/83	398.9	S
1/26/83	399.1	S
2/ 2/83	398.9	S
2/11/83	399.1	S
2/22/83	399.1	S
3/ 4/83	398.8	S
3/10/83	399.2	S
3/16/83	399.2	S
4/28/83	399.7	S
5/20/83	407.0	S
5/24/83	410.1	S
6/22/83	411.0	S
7/12/83	408.6	S
8/ 5/83	406.7	S
8/25/83	405.5	S
9/29/83	404.2	S
11/21/83	402.9	S

Table 14. Water-level records for well H-3, Magenta Dolomite and
Culebra Dolomite Members of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 22.31.29.2085FSL.0138FEL

Total depth: 894.0 Land-surface altitude: 3,389.5

Date	Water level, in feet below land surface	Measurement code and remarks
2/28/80	391.6	S
3/ 2/80	391.9	S
3/14/80	391.5	S
4/15/80	391.0	S
5/ 5/80	390.8	S
6/11/80	390.8	S

Table 15. Water-level records for well H-4A, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.31.05.0546FNL.0720FWL

Total depth: 415.0 Land-surface altitude: 3,330.9

Date	Water level, in feet below land surface	Measurement code and remarks
6/ 2/78	199.8	S
7/ 6/78	190.5	S
7/25/78	190	M
10/ 3/78	187.0	S
11/ 7/78	171.9	S
11/30/78	186.3	S Measured at 1015.
11/30/78	186.3	S Measured at 1550.
12/ 1/78	186.3	S
12/ 5/78	333.4	S
12/ 6/78	302.4	S
12/12/78	207.1	S
12/18/78	195.7	S
2/11/79	191	W
3/ 5/79	189.5	S
5/ 8/79	189.2	S
6/ 5/79	189.3	S
7/11/79	189.4	S
8/ 6/79	189.4	S
9/ 6/79	189.4	S
10/ 4/79	189.6	S
11/ 1/79	189.4	S
12/ 4/79	189.6	S
1/ 2/80	189.5	S
2/ 3/80	189.5	S
3/ 2/80	189.5	S
4/15/80	189.4	S
5/ 7/80	189.3	S
6/11/80	189.4	S
7/ 1/80	189.4	S
8/ 8/80	189.5	S

Table 15. Water-level records for well H-4A, Magenta Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
9/ 7/80	189.5	S
10/ 7/80	189.1	S
11/ 5/80	189.3	S
12/ 4/80	189.3	S
1/ 5/81	189.3	S

Table 16. Water-level records for well H-4B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 23.31.05.0498FNL.0633FWL

Total depth: 529.0 Land-surface altitude: 3,330.7

Date	Water level, in feet below land surface	Measurement code and remarks
6/ 2/78	350.9	S
7/ 6/78	349.4	S
7/25/78	351	W
10/ 3/78	348.7	S
11/ 7/78	348.2	S
11/30/78	347.6	S Measured at 1030.
11/30/78	347.4	S Measured at 1545.
12/ 1/78	347.5	S Measured at 0845.
12/ 1/78	347.4	S Measured at 1045.
12/ 2/78	347.3	S
12/ 3/78	347.5	S
12/12/78	347.8	S
12/18/78	347.5	S
2/11/79	350	W
3/ 5/79	346.9	S
5/ 8/79	346.2	S
6/ 5/79	345.2	S
7/11/79	345.9	S
8/ 6/79	345.9	S
9/ 6/79	345.3	S
10/ 9/79	347	W
11/ 1/79	347	W
12/ 4/79	346.2	S
1/ 2/80	345.6	S
2/ 3/80	345.6	S
2/28/80	345.2	S
3/ 2/80	346.2	S
4/15/80	344.9	S
5/ 7/80	344.7	S
6/11/80	344.6	S

Table 16. Water-level records for well H-4B, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
7/ 1/80	344.3	S
8/ 8/80	343.9	S
9/ 7/80	343.6	S
10/ 7/80	343.3	S
11/ 5/80	342.9	S
12/ 4/80	342.3	S
1/ 5/81	342.2	S
2/ 6/81	345.7	S
3/ 5/81	341.9	S
4/ 1/81	342.3	S
5/ 4/81	341.7	S
7/ 6/81	341.1	S
8/ 3/81	340.5	S
9/ 2/81	339.4	S
10/ 2/81	341.9	S
11/ 4/81	340.5	S
12/ 1/81	341	W
1/22/82	340.0	S
2/18/82	339.7	S
3/10/82	339.3	S
4/15/82	339.1	S
5/17/82	339.3	S
6/22/82	339.2	S
8/20/82	338.8	S

Table 17. Water-level records for well H-4C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.31.05.0446FNL.0718FWL

Total depth: 661.0 Land-surface altitude: 3,333.5

Date	Water level, in feet below land surface	Measurement code and remarks
7/ 6/78	602	W
7/25/78	588	W
10/ 4/78	545	W
11/ 7/78	527	W
2/11/79	491	W
5/ 8/79	493	W
6/ 5/79	482	W
7/11/79	470.6	S
8/ 6/79	461.2	S
9/ 6/79	453.3	S
10/ 4/79	446.8	S
11/ 1/79	440.9	S
12/ 4/79	434.5	S
1/ 2/80	429.4	S
2/ 3/80	424.3	S
3/ 2/80	420.2	S
4/15/80	414.3	S
5/ 7/80	411.7	S
6/11/80	608	W Bailed 180 gallons on 6/2/80.
7/ 1/80	605	W
8/ 9/80	575	W
10/ 7/80	541	W
12/ 4/80	515	W

Table 18. Water-level records for well H-5A, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 22.31.15.1093FNL.0184FEL

Total depth: 824.0 Land-surface altitude: 3,505.9

Date	Water level, in feet below land surface	Measurement code and remarks
7/ 7/78	352	W
7/25/78	348	W
10/ 4/78	344.8	S
11/ 8/78	345	W
12/ 2/78	344.1	S
12/ 3/78	344.4	S
12/ 4/78	344.1	S
12/ 6/78	344.0	S
12/15/78	344.1	S
2/16/79	347	W
5/ 8/79	344.2	S
6/ 4/79	344.4	S
7/10/79	344.4	S
8/ 6/79	344.4	S
9/ 7/79	344.4	S
10/ 5/79	344.5	S
11/ 1/79	344.0	S
12/ 4/79	344.8	S
1/ 2/80	344.5	S
2/ 3/80	344.6	S
3/ 2/80	344.8	S
4/15/80	344.4	S
5/ 6/80	344.5	S
6/10/80	344.5	S
7/ 1/80	344.5	S
8/ 9/80	344.5	S
9/ 8/80	344.6	S
10/ 3/80	344.4	S
11/ 5/80	344.6	S
12/ 4/80	344.4	S
1/ 5/81	344.5	S

Table 19. Water-level records for well H-5B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.15.1007FNL.0234FEL

Total depth: 925.0 Land-surface altitude: 3,505.7

Date	Water level, in feet below land surface	Measurement code and remarks
7/ 7/78	481	W
7/25/78	480	W
10/ 3/78	478.3	S
11/ 7/78	480	W
12/ 2/78	477.8	S
12/ 3/78	477.8	S
12/ 4/78	477.9	S
12/ 5/78	477.8	S
12/ 6/78	477.8	S
12/11/78	480.2	S Measured at 0752.
12/11/78	479.8	S Measured at 1650.
12/12/78	479.3	S
12/13/78	478.9	S
12/18/78	509.2	S
2/11/79	489	W
3/ 5/79	486.6	S
5/ 8/79	486.0	S
6/ 4/79	486.1	S
7/10/79	486.0	S
8/ 6/79	486.1	S
9/ 7/79	486.0	S
10/ 5/79	486.0	S
11/ 1/79	486.0	S
12/ 4/79	486.1	S
1/ 2/80	485.8	S
2/ 3/80	485.9	S
3/ 2/80	486.0	S
4/15/80	485.6	S
5/ 6/80	485.6	S
6/10/80	485.6	S

Table 19. Water-level records for well H-5B, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
7/ 1/80	485.6	S
8/ 9/80	485.5	S
9/ 8/80	489.5	S
10/ 3/80	485.4	S
11/ 5/80	485.4	S
12/ 4/80	485.2	S
1/ 5/81	485.2	S
3/ 4/81	487.8	S
4/ 1/81	486.4	S
5/ 4/81	488.1	S
8/ 3/81	489	W
9/ 1/81	488	W
12/ 1/81	492	W
1/27/82	488.5	S
2/18/82	487.7	S
3/10/82	487.3	S
4/15/82	486.4	S
5/17/82	487.0	S
6/22/82	485.2	S
8/20/82	485.8	S
10/15/82	485.7	S
12/13/82	485.2	S
2/17/83	485.2	S
10/18/84	484.7	S

Table 20. Water-level records for well H-5C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.15.1006FNL.0134FEL

Total depth: 1,076.0 Land-surface altitude: 3,506.1

Date	Water level, in feet below land surface	Measurement code and remarks
7/ 6/78	--	W Dry.
7/25/78	1,062	W
10/ 4/78	998	W
11/ 7/78	547	W Recharge from surface-water runoff.
12/ 6/78	546	W Do.
12/15/78	--	W Dry.
2/11/79	1,055	W
3/ 5/79	1,048	W
5/ 8/79	1,037	W
8/ 9/80	1,052	W
10/ 7/80	1,040	W
11/ 5/80	1,032	W
12/ 4/80	1,026	W

Table 21. Water-level records for well H-6A, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 22.31.18.0284FNL.0275FWL

Total depth: 525.0 Land-surface altitude: 3,345.8

Date	Water level, in feet below land surface	Measurement code and remarks
7/25/78	294	W
10/ 4/78	292	W
11/ 8/78	292	W
12/10/78	291.5	S
12/11/78	291.7	S
12/12/78	291.6	S
12/14/78	292.0	S
2/16/79	294	W
3/ 5/79	292.0	S
5/ 8/79	291.4	S
6/ 4/79	291.6	S
7/10/79	291.7	S
8/ 6/79	291.4	S
10/ 5/79	291.2	S
11/ 1/79	291.2	S
12/ 4/79	291.2	S
1/ 2/80	290.9	S
2/ 3/80	291.0	S
3/ 2/80	291.0	S
4/15/80	290.5	S
5/ 7/80	290.5	S
6/10/80	290.6	S
7/ 2/80	290.6	S
8/ 8/80	290.5	S
9/ 8/80	290.4	S
10/ 3/80	290.2	S
11/ 4/80	290.1	S
12/ 3/80	290.0	S
1/ 5/81	289.8	S

Table 22. Water-level records for well H-6B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.18.0196FNL.0322FWL

Total depth: 640.0 Land-surface altitude: 3,346.1

Date	Water level, in feet below land surface	Measurement code and remarks
7/25/78	298	W
10/ 4/78	296	W
11/ 8/78	296	W
12/10/78	294.3	S
12/11/78	294.5	S
12/12/78	294.3	S
12/14/78	295.3	S
12/17/78	295.0	S
12/19/78	294.9	S
2/16/79	304	W
3/ 5/79	301.4	S
5/ 8/79	300.5	S
6/ 4/79	300.5	S
7/10/79	300.4	S
8/ 6/79	299.9	S
10/ 9/79	301	W
11/ 1/79	301.0	S
12/ 4/79	299.8	S
1/ 2/80	299.9	S
2/ 3/80	300.1	S
2/28/80	299.9	S
3/ 2/80	300.4	S
4/15/80	300.2	S
5/ 7/80	300.0	S
6/10/80	299.8	S
7/ 2/80	299.8	S
8/ 8/80	299.7	S
9/ 8/80	299.8	S
10/ 3/80	299.3	S
11/ 4/80	299.1	S

Table 22. Water-level records for well H-6B, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
12/ 3/80	298.9	S
1/ 5/81	299.1	S
2/ 4/81	299.5	S
3/ 4/81	298.8	S
4/ 1/81	299.0	S
6/ 1/81	303.1	S
7/ 6/81	300.4	S
8/ 3/81	300.2	S
11/ 4/81	300.3	S
12/ 1/81	306.1	S
1/27/82	299.7	S
2/18/82	298.8	S
3/10/82	299.9	S
4/15/82	299.6	S
5/18/82	300.0	S
6/22/82	300.2	S
8/20/82	300.4	S
10/18/84	301.2	S

Table 23. Water-level records for well H-6C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.18.0281FNL.0375FWL

Total depth: 741.0 Land-surface altitude: 3,346.5

Date	Water level, in feet below land surface	Measurement code and remarks
7/25/78	624	W
10/ 4/78	480	W
11/ 8/78	453	W
2/11/79	424	W
3/ 5/79	418.7	S
3/11/79	417.9	S
3/12/79	417.8	S
3/13/79	417.8	S
3/18/79	417.7	S
3/20/79	417.0	S
5/ 9/79	540	W
7/10/79	520	W
8/ 7/79	483	W
10/ 5/79	439.6	S
11/ 1/79	431.8	S
12/ 4/79	424.3	S
1/ 2/80	420.1	S
2/ 3/80	417.0	S
3/ 2/80	415.2	S
4/15/80	413.4	S
5/ 7/80	412.8	S
6/10/80	412.1	S
7/ 2/80	411.8	S
8/ 8/80	411.3	S
9/ 8/80	411.2	S
10/ 3/80	411.1	S
11/ 4/80	410.8	S
12/ 3/80	410.5	S
1/ 5/81	412.5	S

Table 24. Water-level records for well H-7A, Magenta Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.30.14.2495FNL.2492FWL

Total depth: 154.0 Land-surface altitude: 3,163.6

Date	Water level, in feet below land surface	Measurement code and remarks	
9/26/79	154	W	Magenta dry.
10/10/79	154	W	Do.
11/ 1/79	154.3	S	Do.
12/ 4/79	154.1	S	Do.
11/ 4/80	--		Do.
6/ 2/81	--		Do.
10/ 2/81	--		Do.
1/22/82	--		Do.

Table 25. Water-level records for well H-7B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.30.14.2566FNL.2563FWL
Total depth: 286.0 Land-surface altitude: 3,162.6

Date	Water level, in feet below land surface	Measurement code and remarks
9/19/79	171	W
9/26/79	171	W
10/10/79	171	W
11/ 1/79	170.9	S
12/ 4/79	170.9	S
1/ 2/80	171.5	S
2/ 3/80	171.6	S
3/ 2/80	171.8	S
3/20/80	171.5	S
4/15/80	171.3	S
5/ 6/80	171.4	S
6/10/80	171.4	S
7/ 1/80	171	W
8/ 2/80	171.3	S
9/ 8/80	171.4	S
10/ 8/80	171.3	S
11/ 4/80	171.1	S
12/ 2/80	170.7	S
2/ 4/81	170.4	S
5/ 4/81	170.0	S
6/ 2/81	170.1	S
7/ 6/81	170.2	S
7/15/81	170.2	S
7/23/81	170.2	S
7/29/81	170.3	S
8/ 4/81	170.2	S
8/10/81	170.4	S
8/21/81	170.3	S
9/ 1/81	170.2	S
9/14/81	170.2	S Measured at 0920.

Table 25. Water-level records for well H-7B, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks	
9/14/81	170.1	S	Measured at 1512.
10/ 2/81	170.3	S	
11/ 2/81	170.4	S	
12/ 2/81	170.2	S	
1/22/82	170.2	S	
5/25/82	170.2	S	
6/22/82	170.0	S	
8/20/82	170.6	S	
10/15/82	170.7	S	
12/13/82	170.3	S	
2/17/83	170.4	S	
10/18/84	169.7	S	
1/ 7/85	169.6	S	

Table 26. Water-level records for well H-7C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.30.14.2592FNL.2468FWL

Total depth: 420.0 Land-surface altitude: 3,163.5

Date	Water level, in feet below land surface	Measurement code and remarks
9/19/79	199	W
9/26/79	199	W
10/10/79	199	W
4/15/80	199	W
5/ 6/80	199	W
6/10/80	198.7	S
7/ 1/80	198.6	S
8/ 2/80	198.6	S
9/ 8/80	198.5	S
10/ 8/80	198.4	S
11/ 4/80	198.3	S
11/24/80	214	W
11/25/80	213.3	S
12/ 2/80	214.9	S
2/ 4/81	212.0	S
5/ 4/81	206.6	S
6/ 2/81	206.4	S
7/ 6/81	206.3	S
7/23/81	206.3	S
8/ 4/81	206.2	S
9/14/81	205.9	S
9/16/81	205.9	S
10/ 2/81	205.7	S
11/ 2/81	205.5	S
12/ 2/81	205.2	S
1/22/82	204.8	S
5/15/82	204.1	S
6/22/82	203.9	S
8/20/82	203.8	S
10/15/82	203.7	S
12/13/82	203.3	S
2/17/83	203.1	S

Table 27. Water-level records for well H-8A, Magenta Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 24.30.23.1963FNL.1487FEL

Total depth: 505.0 Land-surface altitude: 3,433.0

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 1/79	456	W
12/ 4/79	420.5	S
1/ 2/80	411.3	S
1/28/80	407.0	S
2/15/80	429	W
3/ 2/80	421	W
4/16/80	411	W
5/ 6/80	410	W
6/10/80	408	W
7/ 1/80	407	W
8/ 9/80	406.0	S
9/ 6/80	405.7	S
10/ 7/80	405.4	S
11/ 5/80	405.2	S
12/ 3/80	405.1	S
2/ 6/81	405.0	S
5/ 4/81	405.0	S
7/ 7/81	405.0	S
10/ 2/81	405.1	S
1/22/82	405.2	S
5/25/82	405.2	S
6/22/82	405.2	S
8/20/82	405.3	S
10/15/82	405.4	S
12/13/82	405.4	S
2/17/83	405.3	S
8/24/83	405.3	S
1/24/84	405.3	S
10/20/84	405.2	S
1/ 7/85	405.2	S

Table 28. Water-level records for well H-8B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 24.30.23.1995FNL.1405FEL

Total depth: 624.0 Land-surface altitude: 3,433.8

Date	Water level, in feet below land surface	Measurement code and remarks
8/13/79	452	W
8/15/79	450	W
8/17/79	451	W
8/20/79	449.6	S
8/23/79	448.8	S
8/28/79	441.2	S
9/ 7/79	450	W
10/10/79	450	W
11/ 1/79	449.1	S
12/ 4/79	449.3	S
1/ 2/80	449.7	S
1/28/80	448.3	S
1/30/80	448.5	S
2/ 1/80	448.8	S
2/ 2/80	448.5	S
2/ 3/80	448.6	S
2/ 4/80	448.4	S
2/ 5/80	448.6	S
2/ 6/80	448.3	S
2/11/80	448.4	S
3/ 2/80	449	W
4/16/80	448	W
5/ 6/80	447	W
6/10/80	448	W
7/ 1/80	448	W
8/ 9/80	446.2	S
9/ 6/80	446.5	S
10/ 7/80	445.8	S
11/ 5/80	445.3	S
12/ 3/80	445.3	S

Table 28. Water-level records for well H-8B, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
2/ 6/81	444.7	S
5/ 4/81	444.5	S
7/ 7/81	444.5	S
10/ 2/81	443.7	S
1/22/82	442.6	S
5/25/82	442.2	S
6/22/82	442.3	S
8/20/82	443.0	S
10/15/82	442.1	S
12/13/82	441.1	S
2/17/83	440.6	S
8/24/83	441.2	S
1/24/84	440.9	S
10/20/84	440.4	S
1/ 7/85	440.3	S

Table 29. Water-level records for well H-8C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 24.30.23.2059FNL.1470FEL

Total depth: 808.0 Land-surface altitude: 3,433.0

Date	Water level, in feet below land surface	Measurement code and remarks
8/13/79	766	W
8/15/79	755	W
8/17/79	745	W
8/20/79	734	W
8/23/79	718	W
8/28/79	696	W
9/ 7/79	663	W
9/13/79	644	W
9/19/79	627	W
10/10/79	588	W
10/ 7/80	459	W
11/ 5/80	460	W
12/ 3/80	460	W
2/ 6/81	462	W
3/ 5/81	463.4	S
5/ 4/81	463.8	S
7/ 7/81	463.1	S
10/ 2/81	463.7	S
1/22/82	463.3	S
5/25/82	462.8	S
6/22/82	462.6	S
8/20/82	462.5	S
10/15/82	462.3	S
12/13/82	462.0	S
2/17/83	461.6	S
8/24/83	460.9	S
1/24/84	460.4	S
10/20/84	459.7	S
1/ 7/85	459.5	S

Table 30. Water-level records for well H-9A, Magenta Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 24.31.04.2392FNL.0139FWL
 Total depth: 559.0 Land-surface altitude: 3,404.4

Date	Water level, in feet below land surface	Measurement code and remarks
9/ 7/79	297	W
9/13/79	289	W
9/26/79	284	W
10/10/79	284	W
11/ 1/79	284.4	S
12/ 4/79	284.1	S
1/ 2/80	283.6	S
2/ 1/80	283.7	S
2/ 6/80	289	W
2/13/80	284	W
3/ 2/80	284	W
4/16/80	283	W
5/ 6/80	283	W
6/10/80	284	W
7/ 1/80	283	W
8/ 9/80	283.0	S
9/ 7/80	283.1	S
10/ 7/80	282.8	S
11/ 5/80	282.8	S
12/ 3/80	282.7	S
2/ 6/81	282.0	S
5/ 4/81	282.2	S
8/ 4/81	282.4	S
9/ 3/81	282.4	S
10/ 1/81	282.5	S
11/ 2/81	282.5	S
12/ 2/81	282.4	S
1/21/82	282.3	S
2/18/82	282.3	S
3/10/82	281.0	S

Table 30. Water-level records for well H-9A, Magenta Dolomite Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
4/15/82	282.1	S
5/17/82	282.1	S
6/22/82	282.3	S
9/ 2/82	282.3	S
10/29/82	282.3	S
12/13/82	282.0	S
2/17/83	282.0	S

Table 31. Water-level records for well H-9B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 24.31.04.2391FNL.0239FWL

Total depth: 708.0 Land-surface altitude: 3,404.7

Date	Water level, in feet below land surface	Measurement code and remarks
8/29/79	440	W
9/ 7/79	440	W
10/10/79	440	W
11/ 1/79	439.3	S
12/ 4/79	438.9	S
1/ 2/80	438.1	S
2/ 1/80	437.5	S
2/ 2/80	438.1	S
2/ 3/80	438.2	S
2/ 4/80	438.5	S
2/ 5/80	438.6	S
2/13/80	438	W
3/ 2/80	438	W
4/16/80	437	W
5/ 6/80	436	W
6/10/80	436	W
7/ 1/80	436	W
8/ 9/80	434	W
9/ 7/80	432.7	S
10/ 7/80	430.3	S
11/ 5/80	424.0	S
12/ 3/80	425.7	S
2/ 6/81	425.9	S
5/ 4/81	432.9	S
8/ 4/81	433.0	S
9/ 3/81	431.5	S
10/ 1/81	431.7	S
11/ 2/81	430.9	S
12/ 2/81	429.9	S
1/21/82	429.8	S

Table 31. Water-level records for well H-9B, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
2/18/82	429.2	S
3/10/82	428.1	S
4/15/82	428.3	S
6/22/82	429.4	S
9/ 2/82	429.4	S
10/29/82	431.9	S
12/13/82	428.2	S
2/17/83	428.7	S
10/20/84	430.3	S
1/ 7/85	430.7	S

Table 32. Water-level records for well H-9C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 24.31.04.2479FNL.0188FWL

Total depth: 816.0 Land-surface altitude: 3,405.9

Date	Water level, in feet below land surface	Measurement code and remarks
8/17/79	788	W
8/20/79	788	W
8/23/79	788	W
8/28/79	788	W
9/27/79	815	W
10/10/79	816	W
2/13/80	809	W
2/15/80	809	W
2/16/80	809	W
2/27/80	809	W
3/ 2/80	808	W
4/16/80	804	W
5/ 6/80	803	W
5/ 5/81	728	W
6/ 2/81	714	W
8/ 4/81	713	W
9/ 3/81	704	W
10/ 1/81	690	W
12/ 2/81	680.6	S
1/21/82	665	W
2/18/82	656.3	S
3/10/82	656.5	S
8/19/82	715.2	S
1/19/83	708	W Measured after pulling packer.
2/ 1/83	717	W

Table 33. Water-level records for well H-10A, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.32.20.0433FSL.2069FEL

Total depth: 1,318.0 Land-surface altitude: 3,686.6

Date	Water level, in feet below land surface	Measurement code and remarks
8/28/79	1,142	W
9/ 7/79	847	W
9/13/79	758	W
9/18/79	711	W
9/26/79	665	W
10/10/79	625	W
11/ 1/79	602	W
11/21/79	594	W
11/26/79	593	W
12/ 3/79	592	W
12/10/79	592	W
2/ 1/80	590	W
2/13/80	589	W
2/15/80	589	W
2/16/80	589	W
2/17/80	587	W
3/ 2/80	670	W
4/16/80	619	W
5/ 6/80	600	W
6/10/80	591	W
7/ 1/80	591	W
8/ 9/80	590	W
10/ 7/80	589	W
11/ 5/80	589	W
12/ 4/80	588	W
2/ 6/81	587.2	S
5/ 5/81	586.8	S
8/ 4/81	586.8	S
10/ 1/81	586.8	S
11/ 2/81	586.7	S

Table 33. Water-level records for well H-10A, Magenta Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
12/ 2/81	586.7	S
1/21/82	586.6	S
2/18/82	586.5	S
3/10/82	586.5	S
4/15/82	586.4	S
5/26/82	586.4	S
8/20/82	586.6	S

Table 34. Water-level records for well H-10B, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.32.20.0485FSL.1985FEL
Total depth: 1,398.0 Land-surface altitude: 3,687.0

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 1/79	695	W
11/21/79	689	W
11/26/79	689	W
12/ 3/79	688	W
12/10/79	688	W
2/ 1/80	687	W
2/13/80	687	W
2/15/80	686	W
2/16/80	686	W
2/21/80	687	W
2/25/80	684	W
3/ 2/80	718	W
4/16/80	687	W
5/ 6/80	699	W
6/10/80	697	W
7/ 1/80	699	W
8/ 9/80	699	W
10/ 7/80	699	W
11/ 5/80	699	W
12/ 4/80	700	W
2/ 6/81	697.9	S
5/ 5/81	697.7	S
8/ 4/81	697.8	S
10/ 1/81	697.8	S
11/ 2/81	691.3	S

Table 34. Water-level records for well H-10B, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
12/ 2/81	687.1	S
1/21/82	699	W
2/18/82	696.4	S
3/10/82	697.3	S
4/15/82	697.0	S
5/26/82	697.0	S
8/20/82	697.2	S

Table 35. Water-level records for well H-10C, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.32.20.0385FSL.1982FEL

Total depth: 1,538.0 Land-surface altitude: 3,686.9

Date	Water level, in feet below land surface	Measurement code and remarks
8/23/79	1,517	W
8/28/79	1,517	W
9/ 7/79	1,517	W
9/26/79	1,516	W
10/10/79	1,516	W
2/17/80	1,507	W
2/27/80	1,508	W
3/ 2/80	1,514	W
4/16/80	1,498	W
5/ 6/80	1,498	W
5/ 5/81	1,402	W
6/ 2/81	1,389	W
8/ 4/81	1,375	W
9/ 3/81	1,369	W
10/ 1/81	1,365	W
1/21/82	1,346	W
5/26/82	1,328	W
8/20/82	1,315	W
1/19/83	1,292	W

Table 36. Water-level records for well P-14, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.30.24.0309FSL.0613FWL

Total depth: 1,545.0 Land-surface altitude: 3,360.3

Date	Water level, in feet below land surface	Measurement code and remarks
3/27/77	325	M
4/ 5/77	326	M
5/ 6/77	325	M
5/25/77	322	M
6/23/77	326	M
8/ 4/77	326	W
9/ 5/77	326	W
10/ 6/77	324.3	S
11/ 3/77	324.0	S
12/ 1/77	323.8	S
1/ 8/78	324.7	S
2/ 3/78	325.4	S
3/ 2/78	325.3	S
4/ 4/78	325.6	S
5/ 3/78	325.5	S
6/ 1/78	325.5	S
7/ 7/78	324.8	S
8/ 1/78	324.7	S
9/ 6/78	324.3	S
10/ 4/78	323.6	S
11/ 8/78	323.3	S
1/ 5/79	322.5	S
2/11/79	322.7	S
3/ 5/79	322.7	S
5/ 8/79	322.9	S
6/ 4/79	322.0	S
7/10/79	321.8	S
8/ 6/79	321.2	S
9/ 6/79	321.4	S
10/ 5/79	321.3	S

Table 36. Water-level records for well P-14, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
11/ 1/79	321.4	S
12/ 4/79	321.3	S
1/ 2/80	320.4	S
2/ 3/80	320.9	S
2/28/80	320.9	S
5/ 7/80	321	M
6/ 9/80	321.9	S
7/ 2/80	321.6	S
8/ 8/80	321.7	S
12/ 3/80	320.0	S
1/ 5/81	319.9	S
2/ 4/81	320.5	S
3/ 4/81	320.1	S
4/ 1/81	320.3	S
5/ 4/81	320.3	S
6/ 1/81	321.7	S
7/ 6/81	320.5	S
10/ 7/81	320.8	S
11/ 4/81	320.1	S
1/27/82	320.0	S
5/18/82	320.2	S
7/19/82	320.3	S
9/ 8/82	320.3	S
11/19/82	322.8	S
1/12/83	320.7	S
8/24/83	320.9	S

Table 37. Water-level records for well P-14, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.30.24.0309FSL.0613FWL

Total depth: 1,545.0 Land-surface altitude: 3,360.3

Date	Water level, in feet below land surface	Measurement code and remarks
3/24/77	457	M
3/25/77	403	M
3/26/77	389	M
3/27/77	386	M
4/ 5/77	385	M
5/ 6/77	386	M
5/25/77	386	M
6/23/77	386.2	S
8/ 4/77	389	M
9/ 5/77	383	M
10/ 6/77	386.2	S
11/ 3/77	386.2	S
12/ 1/77	386.1	S
1/ 8/78	386.2	S
2/ 3/78	386.2	S
3/ 2/78	386.0	S
4/ 4/78	385.9	S
5/ 3/78	386.0	S
6/ 1/78	386.0	S
7/ 7/78	386.0	S
8/ 1/78	386.0	S
9/ 6/78	385.8	S
10/ 4/78	385.7	S
11/ 8/78	385.6	S
1/ 5/79	385.6	S
2/11/79	386.2	S
3/ 5/79	385.5	S
5/ 8/79	385.4	S
6/ 4/79	385.4	S
7/10/79	385.5	S

Table 37. Water-level records for well P-14, Rustler Formation-Salado Formation contact zone - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
8/ 6/79	385.6	S
9/ 6/79	385.5	S
10/ 5/79	385.5	S
11/ 1/79	385.5	S
12/ 4/79	385.5	S
1/ 2/80	385.3	S
1/31/80	385.1	S
2/ 3/80	385.4	S
2/28/80	386.7	S
9/ 8/80	359	M
9/16/80	360	M
10/ 3/80	388	M
11/ 4/80	389.2	S
12/ 3/80	388.9	S
1/ 5/81	388.9	S
2/ 4/81	389.0	S
3/ 4/81	388.7	S
4/ 1/81	388.9	S
5/ 4/81	388.7	S
6/ 1/81	388.8	S
7/ 6/81	388.9	S
10/ 7/81	389.0	S
11/ 4/81	388.9	S
1/27/82	388.9	S
5/18/82	388.6	S
7/19/82	388.8	S
9/ 8/82	388.4	S
11/19/82	388.2	S
1/12/83	388.2	S
8/24/83	387.7	S

Table 38. Water-level records for well P-15, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.31.0411FSL.0190FWL

Total depth: 1,465.0 Land-surface altitude: 3,309.5

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	308	M
6/23/77	307	M
8/ 4/77	307	M
9/ 3/77	308	M
10/ 3/77	308	M
11/ 3/77	308	M
11/30/77	307	M
1/ 7/78	308	A
2/ 3/78	308	A
3/ 3/78	307	A
4/ 4/78	307	A
5/ 3/78	307	A
6/ 2/78	307	A
7/ 6/78	307	A
8/ 2/78	306	A
9/ 6/78	306	A
10/ 3/78	306	A
11/ 7/78	306	A
1/16/79	305	A
2/11/79	305	A
3/ 5/79	305	A
4/ 6/79	311.6	S
11/ 1/79	309.5	S
12/ 4/79	309.5	S
1/ 2/80	309.0	S
2/ 3/80	309.0	S
3/ 2/80	308.9	S
4/15/80	308.3	S
5/ 5/80	308.4	S
6/11/80	308.2	S

Table 38. Water-level records for well P-15, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
7/ 2/80	308.3	S
8/ 2/80	307.9	S
9/ 7/80	307.9	S
10/ 7/80	307.5	S
11/ 4/80	307.1	S
12/ 4/80	306.9	S
1/ 5/81	306.6	S
2/ 4/81	306.5	S
3/ 5/81	306.2	S
4/ 2/81	306.1	S
5/ 5/81	305.9	S
6/ 1/81	305.8	S
7/ 6/81	306.0	S
10/ 2/81	305.8	S
11/ 4/81	305.4	S
1/22/82	305.2	S
5/25/82	304.5	S
7/19/82	304.2	S
9/ 8/82	304.5	S
11/19/82	304.2	S
1/12/83	304.8	S
8/25/83	304.9	S

Table 39. Water-level records for well P-15, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.31.0411FSL.0190FWL

Total depth: 1,465.0 Land-surface altitude: 3,309.5

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	341.7	S
6/23/77	328.5	S
8/ 4/77	328	M
9/ 4/77	325	M
10/ 2/77	327.4	S
11/ 4/77	327.2	S
11/30/77	328.0	S
1/ 7/78	328.6	S
2/ 3/78	328.5	S
3/ 3/78	328.5	S
4/ 4/78	323.1	S
4/ 6/78	326.0	S
5/ 3/78	322.2	S
6/ 2/78	322.0	S
7/ 6/78	322.1	S
8/ 2/78	323.1	S
9/ 6/78	322.4	S
10/ 3/78	320.4	S
11/ 7/78	320.0	S
1/ 5/79	318.7	S
2/10/79	317.9	S
3/ 5/79	316.9	S
4/ 6/79	324.4	S
6/ 5/79	371	M
7/11/79	352.6	S
8/ 6/79	344.9	S
9/ 6/79	348.3	S
10/ 9/79	344.0	S
11/ 1/79	339.2	S
12/ 4/79	337.2	S

Table 39. Water-level records for well P-15, Rustler Formation-Salado Formation contact zone - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
1/ 2/80	335.7	S
2/ 3/80	334.7	S
3/ 2/80	333.8	S
4/15/80	331.9	S
5/ 5/80	331.6	S
6/11/80	330.2	S
7/ 2/80	328.9	S
8/ 8/80	325.3	S
9/ 7/80	325.3	S
10/ 7/80	322.9	S
11/ 4/80	322.5	S
12/ 4/80	320.6	S
1/ 5/81	320.3	S
2/ 4/81	318.4	S
3/ 5/81	317.3	S
4/ 2/81	316.6	S
5/ 5/81	315.6	S
6/ 1/81	315.1	S
7/ 6/81	314.5	S
10/ 2/81	312.9	S
11/ 4/81	312.3	S
1/22/82	310.9	S
5/25/82	309.1	S
7/19/82	308.6	S
9/ 8/82	308.3	S
11/19/82	307.7	S
1/12/83	308.1	S
8/25/83	307.3	S

Table 40. Water-level records for well P-17, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.31.04.1356FSL.0398FWL

Total depth: 1,660.7 Land-surface altitude: 3,334.2

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	372	M Probable packer leak.
6/23/77	373.4	S Do.
8/ 4/77	372	M Do.
9/ 3/77	373	M Do.
10/ 3/77	372	M Do.
11/ 3/77	372	M Do.
11/30/77	372	M Do.
1/ 7/78	372	A Do.
2/ 3/78	371	A Do.
3/ 2/78	370	A Do.
4/ 4/78	370	A Do.
5/ 3/78	369	A Do.
6/ 1/78	370	A Do.
7/ 6/78	370	A Do.
8/ 1/78	369	A Do.
9/ 6/78	369	A Do.
10/ 3/78	368	A Do.
11/ 8/78	368	A Do.
12/ 6/78	368	A Do.
1/16/79	366	A Do.
2/11/79	367	A Do.
3/ 5/79	366	A Do.
4/20/79	366.8	S Do.
5/ 8/79	364	A Do.
7/11/79	369.6	S Do.
8/ 7/79	367.3	S Do.
5/25/82	360.5	S Do.

Table 41. Water-level records for well P-17, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 23.31.04.1356FSL.0398FWL
 Total depth: 1,660.7 Land-surface altitude: 3,334.2

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	371	M Probable packer leak.
6/23/77	373.9	S Do.
8/ 4/77	376	M Do.
9/ 4/77	370	M Do.
10/ 1/77	370	M Do.
11/ 4/77	368.9	S Do.
11/30/77	368.1	S Do.
1/ 7/78	367.8	S Do.
2/ 3/78	367.7	S Do.
3/ 2/78	367.2	S Do.
4/ 4/78	367.3	S Do.
5/ 3/78	366.7	S Do.
6/ 1/78	367.5	S Do.
7/ 6/78	366.5	S Do.
8/ 1/78	366.4	S Do.
9/ 6/78	366.0	S Do.
10/ 3/78	365.7	S Do.
11/ 8/78	365.4	S Do.
12/ 6/78	364.9	S Do.
1/ 5/79	364.9	S Do.
2/11/79	365.0	S Do.
3/ 5/79	365.0	S Do.
4/20/79	365.2	S Do.
4/24/79	365.2	S Do.
5/ 8/79	365.1	S Do.
11/ 4/81	322.6	S
12/ 1/81	322.8	S
1/22/82	320.5	S
5/25/82	316.3	S

Table 42. Water-level records for well P-18, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.26.0139FSL.0733FEL

Total depth: 2,000.5 Land-surface altitude: 3,475.8

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	1,034	A
8/ 4/77	1,015	A
9/ 3/77	1,016	A
10/ 3/77	999	A
11/ 3/77	993	A
11/30/77	986	A
1/ 7/78	981	A
2/ 3/78	972	A
3/ 2/78	966	A
4/ 4/78	958	A
5/ 3/78	951	A
6/ 1/78	944	A
7/ 6/78	934	A
8/ 1/78	927	A
9/ 6/78	917	A
10/ 3/78	907	A
11/ 8/78	900	A
12/ 6/78	895	A
1/16/79	883	A
2/11/79	878	A
3/ 5/79	874	A
5/ 8/79	862	A
5/ 5/81	765	A
5/11/81	763	A
6/ 2/81	759	A
7/ 8/81	753	A
8/ 4/81	748	A
9/ 3/81	744	A
10/ 1/81	740	A
1/21/82	714	A

Table 42. Water-level records for well P-18, Culebra Dolomite
Member of the Rustler Formation - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/82	713	A
8/19/82	705	A
3/15/83	703	W

Table 43. Water-level records for well P-18, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.31.26.0139FSL.0733FEL

Total depth: 2,000.5 Land-surface altitude: 3,475.8

Date	Water level, in feet below land surface	Measurement code and remarks
5/25/77	1,011	M
8/ 4/77	882	M
9/ 4/77	836	M
10/ 1/77	801	M
11/ 4/77	755	M
11/30/77	723	M
1/ 7/78	676	A
2/ 3/78	645	A
3/ 2/78	612	A
4/ 4/78	585	A
5/ 3/78	557	A
6/ 1/78	530	A
7/ 6/78	503	A
10/ 3/78	487	A
11/ 8/78	472	A
12/ 6/78	461	A
1/16/79	444	A
2/11/79	435	A
3/ 5/79	428	A
5/ 8/79	409	A
5/ 5/81	960	W
6/ 2/81	921	W
7/ 8/81	874	W
8/ 4/81	840	W
9/ 3/81	804	W
10/ 1/81	774	W
11/ 4/81	737.6	S
12/ 1/81	710.4	S
1/21/82	665	W
2/18/82	641.5	S

Table 43. Water-level records for well P-18, Rustler Formation-
Salado Formation contact zone - Concluded

Date	Water level, in feet below land surface	Measurement code and remarks
3/10/82	626.7	S
5/25/82	574.9	S
8/19/82	527.9	S
1/19/83	624	W

Table 44. Water-level records for well WIPP-16, breccia

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.30.05.2356FSL.0139FWL

Total depth: 1,300.0 Land-surface altitude: 3,383.0

Date	Water level, in feet below land surface	Measurement code and remarks
2/26/80	282.7	S
2/27/80	282.9	S
2/28/80	283.0	S
3/ 2/80	284.6	S
3/ 6/80	287.4	S
3/14/80	291.6	S
3/24/80	294.7	S
4/ 2/80	296.5	S
4/16/80	298.7	S
5/ 7/80	300.8	S
6/ 9/80	303.0	S
6/30/80	303.7	S
10/ 8/80	303.6	S
11/ 3/80	302.8	S
12/ 1/80	301.9	S
2/ 6/81	299.6	S
5/ 6/81	297.4	S
10/ 5/81	294.5	S
1/19/82	293.5	S

Table 45. Water-level records for well WIPP-25, Magenta Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.30.15.1853FSL.2838FEL

Total depth: 655.0 Land-surface altitude: 3,211.8

Date	Water level, in feet below land surface	Measurement code and remarks
10/ 8/80	158	M
11/ 3/80	157.8	S
12/ 1/80	158.3	S
2/ 6/81	158.6	S
3/ 2/81	158.6	S
5/ 7/81	158.7	S
10/ 5/81	159.8	S
1/19/82	159.6	S
5/18/82	159.8	S
7/19/82	159.8	S
9/ 8/82	159.8	S
11/19/82	160.3	S
1/12/83	159.7	S
8/24/83	159.8	S
9/29/83	159.2	S
11/21/83	158.6	S
1/23/84	158.3	S
10/18/84	157.7	S
1/ 7/85	157.2	S

Table 46. Water-level records for well WIPP-25, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 22.30.15.1853FSL.2838FEL

Total depth: 655.0 Land-surface altitude: 3,211.8

Date	Water level, in feet below land surface	Measurement code and remarks
8/24/83	160.4	S
9/29/83	160.4	S
11/21/83	160.5	S
1/23/84	161.3	S
10/18/84	159.7	S
1/ 7/85	161.0	S

Table 47. Water-level records for well WIPP-25, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.30.15.1853FSL.2838FEL

Total depth: 655.0 Land-surface altitude: 3,211.8

Date	Water level, in feet below land surface	Measurement code and remarks
3/14/80	263	M
4/16/80	255	M
5/ 7/80	250	M
6/ 9/80	241	M
6/16/80	240.0	S
6/19/80	239.6	S
6/24/80	239.1	S
6/30/80	238.4	S

Table 48. Water-level records for well WIPP-26, Magenta Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.30.29.2232FNL.0012FEL

Total depth: 503.0 Land-surface altitude: 3,151.7

Date	Water level, in feet below land surface	Measurement code and remarks
9/17/80	127	M
9/22/80	127	M
10/ 8/80	128	M
11/ 3/80	127.3	S
12/ 1/80	127.2	S
3/ 4/81	127.2	S
5/ 7/81	127.2	S
1/19/82	130.0	S
5/19/82	127.1	S
7/19/82	127.0	S
9/ 8/82	127.1	S
11/19/82	127.1	S
1/12/83	127.0	S

Table 49. Water-level records for well WIPP-26, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.30.29.2232FNL.0012FEL

Total depth: 503.0 Land-surface altitude: 3,151.7

Date	Water level, in feet below land surface	Measurement code and remarks
8/24/83	141.7	S
9/29/83	141.5	S
11/21/83	140.8	S
1/24/84	141.5	S
10/20/84	137.3	S
1/ 7/85	137.3	S

Table 50. Water-level records for well WIPP-26, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.30.29.2232FNL.0012FEL

Total depth: 503.0 Land-surface altitude: 3,151.7

Date	Water level, in feet below land surface	Measurement code and remarks
3/12/80	217.0	S
3/14/80	201.3	S
3/18/80	197.6	S
4/16/80	195	M
5/ 7/80	194	M
6/ 9/80	192.1	S
6/30/80	191.7	S

Table 51. Water-level records for well WIPP-27, Magenta Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.30.21.0090FNL.1485FWL

Total depth: 592.0 Land-surface altitude: 3,174.4

Date	Water level, in feet below land surface	Measurement code and remarks
10/ 8/80	106	M
11/ 3/80	104.1	S
12/ 1/80	103.6	S
2/ 6/81	103.4	S
3/ 4/81	103.3	S
5/ 6/81	103.1	S
10/ 5/81	102.1	S
1/19/82	102.2	S
5/18/82	103.5	S
3/ 2/83	105.6	S
7/20/83	107.3	S
8/24/83	107.5	S
11/21/83	107.0	S
1/23/84	106.9	S
10/18/84	106.4	S
1/ 7/85	106.5	S

Table 52. Water-level records for well WIPP-27, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure
Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total
depth is in feet below land surface. Land-surface altitude
is in feet above sea level.]

Location: 21.30.21.0090FNL.1485FWL

Total depth: 592.0 Land-surface altitude: 3,174.4

Date	Water level, in feet below land surface	Measurement code and remarks
8/24/83	106.1	S
11/21/83	105.4	S
1/23/84	105.2	S
10/18/84	104.5	S
1/ 7/85	104.3	S

Table 53. Water-level records for well WIPP-27, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.30.21.0090FNL.1485FWL

Total depth: 592.0 Land-surface altitude: 3,174.4

Date	Water level, in feet below land surface	Measurement code and remarks
3/17/80	540	W Perforated casing.
3/18/80	478	W
4/16/80	120	W
5/ 7/80	110	W
6/ 7/80	109	W Measured at 0845.
6/ 7/80	565	W Measured at 1120.
6/ 9/80	518	W
6/10/80	499	W
6/11/80	489	W
6/12/80	471	W
6/13/80	453	W
6/14/80	434	W
6/15/80	414	W
6/16/80	396	W
6/17/80	377.5	S
6/18/80	358.3	S
6/19/80	338.8	S
6/20/80	315.5	S
6/21/80	308	W
6/22/80	292	W
6/23/80	275.6	S
6/24/80	263.2	S
6/25/80	252	W
6/26/80	240	W
6/27/80	229	W
6/28/80	220	W
6/29/80	212	W
6/30/80	204	W
7/ 2/80	192	W

Table 54. Water-level records for well WIPP-28, Magenta Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.31.18.0099FNL.2401FEL
 Total depth: 801.0 Land-surface altitude: 3,346.8

Date	Water level, in feet below land surface	Measurement code and remarks
9/23/80	340	M
10/ 8/80	305	M
11/ 3/80	232.8	S
5/ 6/81	201.0	S
7/ 7/81	201.7	S
8/ 3/81	202.6	S
9/ 1/81	202.9	S
10/ 5/81	202.8	S
1/19/82	202.4	S
5/19/82	202.0	S
3/ 2/83	201.4	S

Table 55. Water-level records for well WIPP-28, Culebra Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.31.18.0099FNL.2401FEL

Total depth: 801.0 Land-surface altitude: 3,346.8

Date	Water level, in feet below land surface	Measurement code and remarks
9/29/83	274.4	S
11/21/83	274.2	S
1/23/84	274.8	S
10/18/84	274.6	S
1/ 7/85	274.2	S

Table 56. Water-level records for well WIPP-28, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.31.18.0099FNL.2401FEL
 Total depth: 801.0 Land-surface altitude: 3,346.8

Date	Water level, in feet below land surface	Measurement code and remarks
3/15/80	410	W
3/17/80	330	W
4/16/80	314	W
5/ 7/80	308	W
6/ 9/80	304	W
6/19/80	303.1	S
6/24/80	303.3	S
6/30/80	303.3	S
8/24/83	295.4	S
9/29/83	294.1	S
11/21/83	294.2	S
1/23/84	293.9	S
10/18/84	293.0	S
1/ 7/85	291.8	S

Table 57. Water-level records for well WIPP-29, Culebra Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.29.34.0407FSL.1828FEL

Total depth: 376.0 Land-surface altitude: 2,977.1

Date	Water level, in feet below land surface	Measurement code and remarks
10/ 8/80	7.9	S
11/ 3/80	9.1	S
12/ 1/80	8.5	S
3/ 4/81	9.4	S
5/ 7/81	8.2	S
10/ 6/81	10.0	S
1/19/82	10.2	S
5/18/82	10.4	S
7/19/82	10.2	S
9/ 8/82	10.9	S
11/19/82	10.7	S
1/12/83	9.8	S
7/18/83	11.1	S
8/25/83	10.4	S
9/29/83	10.2	S
11/21/83	9.6	S
1/24/84	9.8	S
10/20/84	9.8	S
1/ 7/85	9.7	S

Table 58. Water-level records for well WIPP-29, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 22.29.34.0407FSL.1828FEL

Total depth: 376.0 Land-surface altitude: 2,977.1

Date	Water level, in feet below land surface	Measurement code and remarks
3/11/80	20.5	S
3/14/80	19.1	S
4/15/80	19.2	S
5/ 7/80	19.2	S
6/ 9/80	17.0	S
6/30/80	17.6	S
8/25/83	39.0	S
9/29/83	38.4	S
11/21/83	37.1	S
1/24/84	36.4	S
10/20/84	31.1	S
1/ 7/85	30.0	S

Table 59. Water-level records for well WIPP-30, Magenta Dolomite Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.31.33.0668FNL.0177FWL

Total depth: 913.0 Land-surface altitude: 3,424.8

Date	Water level, in feet below land surface	Measurement code and remarks
9/22/80	419	M
9/23/80	411	M
9/24/80	403	M
12/ 1/80	303.7	S
5/ 7/81	316	M
10/ 7/81	308	M
1/19/82	306	M
5/19/82	304.0	S
7/19/82	303.9	S
9/ 8/82	303.9	S
11/19/82	303.6	S
1/12/83	303.4	S
7/21/83	302.9	S
8/23/83	336.7	S
9/29/83	335.6	S
11/21/83	335.3	S
1/23/84	335.1	S
10/18/84	333.4	S
1/ 7/85	333.3	S

Table 60. Water-level records for well WIPP-30, Culebra Dolomite
Member of the Rustler Formation

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.31.33.0668FNL.0177FWL

Total depth: 913.0 Land-surface altitude: 3,424.8

Date	Water level, in feet below land surface	Measurement code and remarks
8/23/83	401.5	S
9/29/83	400.3	S
11/21/83	398.7	S
1/23/84	397.0	S
10/18/84	386.9	S
1/ 7/85	386.4	S

Table 61. Water-level records for well WIPP-30, Rustler Formation-Salado Formation contact zone

[Measurement code: A, Air-line measurement; L, Lynes Pressure Sentry System; M, M-Scope; S, Steel tape; W, Winch. Total depth is in feet below land surface. Land-surface altitude is in feet above sea level.]

Location: 21.31.33.0668FNL.0177FWL

Total depth: 913.0 Land-surface altitude: 3,424.8

Date	Water level, in feet below land surface	Measurement code and remarks
4/15/80	474	W
5/ 7/80	474	W
6/ 9/80	473	W
6/16/80	473.2	S
6/19/80	473.2	S
6/24/80	473.3	S
6/30/80	473.3	S