

***HYDROLOGIC-TEST DATA FROM WELLS AT
HYDROLOGIC-TEST PADS H-7, H-8, H-9,
AND H-10 NEAR THE PROPOSED
WASTE ISOLATION PILOT PLANT
SITE, SOUTHEASTERN NEW MEXICO***

By Steven F. Richey

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CONVERSION FACTORS

In this report figures for measurements are given in inch-pound units only. The following tables 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
foot squared per day	0.0929	meter squared per day
gallon	3.785	liter
gallon per minute	0.06309	liter per second
pound per square inch	0.07031	kilogram per square centimeter

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

**HYDROLOGIC-TEST DATA FROM WELLS AT HYDROLOGIC-TEST
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ISOLATION PILOT PLANT SITE, SOUTHEASTERN NEW MEXICO**

By Steven F. Richey

ABSTRACT

Hydrologic testing was conducted in 1980 and 1981 at wells at hydrologic-test pads H-7, H-8, H-9, and H-10 near the proposed Waste Isolation Pilot Plant site in southeastern New Mexico. Tests were conducted in three zones above the horizon of the proposed underground storage facility. The zones are the Magenta Dolomite Member of the Rustler Formation, the Culebra Dolomite Member of the Rustler Formation, and the Rustler Formation-Salado Formation contact zone. Data presented are from bailing tests, density profiles, shut-in tests, slug tests, flow tests, pressure-pulse tests, and pumping tests.

INTRODUCTION

The U.S. Geological Survey, at the request of the U.S. Department of Energy, is investigating the geohydrology of the proposed Waste Isolation Pilot Plant (WIPP) site in southeastern New Mexico (fig. 1). The site is intended as a storage facility for defense-associated transuranic waste. The investigation is designed to supplement work conducted by Sandia National Laboratories, which is responsible for technical development of the site. The proposed facility would be constructed in bedded salts of the Permian Salado Formation.

This publication reports data obtained during hydrologic testing of wells at hydrologic-test pads H-7, H-8, H-9, and H-10. These wells are completed in several water-bearing zones above the salt section in an area roughly south of the proposed facility (fig. 1 and table 1). Tables 2 through 13 provide data from bailing tests, shut-in tests, slug tests, flow tests, pressure-pulse tests, and pumping tests. The tests performed depended upon the hydrologic conditions encountered at each well. Tables 14 through 24 provide water-level data from long-term monitoring of the wells and tables 25 through 33 provide data from density profiles. Descriptions of testing procedures are provided by Basler (1983).

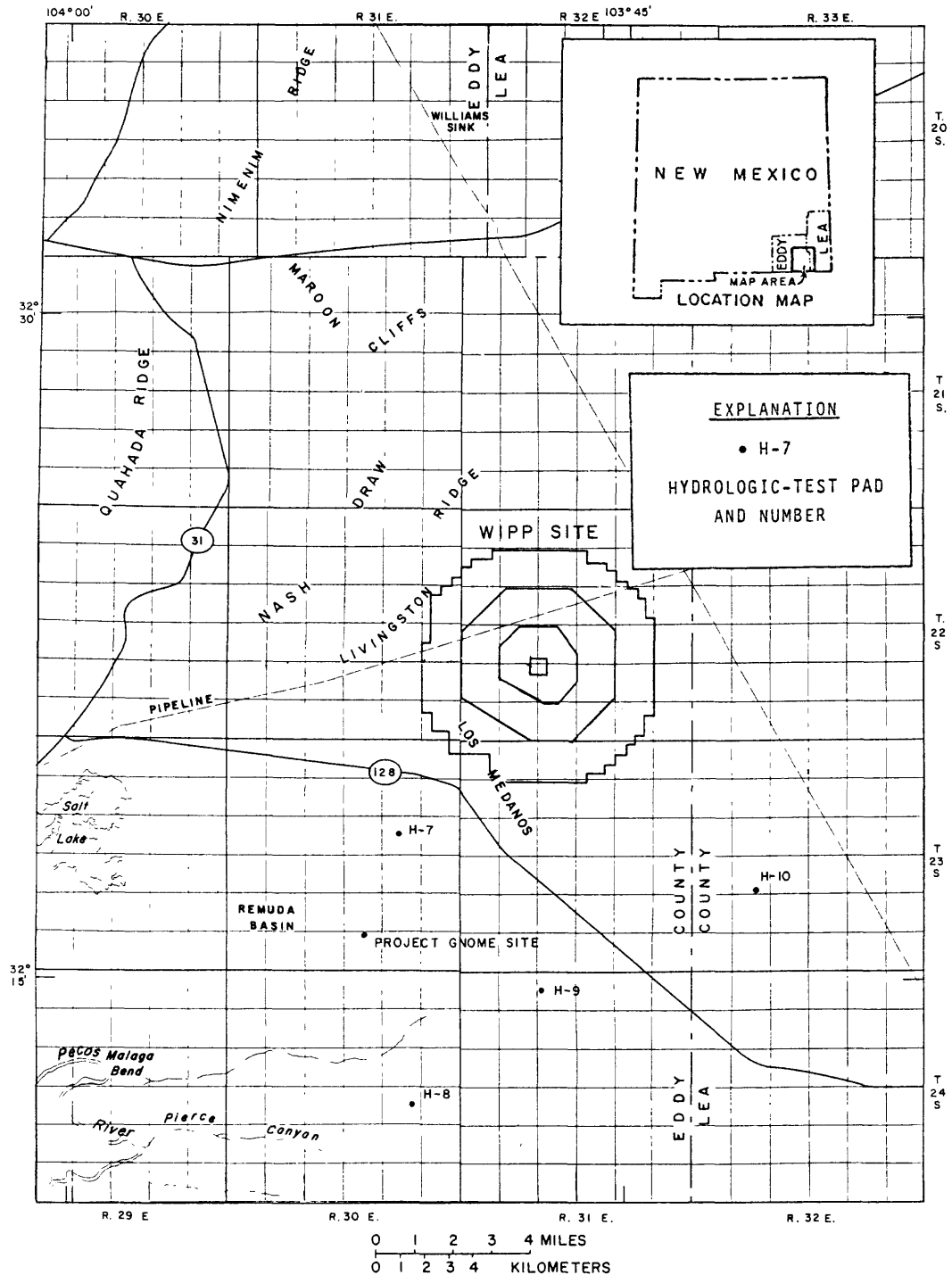


Figure 1.--General location of the proposed Waste Isolation Pilot Plant site and hydrologic-test pads H-7, H-8, H-9, and H-10.

Table 1. Locations of wells tested

[FNL, feet from north section line; FWL, feet from west section line; FEL, feet from east section line; FSL, feet from south section line; Modified from Mercer, 1983]

Test well	Location				Distance	
	Section	Township	Range		(feet)	
H-7A	14	23S.	30E.	2,495.04 FNL	2,492.35	FWL
H-7B	14	23S.	30E.	2,565.80 FNL	2,563.45	FWL
H-7C	14	23S.	30E.	2,591.93 FNL	2,467.51	FWL
H-8A	23	24S.	30E.	1,962.61 FNL	1,486.59	FEL
H-8B	23	24S.	30E.	1,994.76 FNL	1,405.39	FEL
H-8C	23	24S.	30E.	2,059.39 FNL	1,470.14	FEL
H-9A	4	24S.	31E.	2,392.14 FNL	138.92	FWL
H-9B	4	24S.	31E.	2,391.04 FNL	238.63	FWL
H-9C	4	24S.	31E.	2,479.06 FNL	188.02	FWL
H-10A	20	23S.	32E.	433.04 FSL	2,068.91	FEL
H-10B	20	23S.	32E.	484.54 FSL	1,981.84	FEL
H-10C	20	23S.	32E.	384.54 FSL	1,981.84	FEL

HYDROLOGIC-TEST PROCEDURES

Bailing, shut-in, slug, flow, pressure-pulse, and pumping tests (tables 2 through 13) were selectively run in wells drilled specifically for hydrologic testing. Bailing tests were generally run first to develop the well and to obtain preliminary hydrologic data that could be used to indicate which other tests should be run. Pressure-pulse, shut-in, slug, and flow tests were run when the test zone yielded small quantities of water to the well (less than 0.5 gallon per minute). These three tests were primarily restricted to wells that were fully developed and fully penetrated a confined aquifer. In addition, the pressure-pulse, slug, and flow tests were restricted to wells that were completed in zones of low transmissivity. Pumping tests were run when the test zone was determined by prior testing to have a transmissivity of greater than 10 feet squared per day.

Pretest Activities

Drilling of hydrologic-test wells at the WIPP site was done using special techniques to ensure that when hydrologic tests were run they would accurately reflect hydrologic properties of the aquifer. These techniques included using air, air foam, and brine as circulation mediums during drilling and coring.

To test the different zones above the repository level, three wells were drilled at each hydrologic-test pad. Each well was completed in a different test zone: well A was completed in the Magenta Dolomite Member of the Rustler Formation, well B in the Culebra Dolomite Member of the Rustler Formation, and well C in the Rustler Formation-Salado Formation contact zone. Each well was drilled and cased to a point above the test zone and the casing was cemented. The test zone was then cored.

After the well was completed it was developed by flushing with brine which was subsequently removed by using compressed air. This method was used to make sure that the rock immediately surrounding the well retained hydrologic properties that were representative of the formation.

Pressure-Monitoring System

Data from testing were usually obtained by using a pressure transducer to monitor response of the tested zone. A digital-readout data logger at the surface continuously recorded the transducer signals before and during the test period. This method helped to ensure proper initiation and completion of the test. For a comprehensive technical description of the pressure-monitoring and recording system the reader is referred to Basler (1983).

Open-Casing Tests

Open-casing tests included pumping tests and bailing tests. When bailing tests indicated a formation transmissivity greater than 1 foot squared per day, an open-casing slug-injection or slug-displacement test was employed.

The test wells were bailed to develop the well, to remove foreign water used in testing, and to stress the well for a subsequent test. After bailing, very high or very low formation transmissivity sometimes precluded the collection of recovery data. Data from bailing tests that did not have any recovery are included in the tables because the amount of fluid removed from a well may be significant for some purposes. Detailed discussion of bailing procedures and data collection may be found in Basler (1983, p. 15).

The other open-casing tests, slug injection and slug displacement, are similar to each other in principal. The slug-injection test was initiated by pumping a known volume of water down the well whereas the slug-displacement test was initiated by either lowering a displacement barrel of known volume below the water level or by raising it above the water level after being submerged. Aquifer response was then monitored. A detailed description of open-casing slug-injection and slug-displacement tests may be found in Basler (1983, p. 16-18).

Constant-rate pumping tests were run when prior testing had established that the transmissivity of the formation was greater than 10 feet squared per day. A discharge rate was determined by running a series of step-discharge tests. The constant-rate pumping test was started after the aquifer had reached equilibrium. A detailed description of the constant-rate pumping test may be found in Basler (1983, p. 18).

Packer Tests

Special testing procedures were used in wells that had small yields. Inflatable packers in two basic designs reduced the amount of formation water needed for testing because the diameter of the packer tubing was smaller than that of the well bore. The standard production-injection packer was instrumented from the surface after the packer was set. The feed-through packer was basically a standard production-injection packer modified to have small diameter tubing running through the inflation elements. A pressure transducer was attached to this tubing just above the packer element. Either type of packer was placed just above the test zone and inflated using formation water when possible. When it was necessary to use foreign water for inflation or testing, the water was removed at the first opportunity to maintain the chemical integrity of the in situ formation water. Packer tests included shut-in, slug, flow, and pressure-pulse.

The shut-in test was conducted immediately after bailing, after a packer was placed at the predetermined test depth and inflated using a rig-mounted pump. The increasing pressure caused by recovery from bailing was monitored below the packer. The test was terminated after a static pressure was reached in the test zone or after sufficient data had been obtained.

After the shut-in test the well was in a configuration suitable for a slug test. Where the packer tubing was already full of formation water that was used for packer inflation, all that had to be done to initiate the packer slug test was to open the tubing to the test zone and monitor the pressure below the packer.

Slug tests were not always appropriate because some test zones did not yield enough formation water from bailing for packer inflation. In these cases, freshwater generally was used for packer inflation and subsequently removed with a tubing bailer during the shut-in test to avoid contamination of the aquifer with foreign water. A flow test could then be run by allowing formation water to flow into the empty tubing.

The pressure-pulse test was used on formations determined to have very low transmissivities. The test was initiated by applying a nearly instantaneous increase in hydraulic pressure to the test zone. The pressures were then monitored at a point near the well head. A detailed description of the methods used may be found in Basler (1983, p. 26-28).

DENSITY PROFILE

The density profiles provided in tables 25 through 33 were done mainly to aid in interpretation of long-term water-level measurements. They indicate the amount of change of the density gradient in the well casing over time. They are not an indication of density gradients of water in the formation. The density profiles were performed by using a point sampler to obtain water samples at selected depths in the well. These samples were checked for density and temperature.

REFERENCES

- Basler, J. A., 1983, Instrumentation used for hydraulic testing of potential water-bearing formations at the Waste Isolation Pilot Plant site in southeastern New Mexico: U.S. Geological Survey Open-File Report 83-144, 29 p.
- Bredehoeft, H. D., and Papadopoulos, I. S., 1980, A method for determining the hydraulic properties of tight formations: Water Resources Research, v. 16., no. 1, p. 233-238.
- Mercer, J. W., 1983, Geohydrology of the proposed Waste Isolation Pilot Plant site, Los Medaños area, southeastern New Mexico: U.S. Geological Survey Water-Resources Investigations Report 83-4016, 113 p.

Table 2. Data from well H-7A bailing test

Bailing Test 1

Starting date: Unknown	Tested interval: 110-154 feet
Hole depth: 154 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-109 feet	Geologic unit tested: Magenta Dolomite Member of the Rustler Formation
Type of bailer: Dart valve	Capacity: 11.3 gallons
Remark: Magenta Dolomite was dry.	

Table 3. Data from well H-7B bailing and pumping tests

Bailing Test 1

Starting date: 03-20-80	Tested interval: 230-286 feet
Hole depth: 286 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-230 feet	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation

Static water level was 171.51 feet below land surface before bailing.

Type of bailer: Dart valve	Capacity: 11.3 gallons
----------------------------	------------------------

Total amount of fluid bailed: 280 gallons

Remarks: Recovery not monitored. Ran 26 bailing trips from 1246 to 1332.
Bailer number 25 was dry. Kept fluid sample for analyses from
bailer numbers 24 and 26.

Pumping Test 1

Starting date: 03-25-80	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation
Hole depth: 286 feet	
Tested interval: 230-286 feet	Cased interval: 0-230 feet
	Diameter of tested interval: 6.125 inches

Static water level was 170.05 feet below land surface prior to this testing phase.

Remark: Test aborted on 03-28-80 due to pump malfunction.

Table 3. Data from well H-7B bailing and pumping tests - Continued

Pumping Test 2

Starting date: 04-17-81	Geologic unit tested: Culebra Dolomite
	Member of the
Hole depth: 286 feet	Rustler Formation
Tested interval: 230-286 feet	Cased interval: 0-230 feet
Pumping rate: 40.0 gallons per minute	Diameter of tested interval: 6.125 inches

Pump intake port was at 223.4 feet below land surface.

Measuring point was transducer pressure port which was 210 feet below land surface.

Static water level was 170.05 feet below land surface prior to this testing phase.

Table 3. Data from well H-7B balling and pumping tests - Continued

Pumping Test 2 - Continued

Water pressure			Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 04-17-81								
0900:00	17.3	Pumping	1000:00	15.9	--	1501:10	16.3	--
01:00	16.7	--	05:00	15.7	--	:20	16.4	--
02:00	16.6	--	10:00	15.6	--	:30	16.4	--
03:00	16.5	--	15:00	15.6	--	:40	16.4	--
04:00	16.4	--	20:00	15.5	--	:50	16.5	--
05:00	16.3	--	25:00	15.5	--	1502:00	16.5	--
06:00	16.3	--	30:00	15.5	--	:10	16.5	--
07:00	16.2	--	35:00	15.5	--	:20	16.5	--
08:00	16.2	--	40:00	15.5	--	:30	16.6	--
09:00	16.2	--	45:00	15.5	--	:40	16.6	--
10:00	16.2	--	1100:00	15.5	--	:50	16.6	--
11:00	16.1	--	1200:00	15.5	--	1503:00	16.6	--
12:00	16.1	--	1300:00	15.5	--	:20	16.7	--
15:00	16.1	--	1400:00	15.5	--	:40	16.7	--
20:00	16.0	--	1430:00	15.5	--	1504:00	16.7	--
25:00	16.0	--	1500:00	15.5	--	:30	16.7	--
30:00	16.0	--	:10	15.9	Pumping stopped	1505:00	16.8	--
35:00	15.9	--	:20	16.0	Recovery	:30	16.8	--
40:00	15.9	--	:30	16.1	--	1506:00	16.8	--
45:00	15.9	--	:40	16.2	--	:30	16.9	--
50:00	15.9	--	:50	16.3	--	1507:00	16.9	--
55:00	15.9	--	1501:00	16.3	--	:30	16.9	--
								End of test
								17.3

Table 3. Data from well H-7B bailing and pumping tests - Continued

Pumping Test 3

Starting date: 04-20-81	Geologic unit tested: Culebra Dolomite
	Member of the
Hole depth: 286 feet	Rustler Formation
Tested interval: 230-286 feet	Cased interval: 0-230 feet
Pumping rate: 40.1 gallons per minute	Diameter of tested interval: 6.125 inches

Pump intake port was at 223.4 feet below land surface.

Measuring point was transducer pressure port which was 210 feet below land surface.

Static water level was 170.05 feet below land surface prior to this testing phase.

Pumping Test 3 - Continued

13

Table 3. Data from well H-7B bailing and pumping tests - Continued

Pumping Test 3 - Continued

Clock time	Water pressure (pounds per square inch)	Remarks	Water pressure (pounds per square inch)				Remarks	Clock time	Water pressure (pounds per square inch)	Remarks	Clock time	Water pressure (pounds per square inch)	Remarks	
			Clock time											
Date: 04-20-81				Date: 04-21-81				Date: 04-21-81						
1120:00	15.5	--	1510:00	15.5	--	0750:00	15.5	--	2340:00	15.4	--	2340:00	15.4	--
30:00	15.5	--	1600:00	15.5	--	0800:00	15.4	--	0030:00	15.4	--	0030:00	15.4	--
40:00	15.5	--	50:00	15.5	--	40:00	15.4	--	0120:00	15.4	--	0120:00	15.4	--
50:00	15.5	--	1730:00	15.5	--	0930:00	15.4	--	0210:00	15.4	--	0210:00	15.4	--
1200:00	15.5	--	40:00	15.5	--	1020:00	15.4	--	0300:00	15.4	--	0300:00	15.4	--
10:00	15.5	--	1830:00	15.5	--	1110:00	15.4	--	50:00	15.4	--	50:00	15.4	--
20:00	15.5	--	1900:00	15.5	--	1200:00	15.4	--	0440:00	15.4	--	0440:00	15.4	--
30:00	15.5	--	20:00	15.5	--	50:00	15.4	--	0530:00	15.4	--	0530:00	15.4	--
40:00	15.5	--	2010:00	15.5	--	1340:00	15.4	--	0620:00	15.4	--	0620:00	15.4	--
50:00	15.5	--	2100:00	15.5	--	1430:00	15.4	--	0710:00	15.4	--	0710:00	15.4	--
1300:00	15.5	--	50:00	15.5	--	1520:00	15.4	--	0800:00	15.4	--	0800:00	15.4	--
10:00	15.5	--	2240:00	15.5	--	1610:00	15.4	--	50:00	15.4	--	50:00	15.4	--
20:00	15.5	--	2330:00	15.5	--	30:00	15.4	--	0940:00	15.4	--	0940:00	15.4	--
30:00	15.5	--	Date: 04-21-81				1700:00	15.4	--	1030:00	15.4	1030:00	15.4	--
40:00	15.5	--	0020:00	15.5	--	50:00	15.4	--	1130:00	15.4	--	1130:00	15.4	--
50:00	15.5	--	0110:00	15.5	--	1840:00	15.4	--	1210:00	15.3	--	1210:00	15.3	--
1400:00	15.5	--	0200:00	15.5	--	1930:00	15.4	--	1300:00	15.4	--	1300:00	15.4	--
10:00	15.5	--	50:00	15.5	--	2020:00	15.4	--	50:00	15.4	--	50:00	15.4	--
20:00	15.5	--	0340:00	15.5	--	2110:00	15.4	--	1440:00	15.4	--	1440:00	15.4	--
30:00	15.5	--	0430:00	15.5	--	2200:00	15.4	--	1530:00	15.4	--	1530:00	15.4	--
40:00	15.5	--	0520:00	15.5	--	2250:00	15.4	--	1620:00	15.4	--	1620:00	15.4	--
50:00	15.5	--	0610:00	15.5	--									
1500:00	15.5	--	0700:00	15.5	--									

Pumping Test 3 - Continued

Water pressure				Water pressure				Water pressure			
Clock time	(pounds per square inch)	Remarks		Clock time	(pounds per square inch)	Remarks		Clock time	(pounds per square inch)	Remarks	
Date: 04-22-81				Date: 04-24-81							
1700:00	15.4	--		0950:00	15.4	--		0320:00	15.3	--	
10:00	15.4	--		1040:00	15.4	--		0410:00	15.3	--	
1800:00	15.4	--		1130:00	15.4	--		0500:00	15.3	--	
50:00	15.4	--		1220:00	15.3	--		50:00	15.3	--	
1940:00	15.4	--		1310:00	15.4	--		0640:00	15.3	--	
2030:00	15.4	--		1400:00	15.3	--		0730:00	15.3	--	
2120:00	15.4	--		50:00	15.4	--		0820:00	15.3	--	
2210:00	15.4	--		1540:00	15.4	--		50:00	15.3	--	
2300:00	15.4	--		1630:00	15.4	--		0910:00	15.3	--	
50:00	15.4	--		1720:00	15.4	--		05	15.5	Pump off	
Date: 04-23-81				1810:00	15.4	--		10	15.7	Recovery	
0040:00	15.4	--		1900:00	15.4	--		15	15.8	--	
0130:00	15.4	--		50:00	15.3	--		20	15.9	--	
0220:00	15.4	--		2040:00	15.4	--		25	16.0	--	
0310:00	15.3	--		2130:00	15.4	--		30	16.0	--	
0400:00	15.4	--		2220:00	15.3	--		35	16.1	--	
50:00	15.4	--		2310:00	15.3	--		40	16.1	--	
0540:00	15.3	--		2400:00	15.3	--		45	16.1	--	
0630:00	15.4	--		Date: 04-24-81				50	16.2	--	
0720:00	15.4	--		0050:00	15.3	--		55	16.2	--	
0810:00	15.3	--		0140:00	15.3	--		0911:00	16.2	--	
0900:00	15.4	--		0230:00	15.3	--		05	16.2	--	

Table 3. Data from well H-7B balling and pumping tests - Continued

Pumping Test 3 - Concluded

Water pressure		Water pressure		Water pressure	
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 04-24-81					
0916:20	16.7	--	0934:00	17.0	--
:40	16.8	--	35:00	17.0	--
0917:00	16.8	--	36:00	17.0	--
:30	16.8	--	37:00	17.1	--
0918:00	16.8	--	40:00	17.1	--
:30	16.8	--	45:00	17.1	--
0919:00	16.9	--	50:00	17.1	--
:30	16.9	--	54:00	17.1	--
0920:00	16.9	--	1000:00	17.1	--
21:00	16.9	--	05:00	17.1	--
22:00	16.9	--	10:00	17.1	--
23:00	16.9	--	20:00	17.1	--
24:00	17.0	--	30:00	17.1	--
25:00	17.0	--	40:00	17.1	--
26:00	17.0	--	50:00	17.1	--
27:00	17.0	--	1100:00	17.2	--
28:00	17.0	--	20:00	17.2	--
29:00	17.0	--	40:00	17.2	--
30:00	17.0	--	1200:00	17.2	--
31:00	17.0	--	1300:00	17.2	--
32:00	17.0	--	1400:00	17.2	--
33:00	17.0	--	1500:00	17.2	--
Date: 04-25-81					
			0400:00	17.2	--
			0600:00	17.2	--
			0800:00	17.2	--
			1000:00	17.2	End of test

Table 3. Data from well H-7B bailing and pumping tests - Continued

Pumping Test 4

Starting test: 09-16-81	Geologic unit tested: Culebra Dolomite
	Member of the
Hole depth: 286 feet	Rustler Formation
Tested interval: 230-286 feet	Cased interval: 0-230 feet
Pumping rate: 90 gallons per minute	Diameter of tested interval: 6.125 inches

Measuring point was transducer pressure port which was 210 feet below land surface.

Static water level was 170.14 feet below land surface prior to this testing phase.

Table 3. Data from well H-7B bailing and pumping tests - Continued

Pumping Test 4 - Continued

Water			Water			Water			Water		
Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks
Date: 09-16-81											
0716:00	--	Pumping	0732:00	13.5	--	0816:00	12.6	--	1110:00	12.5	--
:15	15.8	--	34:00	13.4	--	18:00	12.6	--	20:00	12.4	--
:30	15.5	--	36:00	13.3	--	20:00	12.6	--	25:00	12.4	--
:45	15.3	--	38:00	13.2	--	25:00	12.6	--	35:00	12.4	--
0717:00	15.1	--	40:00	13.1	--	30:00	12.5	--	45:00	12.4	--
:15	14.9	--	42:00	13.1	--	35:00	12.5	--	55:00	12.4	--
:30	14.8	--	44:00	13.0	--	40:00	12.6	--	1215:00	12.4	--
:45	14.7	--	46:00	13.0	--	45:00	12.5	--	1305:00	12.4	--
0718:00	14.7	--	48:00	12.9	--	50:00	12.5	--	55:00	12.4	--
19:00	14.4	--	50:00	12.9	--	0900:00	12.4	--	1445:00	12.9	--
20:00	14.1	--	52:00	12.9	--	10:00	12.5	--	1535:00	12.5	--
21:00	14.0	--	54:00	12.9	--	20:00	12.4	--	1625:00	12.4	--
22:00	13.9	--	56:00	12.8	--	30:00	12.7	--	1715:00	12.4	--
23:00	13.7	--	58:00	12.8	--	40:00	12.5	--	1805:00	12.3	--
24:00	13.6	--	0800:00	12.7	--	50:00	12.5	--	55:00	12.4	--
25:00	13.6	--	02:00	12.7	--	1000:00	12.5	--	1945:00	12.4	End pumping
26:00	13.5	--	04:00	12.7	--	10:00	12.5	--	46:00	13.7	Recovery
27:00	13.7	--	06:00	12.7	--	20:00	12.5	--	47:00	14.4	--
28:00	13.6	--	08:00	12.7	--	30:00	12.5	--	48:00	15.1	--
29:00	13.6	--	10:00	12.7	--	40:00	12.4	--	49:00	16.0	--
30:00	13.5	--	12:00	12.6	--	50:00	12.5	--	50:00	16.2	--
31:00	13.5	--	14:00	12.6	--	1100:00	12.4	--	51:00	16.4	--

Table 3. Data from well H-7B balling and pumping tests - Concluded

Pumping Test 4 - Concluded

Water pressure		Water pressure	
Clock time	(pounds per square inch)	Clock time	(pounds per square inch)
Remarks	Remarks	Remarks	Remarks
Date: 09-16-81			
1952:00	16.5	2115:00	17.4
53:00	16.6	25:00	17.4
54:00	16.7	35:00	17.4
55:00	16.8	45:00	17.4
56:00	16.8	55:00	17.4
57:00	16.9	2205:00	17.5
58:00	16.9	15:00	17.4
59:00	16.9	25:00	17.5
2000:00	17.0	35:00	17.5
05:00	17.1	2305:00	17.5
10:00	17.2	55:00	17.5
15:00	17.2	Date: 09-17-81	
20:00	17.2		
25:00	17.3	0045:00	17.5
30:00	17.3	0135:00	17.5
35:00	17.3	0225:00	17.5
40:00	17.3	0315:00	17.5
45:00	17.3	0405:00	17.5
50:00	17.4	55:00	17.5
55:00	17.4	0545:00	17.5
2100:00	17.4	0635:00	17.5
05:00	17.4	0700:00	17.5
		End of test	

Table 4. Data from well H-7C bailing, shut-in, and slug tests

Bailing Test 1

Starting date: 03-07-80	Tested interval: 356-420 feet
Hole depth: 420 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-356 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone

Static water level was unknown before bailing.

Type of bailer: Dart valve Capacity: 11.3 gallons

Total amount of fluid bailed: 1,230 gallons

Remarks: Recovery not monitored. Ran 110 bailing trips from 0827 to 1349 with one bailer empty.

Bailing Test 2

Starting date: 03-08-80	Tested interval: 356-420 feet
Hole depth: 420 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-356 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone

Static water level was 204 feet below land surface before bailing.

Type of bailer: Dart valve Capacity: 11.3 gallons

Total amount of fluid bailed: 680 gallons.

Remarks: Recovery not monitored. Ran 60 bailing trips from 0935 to 1114.

Table 4. Data from well H-7C bailing, shut-in, and slug tests - Continued

Bailing Test 3

Starting date: 03-20-80	Tested interval: 356-420 feet
Hole depth: 420 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-356 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone

Static water level was unknown before bailing.

Type of bailer: Dart valve Capacity: 11.3 gallons

Total amount of fluid bailed: 280 gallons

Remarks: Recovery not monitored. Ran 25 bailing trips from 1403 to 1545.
Collected fluid sample.

Bailing Test 4

Starting date: 11-19-80	Screened interval tested: 360-390 feet
Hole depth: 420 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-420 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone

Static water level was unknown before bailing.

Type of bailer: Dart valve

Total amount of fluid bailed: 150 gallons.

Remarks: Bailing to remove mud after installation of screen. Recovery not monitored. Bailed from 1100 to 1200.

Table 4. Data from well H-7C bailing, shut-in, and slug tests - Continued

Shut-In Test 1

Starting date: 04-13-81	Diameter of tested interval: 6.125 inches
Shut in after: Bailing	Geologic unit tested: Rustler Formation- Salado Formation contact zone
Hole depth: 420 feet	
Cased interval: 0-420 feet	Packer type: Production injection packer with feed through
Screened interval tested: 360-390 feet	Packer diameter: 4.25 inches

Packer set at 232.8 feet below land surface.

Measuring point was transducer tubing below the packer which was
236.5 feet below land surface.

Static water level was 212 feet below land surface in February 1981 prior to
this testing phase.

Table 4. Data from well H-7C balling, shut-in, and slug tests - Continued

Shut-In Test 1 - Concluded

Water				Water				Water			
pressure		pressure		pressure		pressure		pressure		pressure	
Clock	time	(pounds	per	Clock	time	(pounds	per	Clock	time	(pounds	per
square		square	inch)	square		square	inch)	square		square	inch)
inch)	Remarks	inch)	Remarks	inch)	Remarks	inch)	Remarks	inch)	Remarks	inch)	Remarks
<u>Date: 04-13-81</u>											
1505:00	6.8	Pretest		1528:00	9.9			1820:00	12.8		
06:00	6.8	--		30:00	10.0	--		40:00	12.9	--	
07:00	6.8	Packer Inflated		35:00	10.2	--		1900:00	12.9	--	
07:20	8.1	Start test		40:00	10.4	--		2000:00	13.1	--	
07:40	8.1	--		45:00	10.7	--		2100:00	13.2	--	
08:00	8.2	--		50:00	10.9	--		2200:00	13.2	--	
09:00	8.3	--		55:00	11.0	--		2300:00	13.3	--	
10:00	8.4	--		1600:00	11.2	--		2400:00	13.3	--	
11:00	8.5	--		05:00	11.3	--		<u>Date: 04-14-81</u>			
12:00	8.7	--		10:00	11.4	--		0200:00	13.4	--	
13:00	8.8	--		15:00	11.5	--		0400:00	13.5	--	
14:00	8.9	--		20:00	11.6	--		0600:00	13.5	--	
15:00	8.9	--		25:00	11.7	--		0800:00	13.6	--	
16:00	9.0	--		30:00	11.8	--		1000:00	13.7	--	
17:00	9.1	--		35:00	11.9	--		1200:00	14.0	--	
18:00	9.2	--		40:00	11.9	--		1400:00	14.0	--	
19:00	9.3	--		45:00	12.0	--		1600:00	14.0	--	
20:00	9.4	--		50:00	12.1	--		1800:00	14.0	--	
21:00	9.4	--		1700:00	12.2	--		2000:00	14.0	--	
22:00	9.5	--		20:00	12.4	--		2200:00	14.1	--	
24:00	9.6	--		40:00	12.6	--		2400:00	14.1	--	
26:00	9.8	--		1800:00	12.7	--					
<u>Date: 04-15-81</u>											
0200:00	14.1	--						0200:00	14.1	--	
0400:00	14.1	--						0400:00	14.1	--	
0600:00	14.1	--						0600:00	14.1	--	
0700:00	14.1	--						0700:00	14.1	--	
0800:00	14.2	--						0800:00	14.2	--	
0900:00	14.2	--						0900:00	14.2	--	
1000:00	14.2	--						1000:00	14.2	--	
1100:00	14.2	--						1100:00	14.2	--	
1200:00	14.2	--						1200:00	14.2	--	
45:00	14.2	End of test									

Table 4. Data from well H-7C bailing, shut-in, and slug tests - Continued

Slug Test 1

Starting date: 04-15-81	Inside diameter of tubing: 1.995 inches
Hole depth: 420 feet	Geologic unit tested: Rustler Formation- Salado Formation
Cased interval: 0-420 feet	contact zone
Screened interval tested: 360-390 feet	Packer type: Production injection packer with feed-through
Diameter of tested interval: 6.125 inches	Packer diameter: 4.25 inches

Packer set at 232.8 feet below land surface.

Measuring point was transducer pressure port below packer which was
236.5 feet below land surface.

Static water level was 212 feet below land surface in February 1981 prior to
this testing phase.

Table 4. Data from well H-7C bailing, shut-in, and slug tests - Concluded

Slug Test 1 - Concluded

Water pressure		Water pressure	
Clock time	(pounds per square inch)	Clock time	(pounds per square inch)
Remarks		Remarks	
Date: 04-15-81			
1259:00	29.5	--	--
1300:00	28.8	--	--
01:00	28.2	--	--
02:00	27.6	--	--
03:00	27.1	--	--
04:00	26.5	--	--
05:00	26.0	--	--
06:00	25.6	--	--
07:00	25.2	--	--
08:00	24.7	--	--
09:00	24.4	--	--
10:00	24.0	--	--
11:00	23.6	--	--
12:00	23.3	--	--
13:00	23.0	--	--
14:00	22.7	--	--
15:00	22.5	--	--
16:00	22.2	--	--
17:00	21.9	--	--
18:00	21.7	--	--
19:00	21.5	--	--
20:00	21.3	--	--
		1325:00	20.3
		30:00	19.6
		35:00	19.0
		40:00	18.4
		45:00	18.0
		50:00	17.6
		55:00	17.3
		1400:00	17.0
		05:00	16.8
		10:00	16.5
		15:00	16.4
		30:00	15.9
		End of test	

Table 5. Data from well H-8A, bailing, shut-in, and slug tests

Bailing Test 1

Starting date: 01-29-80	Tested interval: 452-505 feet
Hole depth: 505 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-452 feet	Geologic unit tested: Magenta Dolomite Member of the Rustler Formation

Water levels were measured with a pressure transducer.

Measuring point for the recovering from bailing was the pressure transducer which was 441 feet below land surface.

Static water level was 407.68 feet below land surface on 01-28-80 before bailing.

Type of bailer: Dart valve Capacity: 9.8 gallons

Total amount of fluid bailed: 60 gallons

Table 5. Data from well H-8A, balling, shut-in, and slug tests - Continued

Balling Test 1 - Concluded

Date: 01-29-80				Date: 01-30-80			
Clock time	Baller number	Water pressure (pounds per square inch)	Remarks	Clock time	Baller number	Water pressure (pounds per square inch)	Remarks
1333	1	--	Balling	0100	--	1.1	--
35	2	--	--	0200	--	1.1	--
37	3	--	--	0300	--	1.2	--
40	4	--	--	0400	--	1.2	--
42	5	--	--	0500	--	1.2	--
45	6	--	--	0600	--	1.2	--
1419	--	0.7	Recovery	0700	--	1.3	--
20	--	0.7	--	0800	--	1.3	--
25	--	0.8	--	0900	--	1.4	--
30	--	0.8	--	1000	--	1.4	--
35	--	0.8	--	40	--	1.5	End of test
40	--	0.8	--				
45	--	0.9	--				
50	--	0.8	--				
55	--	0.8	--				
1500	--	0.8	--				
05	--	0.8	--				
10	--	0.8	--				
15	--	0.8	--				
20	--	0.8	--				
40	--	0.8	--				

Table 5. Data from well H-8A, bailing, shut-in, and slug tests - Continued

Shut-In Test 1

Starting date: 01-30-80	Diameter of tested interval: 6.125 inches
Shut in after: Bailing	Geologic unit tested: Magenta Dolomite Member of the Rustler Formation
Hole depth: 505 feet	
Cased interval: 0-452 feet	Packer type: Production injection packer with feed through
Tested interval: 452-505 feet	Packer diameter: 5.625 inches

Packer set at 442.8 feet below land surface.

Measuring point (MP) was transducer tubing below the packer which was
446.9 feet below land surface.

Static water level was 407.68 feet below land surface prior to this testing
phase on 01-28-80.

Shut-In Test 1 - Continued

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Table 5. Data from well H-8A balling, shut-in, and slug tests - Continued

Shut-in Test 1 - Concluded

Water pressure		Water pressure	
Clock time	(pounds per square inch)	Clock time	(pounds per square inch)
Remarks		Remarks	
Date: 01-30-80		Date: 01-31-80	
1545:00	16.5	0100:00	16.0
1600:00	16.6	0200:00	16.1
15:00	16.5	0400:00	16.2
30:00	15.7	0600:00	16.3
45:00	15.8	0800:00	16.0
1700:00	15.7	1000:00	15.7
15:00	15.8	1100:00	15.9
30:00	15.8		
45:00	15.7		
1800:00	15.7		
30:00	15.8		
1900:00	15.7		
30:00	15.7		
2000:00	15.7		
2100:00	15.8		
2200:00	15.8		
2300:00	15.9		
2400:00	16.0		
			End of test

Table 5. Data from well H-8A bailing, shut-in, and slug tests - Continued

Slug Test 1

Starting date: 01-31-80	Inside diameter of tubing: 1.995 inches
Hole depth: 505 feet	Geologic unit tested: Magenta Dolomite
Cased interval: 0-452 feet	Member of the Rustler Formation
Tested interval: 452-505 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 442.8 feet below land surface.

Measuring point (MP) was transducer pressure port below packer which was 446.9 feet below land surface.

Static water level was 407.68 feet below land surface prior to this testing phase on 01-28-80.

Table 5. Data from well H-8A balling, shut-in, and slug tests - Continued

Slug Test 1 - Continued

Water			Water			Water		
Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks
Date: 01-31-80								
1128:53	15.8	--	1132:53	195.1	--	1244:53	190.2	--
:58	207.9	--	33:23	195.0	--	49:53	189.8	--
1129:03	187.8	--	:53	194.9	--	54:53	189.6	--
:08	190.5	--	34:05	195.0	--	59:53	189.3	--
:13	191.4	--	:53	194.8	--	1302:53	--	--
:18	199.7	--	35:53	194.7	--	05:10	189.0	--
:23	195.1	--	36:53	194.6	--	05:19	189.0	--
:28	195.2	--	37:53	194.5	--	15:00	188.5	--
:33	195.7	--	38:53	194.4	--	30:00	187.6	--
:38	195.4	--	39:53	194.3	--	45:00	186.8	--
:43	195.5	--	44:53	193.9	--	1400:00	186.1	--
:48	195.5	--	49:53	193.3	--	30:00	184.8	--
:53	195.5	--	54:53	193.0	--	1500:00	183.4	--
1130:03	195.4	--	59:53	192.7	--	30:00	182.0	--
:13	195.4	--	1204:53	192.2	--	1600:00	180.7	--
:23	195.4	--	09:53	191.9	--	30:00	179.4	--
:33	195.3	--	14:53	191.5	--	1700:00	178.1	--
:43	195.3	--	19:53	191.2	--	30:00	176.9	--
1131:33	195.2	--	24:53	190.9	--	1800:00	175.7	--
:53	195.2	--	29:53	190.6	--	30:00	174.5	--
1132:26	195.2	--	34:53	190.3	--	1900:00	173.3	--
:45	195.1	--	39:53	190.3	--	30:00	172.1	--
Date: 02-01-80								
						0100:00	160.2	--
						0200:00	158.1	--
						0300:00	156.1	--
						0400:00	154.2	--
						0500:00	152.3	--
						0600:00	150.6	--
						0700:00	148.8	--
						0800:00	147.1	--
						1000:00	143.6	--
						30:00	142.8	--
						1430:00	136.4	--
						1500:00	135.5	--
						1600:00	134.2	--
						1800:00	131.3	--
						2000:00	128.4	--

Table 5. Data from well H-8A bailing, shut-in, and slug tests - Concluded

Slug Test 1 - Concluded

Water pressure		Water pressure	
Clock time	(pounds per square inch)	Clock time	(pounds per square inch)
Remarks		Remarks	
<u>Date: 02-01-80</u>			
2200:00	125.5	1400:00	87.7
2400:00	123.1	1600:00	86.5
		1800:00	85.3
<u>Date: 02-02-80</u>			
0200:00	120.5	2000:00	84.0
0400:00	118.1	2200:00	82.5
0600:00	115.7	2400:00	81.2
0800:00	113.9		
1000:00	111.7	<u>Date: 02-04-80</u>	
1200:00	109.7	0200:00	80.0
1400:00	107.8	0400:00	78.9
1600:00	105.8	0600:00	77.8
1800:00	104.1	0800:00	76.9
2000:00	102.0	1000:00	76.2
2200:00	100.2	1200:00	75.5
2400:00	98.3	1400:00	74.9
		1600:00	74.3
<u>Date: 02-03-80</u>			
0200:00	96.5	1800:00	73.6
0400:00	94.8	2000:00	72.7
0600:00	93.3	2200:00	71.6
0800:00	91.8	2400:00	70.8
1000:00	90.3		End of test
1200:00	89.1		

Table 6. Data from well H-8B bailing, slug, and pumping tests

Bailing Test 1

Starting date: 02-11-80	Tested interval: 574-624 feet
Hole depth: 624 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-574 feet	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation

Static water level was unknown before bailing.

Type of bailer: Dart valve Capacity: 9.8 gallons

Total amount of fluid bailed: 245 gallons

Remarks: Recovery data not valid. From 0948 to 1111 ran 26 bailing trips.

Bailing Test 2

Starting date: 02-13-80	Tested interval: 574-624 feet
Hole depth: 624 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-574 feet	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation

Static water level was unknown before bailing

Type of bailer: Dart valve Capacity: 9.8 gallons

Total amount of fluid bailed: 320 gallons

Remark: Recovery not monitored.

Table 6. Data from well H-8B bailing, slug, and pumping tests - Continued

Slug Test 1

Starting date: 02-13-80	Inside diameter of tubing: 1.995 inches
Hole depth: 624 feet	Geologic unit tested: Culebra Dolomite
Cased interval: 0-574 feet	Member of the Rustler Formation
Tested interval: 574-624 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 559.5 feet below land surface.

Measuring point was transducer pressure port below packer which was
563.5 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 6. Data from well H-8B bailing, slug, and pumping tests - Continued

Slug Test 1 - Continued

Water				Water				Water			
Elapsed time (seconds)	pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	pressure (pounds per square inch)	Remarks
Date: 02-13-80											
-7	51.2	Pretest	37	170.1	--	132	97.9	--	247	65.5	--
-5	51.2	--	39	167.9	--	137	95.6	--	252	64.7	--
-3	51.1	--	41	165.7	--	142	93.5	--	257	63.9	--
-1	51.2	--	43	163.6	--	147	91.3	--	262	63.2	--
1	169.8	Start of test	45	161.3	--	153	89.0	--	268	62.5	--
3	195.8	--	47	159.2	--	157	87.7	--	272	61.9	--
5	185.4	--	51	153.9	--	162	85.8	--	277	61.5	--
7	193.2	--	57	148.7	--	167	84.1	--	282	60.9	--
9	204.8	--	62	143.9	--	172	82.6	--	287	60.3	--
11	202.0	--	67	139.4	--	177	81.0	--	292	59.9	--
13	200.0	--	72	134.7	--	184	78.8	--	297	59.4	--
15	197.4	--	77	130.9	--	187	78.1	--	302	58.9	--
17	195.2	--	82	127.1	--	192	76.6	--	307	58.5	--
19	192.5	--	86	124.1	--	197	75.5	--	313	58.1	--
21	190.0	--	92	119.6	--	202	74.1	--	317	57.7	--
23	187.4	--	97	116.7	--	207	73.0	--	322	57.3	--
25	184.8	--	102	113.6	--	212	71.9	--	327	57.1	--
27	182.4	--	107	110.6	--	221	69.9	--	332	56.7	--
29	179.8	--	112	107.7	--	226	69.0	--	337	56.4	--
31	177.5	--	117	105.1	--	232	68.0	--	342	56.1	--
33	174.9	--	122	102.5	--	237	67.1	--	347	55.8	--
35	172.6	--	127	100.0	--	242	66.2	--	352	55.8	--

Table 6. Data from well H-8B balling, slug, and pumping tests - Continued

Slug Test 1 - Concluded

Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks
357	55.5	--
362	55.2	--
367	55.1	--
372	54.8	--
377	54.8	--
382	54.5	--
387	54.3	--
392	54.2	--
407	54.0	--
427	53.5	--
447	53.3	--
467	53.3	End of test

Table 6. Data from well H-8B bailing, slug, and pumping tests - Continued

Slug Test 2

Starting date: 02-14-80	Inside diameter of tubing: 1.995 inches
Hole depth: 624 feet	Geologic unit tested: Culebra Dolomite
Cased interval: 0-574 feet	Member of the Rustler Formation
Tested interval: 574-624 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 559.5 feet below land surface.

Measuring point was transducer pressure port below packer which was 563.5 feet below land surface.

Static water level was unknown prior to this testing phase.

Slug Test 2 - Continued

Date: 02-14-80				Date: 02-14-80				Date: 02-14-80			
Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks
-2	51.0	--	42	174.6	--	86	135.0	--	130	107.1	--
0	70.0	--	44	172.5	--	88	133.5	--	132	106.0	--
2	202.8	--	46	170.4	--	90	132.1	--	134	105.0	--
4	204.2	--	48	168.6	--	92	130.7	--	136	104.0	--
6	213.8	--	50	166.7	--	94	129.2	--	138	102.9	--
8	210.9	--	52	164.7	--	96	127.8	--	140	101.9	--
10	209.2	--	54	162.7	--	98	126.4	--	142	101.0	--
12	207.1	--	56	160.8	--	100	125.0	--	144	100.0	--
14	204.9	--	58	159.0	--	102	123.6	--	146	99.1	--
16	202.7	--	60	157.0	--	104	122.3	--	148	98.1	--
18	200.1	--	62	155.3	--	106	121.0	--	150	97.1	--
20	198.1	--	64	153.4	--	108	119.7	--	152	96.4	--
22	195.9	--	66	151.6	--	110	118.5	--	154	95.5	--
24	193.6	--	68	149.8	--	112	117.3	--	156	94.6	--
26	191.3	--	70	148.1	--	114	116.1	--	158	93.7	--
28	189.3	--	72	146.4	--	116	114.8	--	160	93.0	--
30	187.2	--	74	144.8	--	118	113.7	--	162	92.1	--
32	184.9	--	76	143.1	--	120	112.4	--	164	91.3	--
34	182.9	--	78	141.4	--	122	111.3	--	166	90.4	--
36	180.6	--	80	139.8	--	124	110.3	--	168	89.7	--
38	178.6	--	82	138.2	--	126	109.1	--	170	88.9	--
40	176.5	--	84	136.7	--	128	108.1	--	172	88.2	--

Date: 02-14-80

Table 6. Data from well H-88 bailing, slug, and pumping tests - Continued

Slug Test 2 - Concluded

Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks
174	87.4	--	218	73.9	--
176	86.7	--	220	73.2	--
178	85.9	--	222	72.9	--
180	85.2	--	224	72.3	End of test
182	84.5	--			
184	83.8	--			
186	83.1	--			
188	82.5	--			
190	81.8	--			
192	81.3	--			
194	80.6	--			
196	80.0	--			
198	79.3	--			
200	78.7	--			
202	78.2	--			
204	77.5	--			
206	77.0	--			
208	76.5	--			
210	76.0	--			
212	75.4	--			
214	74.8	--			
216	74.4	--			

Date: 02-14-80

Table 6. Data from well H-8B bailing, slug, and pumping tests - Continued

Slug Test 3

Starting date: 02-14-80	Inside diameter of tubing: 1.995 inches
Hole depth: 624 feet	Geologic unit tested: Culebra Dolomite
Cased interval: 0-574 feet	Member of the Rustler Formation
Tested interval: 574-624 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 559.5 feet below land surface.

Measuring point was transducer pressure port below packer which was 563.5 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 6. Data from well H-8B bailing, slug, and pumping tests - Continued

Slug Test 3 - Continued

Water				Water				Water			
Elapsed time (seconds)	pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	pressure (pounds per square inch)	Remarks
-1	52.1	--	43	185.4	--	87	149.0	--	131	120.3	--
1	160.9	--	45	183.4	--	89	147.5	--	133	119.1	--
3	219.9	--	47	181.6	--	91	146.1	--	135	117.9	--
5	219.9	--	49	180.0	--	93	144.6	--	137	117.0	--
7	212.3	--	51	178.1	--	95	143.1	--	139	115.8	--
9	210.3	--	53	176.3	--	97	141.7	--	141	114.7	--
11	208.6	--	55	174.7	--	99	140.2	--	143	113.7	--
13	214.1	--	57	173.0	--	101	138.9	--	145	112.6	--
15	212.6	--	59	171.2	--	103	137.6	--	147	111.6	--
17	210.6	--	61	169.6	--	105	136.2	--	149	110.6	--
19	208.6	--	63	167.9	--	107	135.0	--	151	109.5	--
21	206.7	--	65	166.1	--	109	133.7	--	153	108.5	--
23	204.5	--	67	164.5	--	111	132.3	--	155	107.5	--
25	202.6	--	69	162.9	--	113	131.0	--	157	106.5	--
27	200.7	--	71	161.3	--	115	129.7	--	159	105.6	--
29	198.7	--	73	159.7	--	117	128.6	--	161	104.5	--
31	196.8	--	75	158.1	--	119	127.3	--	163	103.7	--
33	194.8	--	77	156.6	--	121	126.1	--	165	102.8	--
35	192.9	--	79	155.0	--	123	124.9	--	167	101.9	--
37	191.0	--	81	153.5	--	125	123.7	--	169	100.9	--
39	188.9	--	83	151.9	--	127	122.5	--	171	100.1	--
41	187.1	--	85	150.5	--	129	121.4	--	173	99.2	--

Date: 02-14-80

Table 6. Data from well H-8B bailing, slug, and pumping tests - Continued

Slug Test 3 - Concluded

Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks	Elapsed time (seconds)	Water pressure (pounds per square inch)	Remarks
175	98.2	--	305	63.0	--
177	97.4	--	315	61.6	--
179	96.6	--	325	60.5	--
181	95.7	--	335	59.5	--
183	94.9	--	345	58.4	End of test
185	94.2	--			
187	93.0	--			
191	91.3	--			
195	90.0	--			
200	88.3	--			
205	86.5	--			
212	84.2	--			
215	83.2	--			
226	79.6	--			
235	77.2	--			
245	74.5	--			
252	72.6	--			
260	71.0	--			
267	69.5	--			
275	68.1	--			
285	66.2	--			
295	64.5	--			

Date: 02-14-80

Table 6. Data from well H-8B bailing, slug, and pumping tests - Continued

Pumping Test 1

Starting date: 03-23-80	Geologic unit tested: Culebra Dolomite
Hole depth: 624 feet	Member of the Rustler Formation
Tested interval: 574-624 feet	Cased interval: 0-574 feet
Pumping rate: 16 gallons per minute	Diameter of tested interval: 6.125 inches

Depth of pump intake port is unknown.

Measuring point was transducer pressure port which was 548 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 6. Data from well H-8B balling, slug, and pumping tests - Continued

Pumping Test 1 - Continued

Water			Water			Water			Water		
Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks
Date: 03-23-80											
0910:00	43.3	Pumping	0911:50	18.4	--	0913:40	20.0	--	0915:30	20.8	--
:05	41.0	--	:55	18.6	--	:45	19.9	--	:35	20.9	--
:10	38.5	--	0912:00	18.8	--	:50	20.1	--	:40	20.9	--
:15	36.2	--	:05	19.1	--	:55	20.1	--	:45	20.8	--
:20	34.1	--	:10	19.0	--	0914:00	20.2	--	:50	20.8	--
:25	31.9	--	:15	19.0	--	:05	20.3	--	:55	21.0	--
:30	30.0	--	:20	19.3	--	:10	20.3	--	0916:00	20.8	--
:35	27.9	--	:25	19.4	--	:15	20.5	--	:05	20.7	--
:40	26.1	--	:30	19.3	--	:20	20.5	--	:10	20.6	--
:45	24.4	--	:35	19.5	--	:25	20.7	--	:15	20.5	--
:50	22.6	--	:40	19.4	--	:30	20.6	--	:20	20.4	--
:55	20.9	--	:45	19.2	--	:35	20.6	--	:25	20.3	--
0911:00	19.2	--	:50	19.4	--	:40	20.7	--	:30	20.3	--
:05	17.6	--	:55	19.4	--	:45	20.5	--	:35	20.0	--
:10	16.7	--	0913:00	19.4	--	:50	20.8	--	:40	20.0	--
:15	16.9	--	:05	19.3	--	:55	20.7	--	:45	19.9	--
:20	17.3	--	:10	19.7	--	0915:00	20.7	--	:50	20.0	--
:25	17.4	--	:15	19.6	--	:05	20.6	--	:55	19.8	--
:30	17.7	--	:20	19.6	--	:10	20.7	--	0917:00	20.0	--
:35	18.0	--	:25	19.8	--	:15	20.7	--	:05	19.7	--
:40	18.1	--	:30	20.0	--	:20	20.7	--	:10	19.6	--
:45	18.1	--	:35	20.0	--	:25	20.8	--	:15	19.7	--

Pumping Test 1 - Continued

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Pumping Test 1 - Continued

Water pressure			
Clock time	(pounds per square inch)	Remarks	
<u>Date: 03-23-80</u>			
1320:00	3.6	Discharge adjustment	
30:00	5.3	--	
40:00	5.9	--	
50:00	5.9	--	
1400:00	5.8	--	
10:00	5.9	--	
20:00	5.8	--	
30:00	5.4	--	
40:00	5.5	--	
50:00	5.4	--	
1500:00	5.2	--	
10:00	5.2	--	
20:00	5.4	--	
30:00	5.0	--	
40:00	4.9	--	
50:00	5.0	--	
1600:00	5.0	--	
10:00	4.7	--	
20:00	4.5	--	
30:00	4.5	--	
40:00	4.6	--	
50:00	4.4	--	
<u>Date: 03-24-80</u>			
1700:00	4.1	--	
10:00	4.2	--	
20:00	4.2	--	
30:00	4.0	--	
40:00	4.2	--	
50:00	4.2	--	
1800:00	4.0	--	
1900:00	3.5	--	
2000:00	3.9	--	
2100:00	4.4	--	
2200:00	4.7	--	
2300:00	4.5	--	
2400:00	4.8	--	
<u>Date: 03-24-80</u>			
0100:00	4.7	--	
0200:00	4.5	--	
0300:00	4.8	--	
0400:00	5.1	--	
0500:00	5.1	--	
0600:00	5.9	--	
0700:00	5.7	--	
0800:00	5.8	--	
Water pressure			
Clock time	(pounds per square inch)	Remarks	
<u>Date: 03-24-80</u>			
0900:00	5.9	--	
0910:00	5.6	End pumping; recovery	
:05	6.9	--	
:10	8.1	--	
:15	9.3	--	
:20	10.5	--	
:25	11.7	--	
:30	13.2	--	
:35	14.5	--	
:40	15.7	--	
:45	16.5	--	
:50	17.3	--	
:55	17.8	--	
0911:00	18.3	--	
:05	18.6	--	
:10	18.8	--	
:15	19.1	--	
:20	19.3	--	
:25	19.5	--	
:30	19.6	--	
:35	19.7	--	
:40	19.8	--	
Water pressure			
Clock time	(pounds per square inch)	Remarks	
<u>Date: 03-24-80</u>			
0911:45	19.8	--	
:50	19.9	--	
:55	20.0	--	
0912:00	20.0	--	
:10	20.0	--	
:20	20.1	--	
:30	20.1	--	
:40	20.1	--	
:50	20.1	--	
0913:00	20.2	--	
:10	20.2	--	
:20	20.2	--	
:30	20.2	--	
:40	20.2	--	
:50	20.2	--	
0914:00	20.3	--	
:10	20.3	--	
:20	20.3	--	
:30	20.3	--	
:40	20.3	--	
:50	20.3	--	
0915:00	20.3	--	

Pumping Test 1 - Continued

Date: 03-24-80

Table 6. Data from well H-88 bailing, slug, and pumping tests - Concluded

Pumping Test 1 - Concluded

Water pressure		Water pressure	
Clock time	(pounds per square inch)	Clock time	(pounds per square inch)
Remarks		Remarks	
<u>Date: 03-24-80</u>			
1920:00	31.8	--	34.1
40:00	31.9	--	34.2
2000:00	32.1	--	34.3
20:00	32.3	--	34.4
40:00	32.4	--	34.5
2100:00	32.5	--	34.5
20:00	32.6	--	34.6
40:00	32.8	--	34.7
2200:00	32.9	--	34.8
20:00	33.0	--	34.8
40:00	33.2	--	34.8
2300:00	33.2	--	34.9
20:00	33.3	--	35.0
40:00	33.5	--	35.0
2400:00	33.5	--	35.0
<u>Date: 03-25-80</u>			
0020:00	33.6	--	35.1
40:00	33.7	--	35.1
0100:00	33.8	--	35.1
20:00	33.9	--	35.2
40:00	33.9	--	35.2
0200:00	34.0	--	35.2
		End of test	

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests

Shut-In Test 1

Starting date: 02-15-80	Diameter of tested interval: 6.125 inches
Shut in after: Flow	Geologic unit tested: Rustler Formation- Salado Formation contact zone
Hole depth: 808 feet	
Cased interval: 0-734 feet	Packer type: Production injection packer
Tested interval: 734-808 feet	Packer diameter: 5.625 inches

Packer set at 720.7 feet below land surface.

Measuring point was transducer tubing below the packer which was
713 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 7. Data from well H-8C shut in, flow, bailing, and pressure-pulse tests - Continued

Shut-In Test 1 - Concluded

Water			Water			Water			Water		
Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks
Date: 02-15-80			Date: 02-16-80			Date: 02-17-80			Date: 02-18-80		
1000:00	--	Started flow	1054:00	23.5	--	1250:00	48.7	--	0200:00	103.3	--
1050:00	20.4	--	55:00	23.8	--	1300:00	50.4	--	0400:00	105.3	--
:05	22.2	--	1100:00	25.0	--	10:00	52.1	--	0600:00	106.7	--
:10	22.4	--	05:00	26.3	--	20:00	53.6	--	0800:00	107.8	--
:15	22.4	--	10:00	27.1	--	30:00	55.1	--	1000:00	108.6	--
:20	22.8	--	15:00	27.8	--	40:00	56.4	--	1200:00	109.4	--
:25	22.7	--	20:00	28.6	--	50:00	57.5	--	1400:00	109.9	--
:30	22.8	--	25:00	29.7	--	1400:00	58.3	--	1600:00	111.7	--
:35	22.9	--	30:00	30.6	--	10:00	59.1	--	1800:00	110.9	--
:40	22.8	--	35:00	31.5	--	20:00	60.3	--	2000:00	111.5	--
:45	23.0	--	40:00	33.1	--	40:00	62.9	--	2200:00	111.5	--
:50	23.0	--	45:00	34.4	--	1500:00	65.5	--	2400:00	111.5	--
:55	22.9	--	50:00	36.0	--	1600:00	72.6	--			
1051:00	23.0	--	55:00	37.3	--	1700:00	80.0	--			
:05	22.9	--	1200:00	38.5	--	1800:00	85.2	--	0600:00	111.8	--
:10	22.9	--	05:00	39.6	--	1900:00	89.0	--	1200:00	112.0	--
:20	22.9	--	10:00	40.8	--	2000:00	92.0	--	1800:00	112.3	--
:30	22.9	--	15:00	41.9	--	2100:00	95.2	--	2400:00	112.6	--
:40	23.2	--	20:00	42.9	--	2200:00	97.2	--			
:50	23.1	--	25:00	44.0	--	2300:00	99.2	--	0600:00	112.6	--
1052:00	23.0	--	30:00	44.9	--	2400:00	100.8	--	0900:00	113.2	End of test
53:00	23.3	--	40:00	47.0	--						

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Continued

Flow Test 1

Starting date: 02-18-80	Diameter of tested interval: 6.125 inches
Hole depth: 808 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone
Cased interval: 0-734 feet	
Tested interval: 734-808 feet	Packer type: Production injection packer
	Packer diameter: 5.625 inches

Packer set at 720.7 feet below land surface.

Measuring point was transducer tubing below the packer which was
712 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 7. Data from well H-8C shut-in, flow, balling, and pressure-pulse tests - Continued

Flow Test 1 - Continued

Water			Water			Water			Water		
Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks
Date: 02-18-80											
0930:00	113.3	Pretest	0931:55	24.1	--	0936:30	24.8	--	0955:00	25.8	--
:10	21.4	Start test	0932:00	24.2	--	0937:00	24.8	--	1000:00	26.1	--
:15	23.1	--	:10	24.1	--	:30	24.8	--	05:00	26.4	--
:20	22.8	--	:20	24.2	--	0938:00	24.9	--	10:00	26.5	--
:25	23.3	--	:30	24.1	--	:30	24.8	--	15:00	26.8	--
:30	23.5	--	:40	24.2	--	0939:00	25.0	--	20:00	27.0	--
:35	23.5	--	:50	24.3	--	:30	24.9	--	25:00	27.1	--
:40	23.6	--	0933:00	24.2	--	0940:00	24.9	--	30:00	27.2	--
:45	23.6	--	:10	24.2	--	41:00	24.9	--	35:00	27.5	--
:50	23.7	--	:20	24.3	--	42:00	25.1	--	40:00	27.5	--
:55	23.8	--	:30	24.4	--	43:00	25.3	--	50:00	27.8	--
0931:00	23.9	--	:40	24.3	--	44:00	25.2	--	1100:00	28.3	--
:05	23.9	--	:50	24.5	--	45:00	25.3	--	10:00	28.7	--
:10	23.9	--	0934:00	24.5	--	46:00	25.3	--	20:00	29.0	--
:15	24.0	--	:10	24.5	--	47:00	25.3	--	30:00	29.5	--
:20	23.9	--	:20	24.5	--	48:00	25.4	--	40:00	29.6	--
:25	24.0	--	:30	24.5	--	49:00	25.4	--	50:00	29.9	--
:30	24.1	--	:40	24.5	--	50:00	25.5	--	1200:00	30.3	--
:35	24.1	--	:50	24.5	--	51:00	25.6	--	10:00	30.6	--
:40	24.0	--	0935:00	24.5	--	52:00	25.6	--	20:00	30.8	--
:45	24.2	--	:30	24.7	--	53:00	25.6	--	30:00	31.3	--
:50	24.0	--	0936:00	24.7	--	54:00	25.7	--	40:00	31.4	--

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Continued

Flow Test 1 - Concluded

Clock time	Water pressure (pounds per square inch)	Remarks	Clock time	Water level, in feet below land surface	Remarks
Date: 02-18-80					
1250:00	31.6	--	1355	567	--
1300:00	32.0	--	Date: 02-29-80		
10:00	32.3	--	1330	562	--
30:00	32.9	--	Date: 03-02-80		
1400:00	33.5	--	1355	562	--
30:00	33.7	--	Date: 03-12-80		
1500:00	34.7	--	1030	560	--
30:00	35.5	--	Date: 03-22-80		
1600:00	35.9	--	1245	553	--
30:00	36.4	--	Date: 04-05-80		
1700:00	36.8	--	1000	553	--
30:00	37.1	--	Date: 04-16-80		
1800:00	37.4	--	1140	553	--
30:00	39.5	--	Date: 04-25-80		
1900:00	40.0	--	0915	555	--
30:00	40.6	--	Date: 05-06-80		
2000:00	40.9	--	1210	563	--
30:00	41.1	--	Date: 06-10-80		
2100:00	41.3	--	1315	538	--
30:00	41.8	--	Date: 07-01-80		
2200:00	41.6	--	1135	524	--
30:00	41.9	--	Date: 08-09-80		
2300:00	--	Equipment malfunction.	1225	505	End of test
Water levels are depth below land surface in feet. Transducer re-moved from well.					

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Continued

Bailing Test 1

Starting date: 09-06-80	Tested interval: 734-808 feet
Hole depth: 808 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-734 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone

Static water level was unknown before bailing

Type of bailer: Dart valve Capacity: Unknown

Amount of fluid bailed: 10 gallons

Remarks: Recovery not monitored. Fluid collected was saved for analysis.

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Continued

Pressure-Pulse Test 1

Starting date: 09-08-80 Inside diameter of tubing: 1.995 inches

Hole depth: 808 feet Geologic unit tested: Rustler Formation-
Salado Formation

Cased interval: 0-734 feet contact zone

Tested interval: 734-808 feet Packer type: Production injection packer

Diameter of tested Packer diameter: 5.625 inches
interval: 6.125 inches

Packer set at 713.1 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

<u>Water</u>			<u>Water</u>		
pressure			pressure		
Clock	(pounds per	Remarks	Clock	(pounds per	Remarks
time	square inch)		time	square inch)	

Date: 09-08-80

0923:00	88.2	Start of test	0927:00	20.5	--
:10	64.0	--	:30	17.8	--
:20	58.5	--	0928:00	15.4	--
:30	54.8	--	29:00	11.0	--
:40	51.5	--	30:00	7.2	--
:50	48.7	--	31:00	3.7	--
0924:00	46.1	--	32:00	0.5	End of test
:10	43.9	--			
:20	41.6	--			
:30	39.7	--			
:40	37.9	--			
:50	36.2	--			
0925:00	34.5	--			
:10	33.1	--			
:20	31.6	--			
:30	30.3	--			
:40	29.0	--			
:50	27.8	--			
0926:00	26.6	--			
:10	25.5	--			
:20	24.4	--			
:40	22.4	--			

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Continued

Pressure-Pulse Test 2

Starting date: 09-08-80 Inside diameter of tubing: 1.995 inches

Hole depth: 808 feet Geologic unit tested: Rustler Formation-
Salado Formation

Cased interval: 0-734 feet contact zone

Tested interval: 734-808 feet Packer type: Production injection packer

Diameter of tested Packer diameter: 5.625 inches
interval: 6.125 inches

Packer set at 713.1 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
<u>Date: 09-08-80</u>					
0940:00	54.6	Start of test	0943:20	28.3	--
:05	55.5	--	:40	26.6	--
:10	53.7	--	0944:00	25.0	--
:15	52.3	--	:30	22.7	--
:20	50.9	--	0945:00	20.6	--
:25	49.8	--	:30	18.6	--
:30	48.9	--	0946:00	16.6	--
:35	48.0	--	47:00	13.0	--
:40	47.0	--	48:15	8.9	--
:45	46.1	--	49:00	6.6	--
:50	45.3	--	50:00	3.7	--
:55	44.5	--	51:00	1.0	End of test
0941:00	43.7	--			
:10	42.3	--			
:20	40.9	--			
:30	39.6	--			
:40	38.4	--			
:50	37.2	--			
0942:00	36.1	--			
:20	33.9	--			
:40	31.9	--			
0943:00	30.0	--			

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Continued

Pressure-Pulse Test 3

Starting date: 09-08-80 Inside diameter of tubing: 1.995 inches

Hole depth: 808 feet Geologic unit tested: Rustler Formation-
Salado Formation

Cased interval: 0-734 feet contact zone

Tested interval: 734-808 feet Packer type: Production injection packer

Diameter of tested interval: 6.125 inches Packer diameter: 5.625 inches

Packer set at 713.1 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
<u>Date: 09-08-80</u>					
0955:00	52.6	Start of test	0958:40	27.4	--
:05	52.4	--	0959:00	25.9	--
:10	51.5	--	:30	23.9	--
:15	50.6	--	1000:00	21.9	--
:20	49.7	--	:30	19.7	--
:25	48.7	--	1001:00	18.2	--
:30	47.8	--	:30	16.5	--
:35	47.1	--	1002:00	14.8	--
:40	46.3	--	:30	13.2	--
:45	45.5	--	1003:00	11.8	--
:50	44.8	--	04:00	8.8	--
0956:00	43.3	--	05:00	6.1	--
:10	42.0	--	06:00	3.6	--
:20	40.8	--	07:00	1.2	End of test
:30	39.6	--			
:40	38.4	--			
:50	37.2	--			
0957:00	36.2	--			
:20	34.2	--			
:40	32.3	--			
0958:00	30.6	--			
:20	29.0	--			

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Continued

Pressure-Pulse Test 4

Sarting date: 09-08-80	Inside diameter of tubing: 1.995 inches
Hole depth: 808 feet	Geologic unit tested: Rustler Formation- Salado Formation
Cased interval: 0-734 feet	contact zone
Tested interval: 734-808 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches
Packer set at 713.1 feet below land surface.	
Measuring point was transducer pressure port which was at land surface.	
Static water level was unknown prior to this testing phase.	

<div>Water pressure</div> <div>Clock (pounds per time square inch) Remarks</div>			<div>Water pressure</div> <div>Clock (pounds per time square inch) Remarks</div>		
Date: 09-08-80					
1015:00	99.3	Start of test	1019:00	27.0	--
:05	93.8	--	:20	24.5	--
:10	88.7	--	:40	22.3	--
:15	84.5	--	1020:00	20.1	--
:20	81.0	--	:30	17.2	--
:25	78.0	--	1021:00	14.6	--
:30	75.2	--	:30	12.0	--
:35	72.6	--	1022:00	9.6	--
:40	70.3	--	:30	7.3	--
:50	66.2	--	1023:00	5.2	--
1016:00	62.5	--	:30	3.1	--
:10	59.2	--	1024:00	1.2	End of test
:20	56.1	--			
:30	53.4	--			
:40	50.9	--			
:50	48.4	--			
1017:00	46.2	--			
:20	42.2	--			
:40	38.6	--			
1018:00	35.3	--			
:20	32.4	--			
:40	29.5	--			

Table 7. Data from well H-8C shut-in, flow, bailing, and pressure-pulse tests - Concluded

Pressure-Pulse Test 5

Starting date: 09-08-80 Inside diameter of tubing: 1.995 inches

Hole depth: 808 feet Geologic unit tested: Rustler Formation-
Salado Formation

Cased interval: 0-734 feet contact zone

Tested interval: 734-808 feet Packer type: Production injection packer

Diameter of tested Packer diameter: 5.625 inches
interval: 6.125 inches

Packer set at 713.1 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
<hr/>					
Date: 09-08-80					
1030:00	93.8	Start of test	1033:20	31.9	--
:05	81.9	--	:40	29.4	--
:10	78.4	--	1034:00	27.2	--
:15	75.0	--	:30	24.1	--
:20	71.9	--	1035:00	21.2	--
:25	69.3	--	:30	18.5	--
:30	67.0	--	1036:00	16.1	--
:35	64.8	--	:30	13.7	--
:40	62.9	--	1037:00	11.6	--
:45	61.1	--	38:00	7.5	--
:50	59.4	--	39:00	3.7	--
1031:00	56.5	--	40:00	0.6	End of test
:10	53.8	--			
:20	51.4	--			
:30	49.4	--			
:40	47.3	--			
:50	45.3	--			
1032:00	43.5	--			
:10	41.8	--			
:20	40.1	--			
:40	37.1	--			
1033:00	34.4	--			

Table 8. Data from well H-9A bailing, shut-in, and slug tests

Bailing Test 1

Starting date: 02-02-80	Tested interval: 510-559 feet
Hole depth: 559 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-510 feet	Geologic unit tested: Magenta Dolomite Member of the Rustler Formation

Water levels were measured with a pressure transducer.

Measuring point for the recovering from bailing was the pressure transducer which was 346 feet below land surface.

Static water level was unknown before bailing.

Type of bailer: Dart valve Capacity: 9.8 gallons

Total amount of fluid bailed: 245 gallons

Table 8. Data from well H-9A, bailing, shut-in, and slug tests - Continued

Bailing Test 1 - Concluded

Water pressure				Water pressure			
Clock time	Bailer number	(pounds per square inch)	Remarks	Clock time	Bailer number	(pounds per square inch)	Remarks
Date: 02-02-80							
0847	1	--	Bailing	1004	23	--	--
50	2	--	--	06	24	--	--
54	3	--	--	09	25	--	End of bailing
57	4	--	--	16	--	7.7	Recovery
0900	5	--	--	17	--	7.8	--
03	6	--	--	18	--	8.0	--
05	7	--	--	19	--	8.1	--
07	8	--	--	21	--	8.4	--
09	9	--	--	23	--	8.7	--
12	10	--	--	25	--	9.0	--
27	11	--	--	27	--	9.3	--
30	12	--	--	29	--	9.5	--
--	13	--	--	34	--	10.2	--
--	14	--	--	39	--	10.8	--
38	15	--	--	49	--	12.1	--
40	16	--	--	59	--	13.4	--
43	17	--	--	1109	--	14.9	--
46	18	--	--	24	--	16.1	--
49	19	--	--	39	--	17.8	--
52	20	--	--	54	--	19.4	--
58	21	--	--	1209	--	20.8	--
1002	22	--	--	29	--	22.6	--
				39	--	23.5	End of test

Table 8. Data from well H-9A bailing, shut-in, and slug tests - Continued

Shut-In Test 1

Starting date: 02-02-80	Diameter of tested interval: 6.125 inches
Shut-in after: Bailing	Geologic unit tested: Magenta Dolomite Member of the Rustler Formation
Hole depth: 559 feet	
Cased interval: 0-510 feet	Packer type: Production injection packer with feed-through
Tested interval: 510-559 feet	Packer diameter: Not available

Packer set at 494.6 feet below land surface.

Measuring point was transducer tubing below the packer which was
498.6 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 8. Data from well H-9A balling, shut-in, and slug tests - Continued

Shut-In Test 1 - Concluded

Water pressure		
Clock time	(pounds per square inch)	Remarks
<u>Date: 02-03-80</u>		
2000:00	91.2	--
2200:00	91.1	--
2400:00	91.3	--
<u>Date: 02-04-80</u>		
0200:00	91.2	--
0400:00	91.3	--
0600:00	91.0	--
0800:00	91.0	--
1000:00	90.9	End of test

Table 8. Data from well H-9A bailing, shut-in, and slug tests - Continued

Slug Test 1

Starting date: 02-04-80	Inside diameter of tubing: 1.995 inches
Hole depth: 559 feet	Geologic unit tested: Magenta Dolomite
Cased interval: 0-510 feet	Member of the Rustler Formation
Tested interval: 510-559 feet	Packer type: Production injection packer with feed-through
Diameter of tested interval: 6.125 inches	Packer diameter: Not available

Packer set at 494.6 feet below land surface.

Measuring point was transducer pressure port below packer which was 498.6 feet below land surface.

Static water level was unknown prior to this testing phase.

Slug Test 1 - Continued

Date: 02-04-80

Table 8. Data from well H-9A bailing, shut-in, and slug tests - Concluded

Slug Test 1 - Concluded

Date: 02-04-80		Water pressure (pounds per square inch)	Remarks	Date: 02-05-80		Water pressure (pounds per square inch)	Remarks
1125:00	112.6		--	0200:00	92.3	--	
30:00	110.8		--	0200:00	92.2	--	
40:00	107.5		--	0400:00	92.2	--	
50:00	105.0		--	0600:00	92.3	End of test	
1200:00	102.8		--				
10:00	101.1		--				
20:00	99.7		--				
30:00	98.5		--				
40:00	97.6		--				
50:00	96.8		--				
1300:00	96.3		--				
1400:00	94.1		--				
1500:00	93.1		--				
1600:00	92.7		--				
1700:00	92.3		--				
1800:00	92.3		--				
1900:00	92.3		--				
2000:00	92.4		--				
2200:00	92.4		--				
2400:00	92.3		--				

Table 9. Data from well H-9B bailing, slug, and pumping tests

Bailing Test 1

Starting date: 02-05-80	Tested interval: 638-708 feet
Hole depth: 708 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-638 feet	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation

Static water level was unknown before bailing.

Type of bailer: Dart valve Capacity: 10 gallons

Total amount of fluid bailed: 420 gallons

Remarks: From 1027 to 1207 ran 45 bailing trips. Kept sample from bailers 44 and 45 for analysis. Recovery not monitored.

Table 9. Data from well H-9B bailing, slug, and pumping tests - Continued

Slug Test 1

Starting date: 02-06-80 Inside diameter of tubing: 1.995 inches
 Type of test: injection Geologic unit tested: Culebra Dolomite
 Member of the
 Hole depth: 708 feet Rustler Formation
 Cased interval: 0-638 feet Packer type: Production injection packer
 Tested interval: 638-708 feet Packer diameter: Not available
 Diameter of tested
 interval: 6.125 inches
 Packer set at 624.4 feet below land surface.
 Measuring point was transducer pressure port below packer which was
 628.4 feet below land surface.
 Static water level was unknown prior to this testing phase.

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
<hr/>					
Date: 02-06-80					
1249:00	80.3	Pretest	1251:45	81.6	--
1250:00	--	Start of test	:50	81.6	--
:05	105.8	--	1252:00	81.5	--
:10	109.7	--	:10	81.3	--
:15	110.6	--	:20	81.3	--
:20	109.1	--	:30	81.1	--
:25	106.7	--	:40	81.1	--
:30	103.8	--	:50	81.0	--
:35	100.6	--	1253:00	81.0	--
:40	97.4	--	:10	81.0	--
:45	94.3	--	:20	80.9	--
:50	91.4	--	:30	80.9	--
:55	89.0	--	:40	80.9	--
1251:00	86.9	--	:50	80.8	--
:05	85.3	--	1254:00	80.8	--
:10	84.2	--	55:00	80.9	--
:15	83.4	--	56:00	80.9	--
:20	82.8	--	57:00	80.9	--
:25	82.3	--	58:00	80.8	--
:30	82.1	--	1300:00	80.8	End of test
:35	81.9	--			
:40	81.8	--			

Table 9. Data from well H-9B bailing, slug, and pumping tests - Continued

Slug Test 2

Starting date: 02-06-80	Inside diameter of tubing: 1.995 inches
Type of test: Injection	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation
Hole depth: 708 feet	
Cased interval: 0-638 feet	Packer type: Production injection packer
Tested interval: 638-708 feet	Packer diameter: Not available
Diameter of tested interval: 6.125 inches	

Packer set at 624.4 feet below land surface.

Measuring point was transducer pressure port below packer which was
628.4 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 9. Data from well H-98 balling, slug, and pumping tests - Continued

Slug Test 2 - Concluded

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 02-06-80			Clock time		
1417:28	80.6	Start of test	1418:12	96.2	--
:30	94.8	--	:14	95.5	--
:32	102.7	--	:16	94.6	--
:34	105.4	--	:18	93.8	--
:36	106.4	--	:20	93.0	--
:38	106.8	--	:22	92.3	--
:40	106.8	--	:24	91.5	--
:42	106.6	--	:26	90.8	--
:44	106.4	--	:28	90.0	--
:46	105.8	--	:30	89.4	--
:48	105.4	--	:32	88.7	--
:50	104.6	--	:34	87.9	--
:52	104.1	--	:36	87.3	--
:54	103.4	--	:38	86.8	--
:56	102.6	--	:40	86.2	--
:58	101.8	--	:42	85.8	--
1418:00	101.1	--	:44	85.3	--
:02	100.3	--	:46	84.8	--
:04	99.5	--	:48	84.4	--
:06	98.7	--	:50	84.0	--
:08	97.9	--	:52	83.7	--
:10	97.1	--	:54	83.5	--
			:56	83.2	--
					End of test
			1418:58	83.0	--
			1419:00	82.8	--
			:05	82.5	--
			:10	82.3	--
			:17	82.1	--
			:25	81.9	--
			:30	81.9	--
			:41	81.7	--
			:50	81.6	--
			1420:01	81.5	--
			:12	81.5	--
			:24	81.3	--
			:40	81.3	--
			:50	81.3	--
			1421:00	81.2	--
			:15	81.2	--
			1422:00	81.0	--
			23:00	81.0	--
			24:00	80.9	--
			26:00	80.8	--
			30:00	80.8	--
			35:00	80.8	--
			45:00	80.8	--

Table 9. Data from well H-9B bailing, slug, and pumping tests - Continued

Pumping Test 1

Starting date: 03-20-80	Geologic unit tested: Culebra Dolomite
	Member of the
Hole depth: 708 feet	Rustler Formation
Tested interval: 638-708 feet	Cased interval: 0-638 feet
Pumping rate: 88.5 gallons per minute	Diameter of tested interval: 6.125 inches

Pump intake port was 605 feet below land surface.

Static water level was 440 feet below land surface prior to this testing phase.

Pumping Test 1 - Continued

Date: 03-20-80

Table 9. Data from well H-9B balling, slug, and pumping tests - Continued

Pumping Test 1 - Continued

Water			Water			Water			Water		
Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks	Clock time	pressure (pounds per square inch)	Remarks
Date: 03-20-80											
0850:00	510.4	--	1040:00	517.5	--	1420:00	523.4	--	1800:00	526.6	--
52:00	510.7	--	50:00	517.8	--	30:00	523.5	--	10:00	526.7	--
54:00	511.0	--	1100:00	518.1	--	40:00	523.7	--	20:00	527.0	--
56:00	511.2	--	10:00	518.6	--	50:00	523.9	--	30:00	527.2	--
58:00	511.5	--	20:00	518.8	--	1500:00	524.0	--	40:00	527.3	--
0900:00	511.6	--	30:00	519.1	--	10:00	524.2	--	50:00	527.5	--
05:00	512.0	--	40:00	519.4	--	20:00	524.4	--	1900:00	527.6	--
10:00	512.5	--	50:00	519.9	--	30:00	524.6	--	10:00	527.7	--
15:00	513.1	--	1200:00	520.2	--	40:00	524.6	--	20:00	527.7	--
20:00	513.5	--	10:00	520.6	--	50:00	524.8	--	30:00	527.8	--
25:00	513.9	--	20:00	520.9	--	--	525.0	--	50:00	528.1	--
30:00	514.3	--	30:00	521.1	--	1600:00	525.1	--	2000:00	528.2	--
35:00	514.4	--	40:00	521.4	--	10:00	525.2	--	10:00	528.2	--
40:00	514.7	--	50:00	521.5	--	20:00	525.3	--	2020:00	528.3	End of pumping
45:00	514.9	--	1300:00	521.7	--	30:00	525.3	--	:05	523.0	Recovery
50:00	515.2	--	10:00	522.1	--	40:00	525.6	--	:10	517.5	--
55:00	515.5	--	20:00	522.3	--	50:00	525.6	--	:15	512.6	--
1000:00	515.7	--	30:00	522.4	--	1700:00	525.8	--	:20	507.9	--
10:00	516.4	--	50:00	522.7	--	10:00	525.9	--	:25	503.6	--
1012:37	516.6	--	50:00	522.8	--	20:00	526.1	--	:30	499.7	--
1020:00	516.8	--	1400:00	523.0	--	30:00	526.1	--	:35	496.1	--
30:00	517.1	--	10:00	523.1	--	40:00	526.3	--	--	--	--
						50:00	526.5	--			

Table 9. Data from well H-98 bailing, slug, and pumping tests - Continued

Pumping Test 1 - Concluded

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 03-20-80					
2200:00	454.5	--	0130:00	450.0	--
10:00	454.2	--	40:00	449.9	--
20:00	453.8	--	50:00	449.8	--
30:00	453.5	--	0200:00	449.7	--
40:00	453.2	--	10:00	449.5	--
50:00	453.0	--	20:00	449.4	--
2300:00	452.7	--	30:00	449.3	--
10:00	452.5	--	40:00	449.2	--
20:00	452.3	--	50:00	449.1	--
30:00	452.0	--	0300:00	449.0	--
40:00	451.8	--	10:00	448.9	--
50:00	451.6	--	20:00	448.7	--
2400:00	451.5	--	30:00	448.6	--
			40:00	448.5	--
			50:00	448.4	--
			0400:00	448.3	--
Date: 03-21-80					
0010:00	451.3	--	10:00	448.3	--
20:00	451.1	--	20:00	448.2	--
30:00	450.9	--	30:00	448.1	--
40:00	450.8	--	0744:00	446.5	--
50:00	450.5	--	50:00	446.5	--
0100:00	450.5	--	0800:00	446.5	--
10:00	450.3	--	10:00	446.4	End of test
20:00	450.2	--			

Table 9. Data from well H-9B bailing, slug, and pumping tests - Continued

Slug Test 3

Starting date: 03-22-80	Inside diameter of tubing: 1.995 inches
Type of test: Injection	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation
Hole depth: 708 feet	
Cased interval: 0-638 feet	
Tested interval: 638-708 feet	
Diameter of tested interval: 6.125 inches	

Measuring point was transducer pressure port which was 445 feet below
land surface.

Static water level was unknown prior to this testing phase.

Table 9. Data from well H-9B balling, slug, and pumping tests - Concluded

Slug Test 3 - Concluded

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 03-22-80					
1005:00	2.4	Pretest	1009:10	41.7	--
1008:00	68.2	Start of test	:20	39.0	--
:02	67.9	--	:30	36.6	--
:04	67.0	--	:39	34.4	--
:06	65.8	--	:49	32.4	--
:08	64.4	--	:58	30.3	--
:10	63.1	--	1010:04	29.1	--
:12	62.3	--	:12	27.5	--
:14	61.2	--	:19	26.8	--
:16	60.3	--	:24	25.7	--
:18	58.4	--	:31	24.7	--
:20	58.2	--	:39	23.6	--
:22	57.3	--	:44	23.1	--
:24	56.6	--	:54	21.6	--
:26	55.6	--	1011:04	20.4	--
:28	54.4	--	:14	19.0	--
:30	53.8	--	:24	17.9	--
:34	52.0	--	:34	16.8	--
:40	50.2	--	:44	15.8	--
:44	48.8	--	:54	14.8	--
:50	47.0	--	1012:04	13.9	--
1009:00	44.7	--	:14	13.1	--
			1012:24	12.3	--
			:34	11.7	--
			:44	11.1	--
			:54	10.6	--
			1013:00	10.2	--
			:04	10.1	--
			:14	9.6	--
			:24	9.3	--
			:34	8.9	--
			:44	8.5	--
			:54	8.1	--
			1014:04	7.8	--
			:14	7.5	--
			:24	7.2	--
			:44	6.8	--
			1015:04	6.5	--
			:24	6.3	--
			:44	6.0	--
			1016:04	5.9	--
			:24	5.7	--
			:44	5.5	End of test

Table 10. Data from well H-9C pressure-pulse tests

Pressure-Pulse Test 1

Starting date: 04-15-81	Inside diameter of tubing: 1.995 inches
Hole depth: 816 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone
Cased interval: 0-783 feet	
Tested interval: 783-816 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 764.7 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

Table 10. Data from well H-9C pressure-pulse tests - Continued

Pressure-Pulse Test 1 - Continued

Water pressure			Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 04-15-81								
1125:00	0.00	--	1133:00	5.56	--	1330:00	3.76	--
:25	5.90	--	34:00	5.55	--	40:00	3.45	--
:30	5.84	--	35:00	5.57	--	50:00	3.10	--
:40	5.86	--	36:00	5.59	--	1400:00	2.75	--
:50	5.82	--	37:00	5.59	--	10:00	2.42	--
1126:00	5.79	--	38:00	5.60	--	20:00	2.04	--
:10	5.77	--	40:00	5.61	--	30:00	1.66	--
:20	5.75	--	45:00	5.67	--	40:00	1.28	--
:30	5.73	--	50:00	5.70	--	50:00	0.89	--
:40	5.72	--	55:00	5.60	--	1500:00	0.52	--
:50	5.71	--	1200:00	5.55	--	05:00	0.31	End of test
1127:00	5.69	--	05:00	5.49	--			
:20	5.67	--	10:00	5.45	--			
:50	5.65	--	15:00	5.41	--			
1128:10	5.63	--	20:00	5.33	--			
:30	5.62	--	25:00	5.26	--			
1129:00	5.62	--	30:00	5.19	--			
:30	5.61	--	40:00	5.02	--			
1130:00	5.62	--	50:00	4.81	--			
:30	5.61	--	1300:00	4.60	--			
1131:00	5.61	--	10:00	4.34	--			
32:00	5.59	--	1320:00	4.04	--			

Table 10. Data from well H-9C pressure-pulse tests - Continued

Pressure-Pulse Test 2

Starting date: 04-22-81	Inside diameter of tubing: 1.995 inches
Hole depth: 816 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone
Cased interval: 0-783 feet	
Tested interval: 783-816 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 764.7 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

Pressure-Pulse Test 2 - Continued

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Table 10. Data from well H-9C pressure-pulse tests - Concluded

Pressure-Pulse Test 2 - Concluded

Clock time	Water pressure		Remarks
	(pounds per square inch)		
1548:20	3.82		--
50:00	3.59		--
51:40	3.37		--
53:20	3.16		--
55:00	2.97		--
56:40	2.76		--
58:20	2.54		--
1600:00	2.30		--
01:40	2.10		--
03:20	1.92		--
05:00	1.72		--
06:40	1.55		--
08:20	1.38		--
10:00	1.18		--
11:40	1.01		--
13:20	0.82		--
15:00	0.61		--
16:40	0.42		--
18:20	0.22		--
20:00	0.04		--

Table 11. Data from well H-10A bailing, shut-in, and slug tests

Bailing Test 1

Starting date: 02-20-80 Tested interval: 1,243-1,318 feet
Hole depth: 1,318 feet Diameter of tested interval: 6.125 inches
Cased interval: 0-1,243 feet Geologic unit tested: Magenta Dolomite
 Member of the
 Rustler Formation

Static water level was 587 feet below land surface before bailing.

Type of bailer: Dart valve Capacity: 9.7 gallons

Total amount of fluid bailed: 310 gallons

Clock time	Bailer number	Water level, In feet below land surface
<hr/>		
Date: 02-20-80		
0842	1	--
1142	58	--
1151	--	911
1153	--	911
1155	--	911
1205	--	910.5
1215	--	909.5
1220	--	909
1250	--	908
<hr/>		
Date: 02-21-80		
1000	--	875

Table 11. Data from well H-10A bailing, shut-in, and slug tests - Continued

Shut-In Test 1

Starting date: 02-21-80	Diameter of tested interval: 6.125 inches
Shut in after: Bailing	Geologic unit tested: Magenta Dolomite
Hole depth: 1,318 feet	Member of the Rustler Formation
Cased interval: 0-1,243 feet	Packer type: Production injection packer with feed-through
Tested interval: 1,243-1,318 feet	Packer diameter: 5.625 inches

Packer set at 1,179.0 feet below land surface.

Measuring point was transducer tubing below the packer which was
1,182.8 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 11. Data from well H-10A balling, shut-in, and slug tests - Continued

Shut-In Test 1 - Concluded

Water pressure Clock time (pounds per square inch)		Water pressure Clock time (pounds per square inch)	
Remarks		Remarks	
Date: 02-22-80			
0230:00	277.3	--	--
45:00	276.3	--	--
0300:00	276.5	--	--
15:00	275.4	--	--
30:00	277.0	--	--
45:00	275.2	--	--
0400:00	275.5	--	--
15:00	277.7	--	--
30:00	277.4	--	--
45:00	278.1	--	--
0500:00	278.4	--	--
15:00	278.8	--	--
30:00	278.9	--	--
45:00	279.2	--	--
0600:00	278.6	--	--
15:00	278.1	--	--
30:00	278.3	--	--
45:00	280.1	--	--
0700:00	278.4	--	--
15:00	278.8	--	--
30:00	277.7	--	--
45:00	275.8	--	--
0800:00	279.2	--	--
15:00	276.8	--	--
30:00	277.2	--	--
45:00	276.7	End of test	

Table 11. Data from well H-10A bailing, shut-in, and slug tests - Continued

Slug Test 1

Starting date: 02-22-80	Inside diameter of tubing: 1.995 inches
Hole depth: 1,318 feet	Geologic unit tested: Magenta Dolomite
Cased interval: 0-1,243 feet	Member of the Rustler Formation
Tested interval: 1,243-1,318 feet	Packer type: Production injection packer with feed through
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 1,179.0 feet below land surface.

Measuring point was transducer pressure port below packer which was
1,182.8 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 11. Data from well H-10A balling, shut-in, and slug tests - Continued

Slug Test 1 - Concluded

Date: 02-22-80		Water pressure (pounds per square inch)	Remarks	Date: 02-23-80		Water pressure (pounds per square inch)	Remarks
1400:00	507.7	--	--	0030:00	265.6	--	--
30:00	500.9	--	--	0100:00	261.2	--	--
1500:00	495.3	--	--	30:00	258.2	--	--
30:00	492.4	--	--	0200:00	254.1	--	--
1600:00	486.0	--	--	30:00	252.5	--	--
30:00	483.0	--	--	0800:00	245.7	End of test	--
1700:00	478.1	--	--				
30:00	475.2	--	--				
1800:00	471.4	--	--				
30:00	467.2	--	--				
1900:00	462.9	--	--				
30:00	458.3	--	--				
2000:00	454.0	--	--				
30:00	449.0	--	--				
2100:00	384.6	--	--				
30:00	351.6	--	--				
2200:00	324.5	--	--				
30:00	306.3	--	--				
2300:00	289.1	--	--				
30:00	280.8	--	--				
2400:00	273.1	--	--				

Table 11. Data from well H-10A bailing, shut-in, and slug tests - Continued

Slug Test 2

Starting date: 02-23-80	Inside diameter of tubing: 1.995 inches
Hole depth: 1,318 feet	Geologic unit tested: Magenta Dolomite
Cased interval: 0-1,243 feet	Member of the Rustler Formation
Tested interval: 1,243-1,318 feet	Packer type: Production injection packer with feed through
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 1,179.0 feet below land surface.

Measuring point was transducer pressure port below packer which was
1,182.8 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 11. Data from well H-10A balling, shut-in, and slug tests - Continued

Slug Test 2 - Continued

Water pressure			Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 02-23-80								
0941:10	--	Start of test	0943:00	419.4	--	0945:15	414.4	--
:15	467.6	--	:05	419.1	--	:40	413.6	--
:20	412.7	--	:10	418.7	--	:50	413.3	--
:25	431.3	--	:15	418.7	--	0946:00	412.4	--
:30	429.4	--	:20	418.9	--	:10	411.9	--
:35	425.0	--	:25	418.3	--	:20	412.4	--
:40	426.6	--	:30	418.1	--	:30	411.6	--
:45	425.4	--	:35	417.7	--	:40	411.4	--
:50	424.0	--	:40	417.7	--	:50	411.3	--
:55	423.6	--	:45	417.8	--	0947:00	410.8	--
0942:00	422.5	--	:50	417.4	--	0948:30	407.9	--
:05	423.1	--	:55	416.6	--	0949:00	406.2	--
:10	423.1	--	0944:00	417.0	--	:30	405.8	--
:15	422.6	--	:05	417.1	--	0950:00	404.7	--
:20	422.6	--	:10	417.1	--	:30	404.7	--
:25	421.6	--	:15	416.9	--	0951:00	404.0	--
:30	421.8	--	:20	416.6	--	:30	402.8	--
:35	421.3	--	:25	416.2	--	0952:00	402.0	--
:40	420.6	--	:35	416.3	--	:30	401.5	--
:45	420.0	--	:45	415.8	--	0953:00	400.7	--
:50	419.9	--	:55	414.9	--	54:00	399.3	--
:55	420.3	--	0945:05	415.8	--	55:00	398.0	--

Table 11. Data from well H-10A bailing, shut-in, and slug tests - Continued

Slug Test 2 - Concluded

Water pressure		Water pressure	
Clock time	(pounds per square inch)	Clock time	(pounds per square inch)
Remarks		Remarks	
Date: 02-23-80			
1110:00	319.8	--	--
15:00	316.8	--	--
20:00	314.0	--	--
25:00	309.5	--	--
30:00	306.1	--	--
45:00	300.1	--	--
1200:00	292.1	--	--
15:00	288.7	--	--
30:00	288.3	--	--
45:00	279.8	--	--
1300:00	276.1	--	--
15:00	273.3	--	--
30:00	270.9	--	--
45:00	269.1	--	--
1400:00	267.2	--	--
15:00	266.1	--	--
30:00	264.7	--	--
45:00	264.2	--	--
1500:00	263.4	--	--
1600:00	261.6	--	--
1700:00	260.7	--	--
1800:00	260.3	--	--
		1900:00	259.0
		2000:00	257.5
		2100:00	257.5
		2200:00	257.8
		2300:00	257.6
		2400:00	258.4
		End of test	

Table 11. Data from well H-10A bailing, shut-in, and slug tests - Concluded

Bailing Test 2

Starting date: 03-21-80	Tested interval: 1,243 to 1,318 feet
Hole depth: 1,318 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-1,243 feet	Geologic unit tested: Magenta Dolomite Member of the Rustler Formation

Static water level was unknown before bailing.

Type of bailer: Dart valve Capacity: 9.7 gallons

Total amount of fluid bailed: 240 gallons

Remarks: From 0913 to 1111 ran 25 bailing trips. Kept sample for analysis.
Recovery not monitored.

Table 12. Data from well H-10B bailing, shut-in, and slug tests

Bailing Test 1

Starting date: 02-26-80 Tested interval: 1,346-1,398 feet
Hole depth: 1,398 feet Diameter of tested interval: 6.125 inches
Cased interval: 0-1,346 feet Geologic unit tested: Culebra Dolomite
 Member of the
 Rustler Formation

Static water level was unknown before bailing.

Total amount of fluid bailed: 470 gallons.

Type of bailer: Dart valve Capacity: 9.7 gallons

Clock time	Bailer number	Water level,	
		In feet below land surface	Remarks

Date: 02-26-80

0812	1	--	--
1124	57	--	--
1132		978.5	Recovery
1133		978.0	--
1134		977.5	--
1135		977.0	--
1140		975.5	--
1145		974.0	--
1150		972.5	--
1155		971.0	--
1200		970.0	--
1215		966.0	--
1230		962.5	--
1245		958.5	End of test

Table 12. Data from well H-10B bailing, shut-in, and slug tests - Continued

Shut-In Test 1

Starting date: 02-26-80	Diameter of tested interval: 6.125 inches
Shut-in after: Bailing	Geologic unit tested: Culebra Dolomite
Hole depth: 1,398 feet	Member of the Rustler Formation
Cased interval: 0-1,346 feet	Packer type: Production injection packer with feed through
Tested interval: 1,346-1,398 feet	Packer diameter: 5.625 inches

Packer set at 1,276.9 feet below land surface.

Measuring point was transducer tubing below the packer which was 1,280.7 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 12. Data from well H-108 balling, shut-in, and slug tests - Continued

Shut-In Test 1 - Concluded

Water pressure			Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 02-26-80								
1452:07	--	Start of test	1455:07	217.3	--	1540:00	231.7	--
:12	220.7	--	:37	216.8	--	45:00	232.5	--
:17	215.1	--	1456:07	216.8	--	1600:00	234.9	--
:22	217.5	--	:37	217.2	--	15:00	237.0	--
:27	223.7	--	1457:07	217.6	--	30:00	238.6	--
:32	232.8	--	:37	217.8	--	45:00	240.2	--
:37	234.2	--	1458:07	218.2	--	1700:00	241.5	--
:42	238.6	--	59:07	219.0	--	30:00	243.9	--
:47	235.6	--	1500:07	219.6	--	1800:00	245.2	--
:52	252.3	--	01:07	220.3	--	30:00	245.9	--
:57	244.8	--	02:07	220.8	--	1900:00	246.2	--
1453:02	237.0	--	04:07	221.9	--	30:00	246.4	--
:07	232.7	--	06:07	222.9	--	2000:00	246.9	--
:17	228.8	--	08:07	223.6	--	2100:00	247.0	--
:27	224.0	--	10:07	224.2	--	2200:00	247.0	--
:37	220.8	--	12:07	225.1	--	2300:00	247.1	--
:47	218.9	--	1514:00	225.7	--	2400:00	247.3	--
:57	220.9	--	16:00	226.4	--	Date: 02-27-80		
1454:07	220.1	--	18:00	227.1	--	0200:00	247.2	--
:17	220.7	--	20:00	227.5	--	0400:00	247.5	--
:27	220.8	--	25:00	228.7	--	0600:00	246.8	--
:47	219.2	--	30:00	229.8	--	0800:00	244.9	--
						0940:00	246.3	End of test

Table 12. Data from well H-10B bailing, shut-in, and slug tests - Continued

Slug Test 1

Starting date: 02-27-80	Inside diameter of tubing: 1.995 inches
Hole depth: 1,398 feet	Geologic unit tested: Culebra Dolomite
Cased interval: 0-1,346 feet	Member of the Rustler Formation
Tested interval: 1,346-1,398 feet	Packer type: Production injection packer with feed through
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 1,276.9 feet below land surface.

Measuring point was transducer pressure port below packer which was 1,280.7 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 12. Data from well H-108 balling, shut-in, and slug tests - Continued

Slug Test 1 - Concluded

Water pressure			Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 02-27-80								
0940:00	246.3	Start of test	0943:16	532.4	--	1050:00	458.5	--
:02	370.0	--	0944:20	530.0	--	1100:00	451.4	--
:04	505.8	--	0945:00	528.6	--	10:00	444.4	--
:06	520.6	--	46:00	526.6	--	20:00	437.9	--
:08	535.8	--	46:40	525.3	--	30:00	431.3	--
:10	538.6	--	0947:40	523.6	--	40:00	425.3	--
:12	538.4	--	0949:00	521.2	--	50:00	419.7	--
:14	538.3	--	50:00	519.5	--	1200:00	414.8	--
:16	539.8	--	51:00	517.9	--	10:00	410.0	--
:18	540.6	--	52:00	516.4	--	20:00	404.8	--
:20	540.5	--	53:00	514.8	--	30:00	400.5	--
:24	540.6	--	54:00	513.4	--	40:00	396.2	--
:30	540.3	--	55:00	511.9	--	1300:00	388.2	--
:34	540.1	--	56:00	510.8	--	20:00	380.4	--
:40	539.7	--	57:00	508.1	--	40:00	373.3	--
:44	539.4	--	1000:00	505.4	--	1400:00	366.5	--
:50	539.1	--	05:00	499.6	--	40:00	353.9	--
:59	538.6	--	10:00	493.9	--	1540:00	337.9	--
0941:10	538.0	--	15:00	488.5	--	1640:00	325.4	--
:20	537.4	--	20:00	483.7	--	1740:00	314.5	--
:30	537.0	--	25:00	479.2	--	1840:00	303.8	--
:40	536.5	--	30:00	474.7	--	1940:00	294.1	--
0942:20	534.8	--	1040:00	466.4	--	2120:00	280.8	--

Table 12. Data from well H-10B bailing, shut-in, and slug tests - Continued

Slug Test 2

Starting date: 02-28-80	Inside diameter of tubing: 1.995 inches
Hole depth: 1,398 feet	Geologic unit tested: Culebra Dolomite
Cased interval: 0-1,346 feet	Member of the Rustler Formation
Tested interval: 1,346-1,398 feet	Packer type: Production injection packer with feed through
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 1,276.9 feet below land surface.

Measuring point was transducer pressure port below packer which was
1,280.7 feet below land surface.

Static water level was unknown prior to this testing phase.

Table 12. Data from well H-108 balling, shut-in, and slug tests - Continued

Slug Test 2 - Continued

Water pressure			Water pressure			Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
Date: 02-28-80											
0955:00	241.6	Pretest	1003:10	527.7	--	1034:30	506.5	--	1501:10	384.2	--
1001:10	--	Start of test	:30	527.4	--	42:50	501.3	--	17:50	379.3	--
:12	600.5	--	:50	527.1	--	51:10	496.5	--	34:30	374.0	--
:14	570.2	--	1004:10	526.8	--	59:30	492.1	--	51:10	369.0	--
:16	530.2	--	:30	526.5	--	1107:50	487.1	--	1607:50	364.2	--
:18	545.3	--	1005:20	525.8	--	13:00	484.5	--	24:30	359.1	--
:20	560.0	--	06:10	525.1	--	16:10	482.6	--	41:10	354.9	--
:22	546.9	--	07:00	524.5	--	24:30	478.1	--	57:50	350.6	--
:24	517.2	--	:50	523.9	--	32:50	473.7	--	1714:30	346.4	--
:30	536.5	--	08:40	523.2	--	41:10	471.8	--	31:10	342.2	--
:35	525.8	--	09:30	522.6	--	49:30	469.7	--	47:50	338.3	--
:40	530.7	--	10:20	521.7	--	57:50	461.5	--	1804:30	334.4	--
:45	528.4	--	11:10	521.3	--	1214:30	453.0	--	21:10	330.3	--
:50	529.3	--	12:50	520.3	--	31:10	445.2	--	37:50	326.5	--
:55	528.7	--	14:30	519.0	--	47:50	437.9	--	54:30	322.8	--
1002:00	528.8	--	15:00	518.6	--	1304:30	430.3	--	1911:10	319.0	--
:10	528.7	--	16:10	517.8	--	21:10	423.1	--	27:50	315.6	--
:20	528.5	--	17:50	516.7	--	37:50	416.0	--	44:30	312.2	--
:30	528.3	--	21:10	514.6	--	54:30	409.1	--	2001:10	308.9	--
:40	528.2	--	24:30	512.7	--	1411:10	402.7	--	17:50	305.8	--
:50	527.9	--	27:50	510.5	--	27:50	396.6	--	34:30	302.7	--
1003:01	527.9	--	31:00	508.5	--	44:30	390.4	--	51:10	299.7	--

Table 12. Data from well H-108 bailing, shut-in, and slug tests - Continued

Slug Test 2 - Concluded

Water pressure		Water pressure	
Clock time	(pounds per square inch)	Clock time	(pounds per square inch)
Remarks		Remarks	
Date: 02-28-80			
2107:50	296.9	--	--
24:30	294.2	--	--
41:10	291.3	--	--
57:50	288.8	--	--
2214:30	286.4	--	--
31:10	283.9	--	--
47:50	281.5	--	--
2304:30	279.4	--	--
21:10	277.7	--	--
37:50	275.8	--	--
54:30	273.6	--	--
Date: 02-29-80			
0011:10	271.7	--	--
27:50	270.3	--	--
44:30	268.7	--	--
0101:10	267.2	--	--
17:50	265.7	--	--
34:30	264.1	--	--
51:10	262.8	--	--
0207:50	261.5	--	--
24:30	260.1	--	--
41:10	258.9	--	--
		0257:50	257.7
		0314:30	256.5
		31:10	255.1
		47:50	254.1
		0404:30	253.1
		End of test	

Table 12. Data from well H-10B bailing, shut-in, and slug tests - Concluded

Bailing Test 2

Starting date: 03-21-80	Tested interval: 1,346-1,398 feet
Hole depth: 1,398 feet	Diameter of tested interval: 6.125 inches
Cased interval: 0-1,346 feet	Geologic unit tested: Culebra Dolomite Member of the Rustler Formation

Type of bailer: Dart valve Capacity: 9.7 gallons

Total amount of fluid bailed: 290 gallons

Remarks: From 1215 to 1444 ran 30 bailing trips. Recovery not monitored.
Collected sample for analysis.

Table 13. Data from well H-10C pressure-pulse tests

Pressure-Pulse Test 1

Starting date: 04-16-81	Inside diameter of tubing: 1.995 inches
Hole depth: 1,538 feet	Geologic unit tested: Rustler Formation- Salado Formation
Cased interval: 0-1,483 feet	contact zone
Tested interval: 1,483-1,538 feet	Packer type: Production injection packer
Diameter of tested interval: 6.125 inches	Packer diameter: 5.625 inches

Packer set at 1456.8 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

Water pressure			Water pressure		
Clock time	(pounds per square inch)	Remarks	Clock time	(pounds per square inch)	Remarks
<u>Date: 04-16-81</u>					
1347:00	10.14	Start of test	1351:40	7.33	--
:05	10.05	--	1352:00	7.18	--
:10	9.97	--	:50	6.83	--
:15	9.88	--	1353:40	6.50	--
:20	9.80	--	1354:20	6.23	--
:25	9.71	--	1355:20	5.84	--
:30	9.64	--	1357:00	5.19	--
:40	9.49	--	1358:40	4.53	--
:50	9.35	--	1400:20	3.90	--
1348:00	9.23	--	1402:00	3.28	--
:10	9.11	--	1403:00	2.99	--
:20	8.99	--	1404:00	2.82	Test aborted
:30	8.88	--			
:40	8.77	--			
1349:00	8.58	--			
:20	8.40	--			
:40	8.23	--			
1350:00	8.07	--			
:20	7.90	--			
:40	7.75	--			
1351:00	7.60	--			
:20	7.47	--			

Table 13. Data from well H-10C pressure-pulse tests - Continued

Pressure-Pulse Test 2

Starting date: 04-16-81	Inside diameter of tubing: 1.995 inches
Hole depth: 1,538 feet	Geologic unit tested: Rustler Formation- Salado Formation contact zone
Cased interval: 0-1,483 feet	
Tested interval: 1,483-1,538 feet	Packer type: Production injection packer
	Packer diameter: 5.625 inches
Diameter of tested interval: 6.125 inches	

Packer set at 1456.8 feet below land surface.

Measuring point was transducer pressure port which was at land surface.

Static water level was unknown prior to this testing phase.

Pressure-Pulse Test 2 - Continued

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Table 13. Data from well H-10C pressure-pulse tests - Concluded

Pressure-Pulse Test 2 - Concluded

Clock time	Water pressure (pounds per square inch)	Remarks
Date: 04-16-81		
2055:00	6.39	--
57:30	6.26	--
2100:00	6.13	--
05:00	5.86	--
10:00	5.59	--
18:20	5.13	--
26:40	4.63	--
35:00	4.12	--
43:20	3.63	--
51:40	3.14	--
2200:00	2.66	--
08:20	2.20	--
16:40	1.73	End of test

Table 14. Water-level records for well H-7B

[Water-bearing zone is the Culebra Dolomite
Member of the Rustler Formation]

Date	Time	Water level, in feet below land surface
<hr/>		
09-26-79	1320	171
10-10-79	1330	171
11-01-79	0730	170.94
12-04-79	1620	170.85
01-02-80	0845	171.51
02-03-80	1400	171.58
03-02-80	0840	171.75
03-20-80	1240	171.51
04-15-80	1125	171.25
05-06-80	1405	171.35
06-10-80	0820	171.44
07-01-80	1405	171
08-02-80	0830	171.34
09-08-80	1400	171.43
10-08-80	1245	171.27
11-04-80	0850	171.06
12-02-80	1200	170.69
02-04-81	0955	170.41
05-04-81	0825	170.04
06-02-81	0820	170.05
07-06-81	1020	170.21
07-15-81	1055	170.24
07-23-81	0850	170.24
07-29-81	1030	170.26
08-04-81	0915	170.23
08-10-81	1105	170.39
08-21-81	1315	170.30
09-01-81	1430	170.20
09-14-81	0920	170.18
09-14-81	1512	170.14
10-02-81	1055	170.25
11-02-81	1000	170.36
12-02-81	1205	170.23
01-22-82	1030	170.18
05-25-82	0750	170.17
06-22-82	0930	169.95
08-20-82	1010	170.58
10-15-82	0925	170.71
12-13-82	1050	170.29
02-17-83	1320	170.37
10-18-84	1803	169.65
01-07-85	1330	169.63

Table 15. Water-level records for well H-7C

[Water-bearing zone is the Rustler Formation-Salado Formation contact zone]

Date	Time	Water level, in feet below land surface
<hr/>		
09-26-79	1330	199
10-10-79	1320	199
04-15-80	1140	199
05-06-80	1420	199
06-10-80	0830	198.66
07-01-80	1345	198.59
08-02-80	0845	198.55
09-08-80	1405	198.51
10-08-80	1250	198.35
11-04-80	0910	198.30
11-24-80	0830	214
11-25-80	0920	213.26
12-02-80	1245	214.85
02-04-81	1005	212.03
05-04-81	0855	206.63
06-02-81	0845	206.44
07-06-81	1025	206.33
07-23-81	0855	206.26
08-04-81	0920	206.15
09-14-81	1506	205.86
09-16-81	0746	205.93
10-02-81	1045	205.71
11-02-81	1005	205.47
12-02-81	1210	205.20
01-22-82	1045	204.80
05-15-82	0755	204.10
06-22-82	0948	203.94
08-20-82	1020	203.84
10-15-82	0940	203.72
12-13-82	1100	203.30
02-17-83	1330	203.12

Table 16. Water-level records for well H-8A

[Water-bearing zone is the Magenta Dolomite
Member of the Rustler Formation]

Date	Time	Water level, in feet below land surface
<hr/>		
11-01-79	1610	456
12-04-79	1430	420.54
01-02-80	0945	411.30
01-28-80	1507	406.98
02-15-80	1115	429
03-02-80	1405	421
04-16-80	1155	411
05-06-80	1220	410
06-10-80	1325	408
07-01-80	1155	407
08-09-80	1255	405.97
09-06-80	0945	405.70
10-07-80	1330	405.38
11-05-80	1315	405.20
12-03-80	1440	405.06
02-06-81	1000	404.95
05-04-81	0940	404.95
07-07-81	1050	405.04
10-02-81	1155	405.14
01-22-82	1125	405.24
05-25-82	0934	405.21
06-22-82	1110	405.23
08-20-82	1100	405.33
10-15-82	1015	405.41
12-13-82	1145	405.35
02-17-83	1210	405.27
08-24-83	1316	405.27
01-24-84	1005	405.25
10-20-84	0930	405.15
01-07-85	1500	405.21

Table 17. Water-level records for well H-8B

[Water-bearing zone is the Culebra Dolomite
Member of the Rustler Formation]

Date	Time	Water level, in feet below land surface
<hr/>		
08-15-79	0935	450
08-17-79	1030	451
08-20-79	0930	449.57
08-23-79	1340	448.80
08-28-79	1500	441.18
09-07-79	1155	450
10-10-79	1240	450
11-01-79	1550	449.12
12-04-79	0910	449.25
01-02-80	0935	449.66
01-28-80	1520	448.34
01-30-80	1200	448.45
02-01-80	1020	448.79
02-02-80	1626	448.47
02-03-80	1335	448.55
02-04-80	1155	448.40
02-05-80	1040	448.64
02-06-80	1707	448.33
02-11-80	0830	448.38
03-02-80	1410	449
04-16-80	1150	448
05-06-80	1225	447
06-10-80	1320	448
07-01-80	1145	448
08-09-80	1245	446.19
09-06-80	0940	446.54
10-07-80	1315	445.84
11-05-80	1310	445.29
12-03-80	1420	445.25
02-06-81	0950	444.65
05-04-81	0935	444.51
07-07-81	1045	444.50
10-02-81	1150	443.70
01-22-82	1120	442.55
05-25-82	0943	442.16
06-22-82	1120	442.27
08-20-82	1119	442.99
10-15-82	1030	442.06
12-13-82	1145	441.14
02-17-83	1220	440.62
08-24-83	1324	441.21
01-24-84	1020	440.90
10-20-84	0915	440.36
01-07-85	1500	440.29

Table 18. Water-level records for well H-8C

[Water-bearing zone is the Rustler Formation-Salado Formation contact zone]

Date	Time	Water level, in feet below land surface
08-15-79	0910	755
08-17-79	1000	745
08-20-79	0955	734
08-23-79	1350	718
08-28-79	1435	696
09-07-79	1205	663
09-13-79	1300	644
09-19-79	0930	627
10-10-79	1235	588
10-07-80	1300	459
11-05-80	1300	460
12-03-80	1500	460
02-06-81	1201	462
03-05-81	1220	463.38
05-04-81	0925	463.76
07-07-81	1040	463.09
10-02-81	1145	463.72
01-22-82	1115	463.25
05-25-82	0925	462.80
06-22-82	1047	462.64
08-20-82	1135	462.47
10-15-82	1050	462.29
12-13-82	1145	461.98
02-17-83	1230	461.63
08-24-83	1336	460.90
01-24-84	1030	460.40
10-20-84	0945	459.65
01-07-85	1500	459.49

Table 19. Water-level records for well H-9A

[Water-bearing zone is the Magenta Dolomite
Member of the Rustler Formation]

Date	Time	Water level, in feet below land surface
09-13-79	1230	289
09-26-79	1210	284
10-10-79	1200	284
11-01-79	1505	284.44
12-04-79	1340	284.14
01-02-80	1020	283.63
02-01-80	0930	283.70
02-06-80	1620	289
02-13-80	1115	284
03-02-80	1325	284
04-16-80	1105	283
05-06-80	1135	283
06-10-80	1245	284
07-01-80	1105	283
08-09-80	1145	283.03
09-07-80	0920	283.06
10-07-80	1220	282.82
11-05-80	1215	282.80
12-03-80	1350	282.73
02-06-81	1025	282.00
05-04-81	1020	282.18
08-04-81	1400	282.43
09-03-81	1210	282.44
10-01-81	1040	282.51
11-02-81	1035	282.53
12-02-81	1105	282.37
01-21-82	1305	282.30
02-18-82	1201	282.33
03-10-82	0945	280.95
04-15-82	1200	282.09
05-17-82	1235	282.13
06-22-82	1235	282.25
09-02-82	0944	282.26
10-29-82	1315	282.25
12-13-82	1310	282.01
02-17-83	1115	281.98

Table 20. Water-level records for well H-9B

[Water-bearing zone is the Culebra Dolomite
Member of the Rustler Formation]

Date	Time	Water level, in feet below land surface
<hr/>		
09-07-79	1105	440
10-10-79	1145	440
11-01-79	1520	439.28
12-04-79	1350	438.92
01-02-80	1035	438.10
02-01-80	0910	437.49
02-02-80	1605	438.11
02-03-80	1250	438.17
02-04-80	1230	438.54
02-05-80	0835	438.63
02-13-80	1105	438
03-02-80	1315	438
04-16-80	1100	437
05-06-80	1125	436
06-10-80	1230	436
07-01-80	1055	436
08-09-80	1135	434
09-07-80	0935	432.72
10-07-80	1130	430.27
11-05-80	1210	23.99
12-03-80	1355	425.72
02-06-81	1100	425.85
05-04-81	1015	432.85
08-04-81	1350	432.97
09-03-81	1205	431.48
10-01-81	1035	431.73
11-02-81	1040	430.88
12-02-81	1100	429.86
01-21-82	1300	429.80
02-18-82	1201	429.20
03-10-82	0940	428.14
04-15-82	1155	428.27
06-22-82	1220	429.36
09-02-82	0925	429.41
10-29-82	1330	431.86
12-13-82	1315	428.19
02-17-83	1125	428.65
10-20-84	1030	430.28
01-07-85	1430	430.69

Table 21. Water-level records for well H-9C

[Water-bearing zone is the Rustler Formation-Salado Formation contact zone]

Date	Time	Water level, in feet below land surface
<hr/>		
08-20-79	1040	788
08-23-79	1315	788
08-28-79	1340	788
09-27-79	1201	815
10-10-79	1120	816
02-13-80	1045	809
02-15-80	1320	809
02-16-80	1045	809
02-27-80	1315	809
03-02-80	1305	808
04-16-80	1050	804
05-06-80	1105	803
05-05-81	1225	728
06-02-81	1200	714
08-04-81	1340	713
09-03-81	1155	704
10-01-81	1025	690
12-02-81	1050	680.58
01-21-82	1230	665
02-18-82	1201	656.30
03-10-82	0930	656.48
08-19-82	0820	715.17
01-19-83	0840	708
02-01-83	1020	717

Table 22. Water-level records for well H-10A

[Water-bearing zone is the Magenta Dolomite
Member of the Rustler Formation]

Date	Time	Water level, in feet below land surface
09-07-79	1020	847
09-13-79	1145	758
09-18-79	1100	711
09-26-79	1035	665
10-10-79	1045	625
11-01-79	1435	602
11-21-79	1045	594
11-26-79	1130	593
12-03-79	1115	592
12-10-79	1015	592
02-01-80	1420	590
02-13-80	1205	589
02-15-80	1245	589
02-16-80	1015	589
02-17-80	1040	587
03-02-80	1220	670
04-16-80	0935	619
05-06-80	1015	600
06-10-80	1155	591
07-01-80	1020	591
08-09-80	1050	590
10-07-80	1130	589
11-05-80	1120	589
12-04-80	1120	588
02-06-81	1130	587.15
05-05-81	1130	586.79
08-04-81	1250	586.77
10-01-81	1150	586.77
11-02-81	1140	586.66
12-02-81	0940	586.74
01-21-82	1130	586.57
02-18-82	1201	586.54
03-10-82	0900	586.52
04-15-82	0945	586.40
05-26-82	0950	586.40
08-20-82	1345	586.64

Table 23. Water-level records for well H-10B

[Water-bearing zone is the Culebra Dolomite
Member of the Rustler Formation]

Date	Time	Water level, in feet below land surface
11-21-79	1100	689
11-26-79	1110	689
12-03-79	1055	688
12-10-79	1000	688
02-01-80	1400	687
02-13-80	1150	687
02-15-80	1235	686
02-16-80	1000	686
02-21-80	1450	687
02-25-80	1215	684
03-02-80	1230	718
04-16-80	0950	687
05-06-80	1020	699
06-10-80	1145	697
07-01-80	1010	699
08-09-80	1035	699
10-07-80	1145	699
11-05-80	1105	699
12-04-80	1130	700
02-06-81	1145	697.94
05-05-81	1145	697.68
08-04-81	1240	697.79
10-01-81	1135	697.81
11-02-81	1145	691.25
12-02-81	0930	687.12
01-21-82	1150	699
02-18-82	1201	696.42
03-10-82	0845	697.27
04-15-82	1015	697.00
05-26-82	0934	697.03
08-20-82	1325	697.16

Table 24. Water-level records for well H-10C

[Water-bearing zone is the Rustler Formation-Salado Formation contact zone]

Date	Time	Water level, in feet below land surface
<hr/>		
08-28-79	1215	1517
09-07-79	0950	1517
09-26-79	1201	1516
10-10-79	1100	1516
02-17-80	1325	1507
02-27-80	0925	1508
03-02-80	1200	1514
04-16-80	0915	1498
05-06-80	0955	1498
05-05-81	1110	1402
06-02-81	1110	1389
08-04-81	1230	1375
09-03-81	1115	1369
10-01-81	1115	1365
01-21-82	1115	1346
05-26-82	0854	1328
08-20-82	1245	1315
01-19-83	1040	1292

Table 25. Density profile for well H-8A

Date run: 01-28-80 Geologic unit: Magenta Dolomite
Hole depth: 505 feet Member of the Rustler
Cased interval: 0-452 feet Formation

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	410	1510	1.012	18.0
2	430	1520	1.007	19.0
3	450	1525	1.008	19.0
4	470	1540	1.0075	19.0
5	490	1545	1.0075	19.0

Table 26. Density profile for well H-8B

Date run: 02-11-80 Geologic unit: Culebra Dolomite
Hole depth: 624 feet Member of the Rustler
Cased interval: 0-574 feet Formation

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	450	0845	1.005	16.0
2	490	0855	1.004	17.0
3	530	0910	1.002	17.0
4	570	0920	1.002	13.0
5	610	0930	1.002	16.0

Table 27. Density profile for well H-8C

Date run: 04-25-80

Geologic unit: Rustler Formation-
Salado Formation
contact zone

Hole depth: 808 feet

Cased interval: 0-734 feet

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	560	0930	1.091	20.0
2	600	0940	1.131	21.5
3	640	0955	1.128	21.5
4	680	1010	1.120	22.0
5	720	1045	1.129	21.5

Table 28. Density profile for well H-9A

Date run: 02-01-80

Geologic unit: Magenta Dolomite
Member of the Rustler
Formation

Hole depth: 559 feet

Cased interval: 0-510 feet

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	300	1705	1.006	14.0
2	350	1715	1.006	14.5
3	400	1725	1.006	14.0
4	450	1735	1.006	14.5
5	500	1745	1.006	14.0

Table 29. Density profile for well H-9B

Date run: 02-05-80 Geologic unit: Culebra Dolomite
Hole depth: 708 feet Member of the Rustler
Cased interval: 0-638 feet Formation

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	450	0845	1.005	15.0
2	510	0900	1.004	16.5
3	570	0910	1.006	17.0
4	630	0923	1.006	18.0
5	700	0937	1.006	18.0

Table 30. Density profile for well H-9C

Date run: 05-20-80 Geologic unit: Rustler Formation-
Hole depth: 816 feet Salado Formation
Cased interval: 0 to 783 feet contact zone

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	805	0757	1.2060	--
2	808	0823	1.2055	--
3	808	0842	1.2050	24
4	808	0910	1.2040	24

Table 31. Density profile for well H-10A

Date run: 02-19-80

Geologic unit: Magenta Dolomite
Member of the Rustler
Formation

Hole depth: 1,318 feet

Cased interval: 0-1,243 feet

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	600	1050	1.166	20.0
2	775	1100	1.173	20.0
3	950	1115	1.172	21.0
4	1,125	1130	1.172	21.0
5	1,300	1145	1.174	21.0

Table 32. Density profile for well H-10B

Date run: 02-25-80

Geologic unit: Culebra Dolomite
Member of the Rustler
Formation

Hole depth: 1,398 feet

Cased interval: 0-1,346 feet

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	700	1220	1.010	21.5
2	875	1235	1.015	21.5
3	1,050	1250	1.024	20.0
4	1,225	1340	1.041	20.0
5	1,400	1355	1.084	22.0

Table 33. Density profile for well H-10C

Date run: 05-19-80

Geologic unit: Rustler Formation-
Salado Formation
contact zone

Hole depth: 1,538 feet

Cased interval: 0-1,483 feet

Sample number	Depth collected (feet)	Time collected	Density (gm/cm ³)	Temperature (°C)
1	1,525	1152	--	--
2	1,510	1222	1.204	25.0
3	1,510	1246	1.2025	25.0
4	1,510	1320	1.2045	25.0