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LISTING OF SCIENTIFIC DATA ON THE BACA GEOTHERMAL FIELD

R.K. Spencer and C-F. Tsang

June 1984

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LBL-17675

LISTING OF SCIENTIFIC DATA ON THE BACA GEOTHERMAL FIELD

A compilation of available geological, geophysical, geochemical and reservoir engineering data

Robin K. Spencer and Chin-Fu Tsang

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Lawrence Berkeley Laboratory
University of California
Berkeley, CA 94720

June 1984

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Table of Contents

	Page
INTRODUCTION	2
1. GENERAL REFERENCE MATERIALS	5
1.1 Reports	6
1.2 Bibliographies	11
1.3 Viewgraph sets	12
1.4 Meetings, Report Plans, etc.	13
1.5 Proposals	14
2. FIELD REPORTS	15
2.1 Reports of operation	16
2.2 Plant activities and status reports	18
3. WELL LOGS	19
4. INDIVIDUAL WELL DATA[1]	23
4.1 Well #1 (no data available)	24
4.2 Well #2 (no data available)	25
4.3 Well #3 (no data available)	26
4.4 Well #4	27
4.5 Well #5-5A	35
4.6 Well #6	40
4.7 Well #7	45
4.8 Well #8	47
4.9 Well #9 (no data available)	49
4.10 Well #10	50

Table of Contents (cont.)

Page

4.11 Well #11 52

4.12 Well #12 57

4.13 Well #13 66

4.14 Well #14 75

4.15 Well #15 79

4.16 Well #16 87

4.17 Well #17 89

4.18 Well #18 91

4.19 Well #19 96

4.20 Well #20 103

4.21 Well #21 116

4.22 Well #22 120

4.23 Well #23 124

4.24 Well #24 130

NOTES

1. Data are divided into one or more of the following units: Daily Testing Reports, Temperature and Pressure Gradient Records, Flowtests, Water Injection, Produced Fluids and Gas Analyses, Flowtest Production Data, Interference Pressure Data, Deepening, Redrill, Other.

INTRODUCTION

This document is a record of the available open-file technical data collected at the Baca Geothermal Field, New Mexico (Fig. 1). The data base is located at the Earth Sciences Division of the Lawrence Berkeley Laboratory, Berkeley, California.

The Baca cooperative geothermal project was jointly sponsored by the U.S. Department of Energy, Union Oil Company, and Public Service Company of New Mexico. Most of the data are from wells drilled by Union Geothermal Company, made available through the DOE-Union-PNM agreement.[1] Twenty-four deep geothermal wells have been completed at the Baca field (Fig. 2). Originally thought to have a potential capacity of at least 400 MWe for 30 years, the field was operated and tests were run until October 1982. In January 1982 it was recognized that under present conditions, the geothermal production capability of the field is much lower[2] and the DOE/Union cooperative project was terminated by mutual agreement.

The arrangement of the information in the Lawrence Berkeley Laboratory (LBL) Baca data base corresponds to the organization of this document, as shown in the Table of Contents. Accordingly, this document will serve as a handbook for using the data base. Section 1 includes general reference materials such as published reports, bibliographies, and proposals. Section 2 contains various types of progress reports. Sections 3 and 4 describe individual well data: Section 3 consists of well log data (retained in both the original and digitized forms) and Section 4 lists various tests carried out in the different wells. Data in both Sections are listed by test date.

Copies of the publications and well test data are available by writing to:

Reservoir Engineering Group-Baca Data Base
Earth Sciences Division
Lawrence Berkeley Laboratory
Berkeley, CA 94720.

[1]U.S. Department of Energy, 1979. Draft EIS: Geothermal Demonstration Program - 50MWe Power Plant - Baca Ranch, Sandoval and Rio Arriba Counties, New Mexico. USDOE/EIS-0049-D.

[2]Goldstein, N.E., Holman, W.R. and Molloy, M.W., 1982. Final report of the Department of Energy Reservoir Definition Review Team for the Baca Geothermal Demonstration Project. Lawrence Berkeley Laboratory Report LBL-14132.

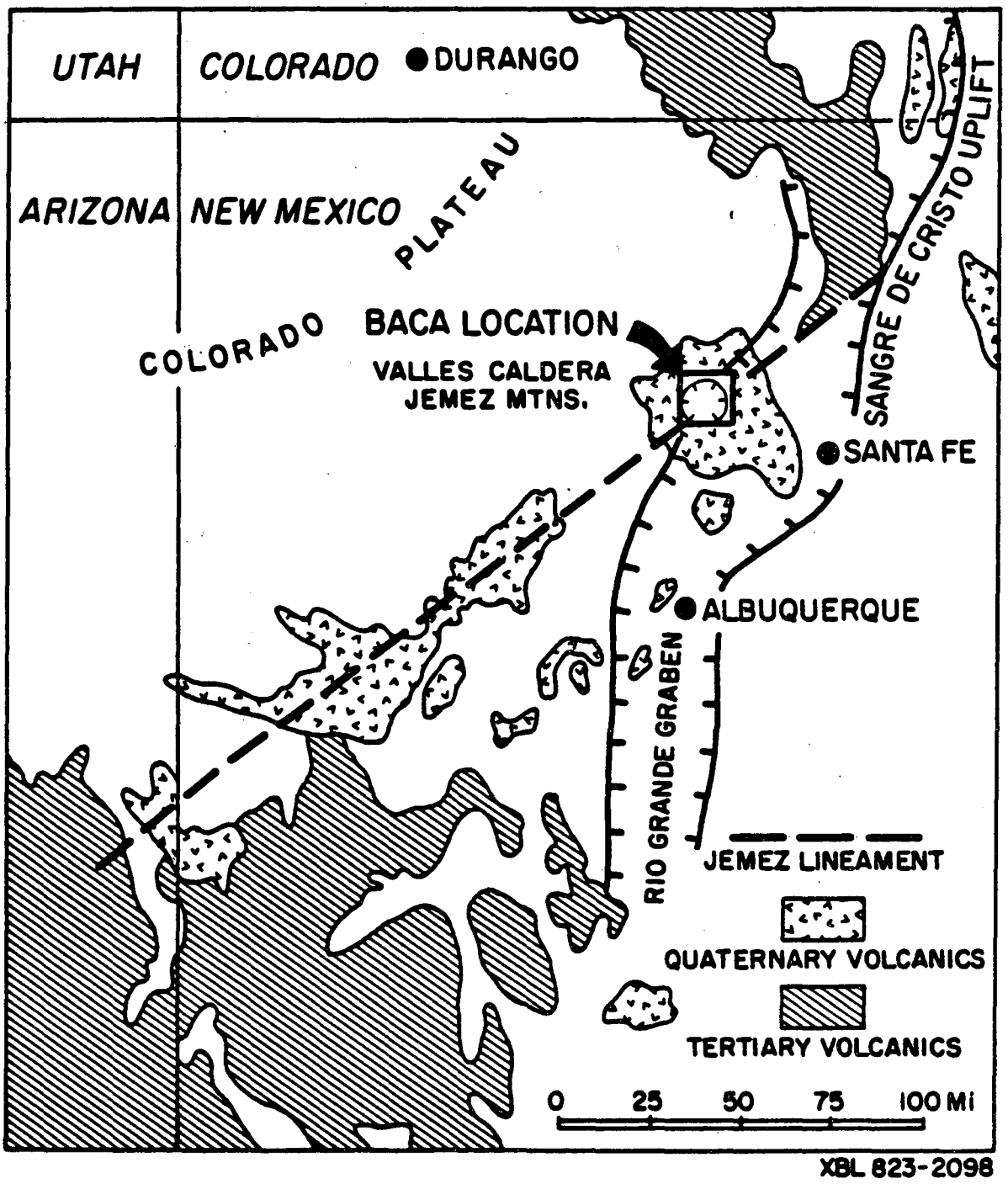
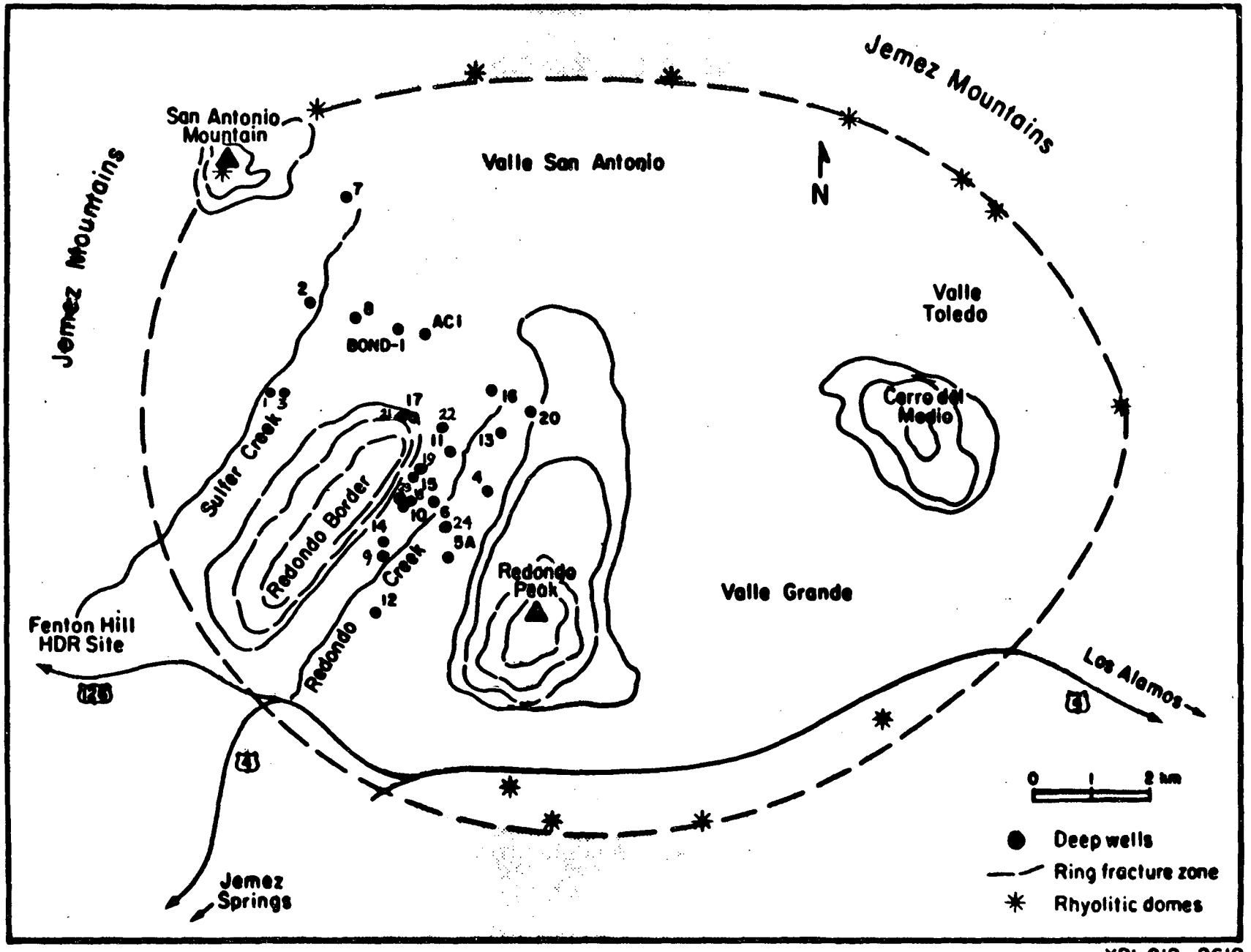


Figure 1. Location of Baca Geothermal Field, New Mexico, showing generalized regional geology.



XBL 812-2618

Figure 2. Location of Baca wells, Baca Geothermal Field, New Mexico.

1. GENERAL REFERENCE MATERIALS

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VIEWGRAPH SETS

GEOPHYSICS

GEOLOGY

RESERVOIR ENGINEERING

FLUID CHEMISTRY

COST DATA

BACA FILES

MEETINGS, REPORT PLANS, ETC.

UNION-PUBLIC SERVICE NM-DOE COOPERATIVE AGREEMENT GEOTHERMAL DEMO POWER PLANT-

BACA TECHNICAL EXTRACT - 34 p.

DOE-UNION REVIEW MEETING, April 30 - MAY 1, 1981.

PLANS AND DECISIONS/PROJECT TASKS - JUNE 1981.

Tentative Time Schedule for Baca Interference Program - 1981.

BACA FILES

PROPOSALS

Systems, Science and Software, June 1981. Unsolicited Proposal for Independent Analysis of Baca Reservoir Data, prepared for LBL, vol. 1 - Technical SSS-P-8310252.

Westec Services, Inc., May 1979. Proposal to Provide Data Gathering, Reduction, Evaluation and Reporting Services for the Geothermal Demonstration Power Plant Project. Submitted to Public Service Co., NM - Union w/comments by many LBL staff.

2. FIELD REPORTS

BACA FILES

REPORTS OF OPERATIONS

AUTHOR, ORGANIZATION: J.D. Maddox TO: Public Service Co., N.M.

DEC 1980

JAN 1981

FEB 1981

MAR 1981

APR 1981

BACA FILES

REPORTS OF OPERATIONS

AUTHOR, ORGANIZATION: Engebretson TO: Wilbur

MAY 1980

JUNE 1981

JULY 1981

AUG 1981

SEPT 1981

OCT 1981

NOV 1981

BACA FILES

PLANT ACTIVITIES AND STATUS REPORTS

Received:

DECEMBER 1980

JANUARY 1981

APRIL 1981

3. WELL LOGS

BACA FILES

WELL LOGS

Well	Logs	Date
BACA #4	Drilling Logs (Lithology)	09-11-70
BACA #5A	Drilling Logs (Lithology)	08-13-71
BACA #6	Drilling Logs (Lithology)	07-08-72
BACA #8	Drilling Logs (Lithology)	08-16-72
BACA #9 and 9 REDRILL	Drilling Logs (Lithology)	09-15-72
BACA #10	Drilling Logs (Lithology)	07-05-73
	Gamma Ray	09-12-73
	Cement Bond Log	09-15-73
	Temperature Log	09-14-73, 09-15-73
BACA #11	Drilling Logs (Lithology)	09-09-73
BACA #12	Drilling Logs (Lithology)	06-27-81
	Casing Inspection Caliper Log	07-17-76
	Temperature Log	07-07-74
BACA #13	Perforating Depth Control	05-15-81
	Engineered Production Logging	05-15-81
	Fullbore Flowmeter	05-15-81
	Temperature Log	05-15-81
	Dual-Induction-SFL w/Linear Correlation Log	09-18-74, 10-28-74
	Compensated Neutron-Formation Density	19-28-74
	Dual-Induction-Laterolog w/Linear Correlation Log	09-18-74, 10-28-74
	Sonic Log	10-28-74
BACA #14	Drilling Logs	11-16-74
	Temperature Log	10-07-75, 02-10-75
	Compensated Neutron-Formation Density	02-10-75
BACA #15	Drilling Logs (Lithology)	04-29-75
BACA #16	Drilling Logs (Lithology)	06-19-75
BACA #17	Drilling Logs (Lithology)	08-13-78
	Dual-Induction-SFL w/Linear Correlation Log	08-31-78
	Temperature	09-22-78, 10-12-78
	Induction-Gamma Ray Log	09-22-78, 10-12-78
	Dual-Induction-Laterolog w/Linear Correlation Log	08-31-78
	Cement Bond Log (Gamma Ray)	09-29-79
	Borehole Geometry (Caliper)	09-22-78

BACA FILES

WELL LOGS

Well		Logs	Date
BACA #17			
	REDRILL #1	Drilling Logs (Lithology)	08-13-78
		Induction-Gamma Ray Log	11-10-78
BACA #18		Drilling Logs (Lithology)	12-16-78
		Induction	03-09-79, 01-01-79
		Dual-Induction-Laterlog w/Linear Correlation Log	12-19-78
		Temperature	01-01-79, 03-08-79
		Fracture ID Log w/Correlation Log	01-01-79
BACA #19		Drilling Logs	09-23-79
		Dual-Induction-SFL w/Linear Correlation Log	10-03-79, 10-12-79, 10-30-79
		Temperature	10-12-79
BACA #20		Fracture ID Log w/Correlation Log	07-15-80, 08-01-80
		Simultaneous Compensated Neutron-Formation Density	07-16-80, 08-10-80,
		High Resolution Temperature	08-01-80
		Borehole Compensated Sonic Log	07-16-80
	REDRILL #1	Simultaneous Compensated Neutron Formation Density	08-13-80
		Fracture ID Log	09-16-81
BACA #21		Fracture ID Log w/Correlation Log	09-28-80
		Dual-Induction-SFL w/Linear Correlation Log	09-18-80
		Simultaneous Dual Laterolog	09-28-80
		Simultaneous Compensated Neutron-Formation Density	09-28-80, 10-03-80
		Temperature	09-27-80
BACA #22		Drilling Logs (Lithology)	10-12-80
		Temperature Log	10-30-80
		Induction-Gamma Ray Log	11-17-80
		Fracture ID Log w/Correlation Log	07-15-80, 08-01-80,
		Dual Laterolog	10-21-80

BACA FILES

WELL LOGS

Well		Logs	Date
BACA #22			
	REDRILL #1	Compensated Neutron-Formation Density	12-10-80,
	REDRILL #3	Dual Laterolog	12-11-81
BACA #23		Drilling Logs (Lithology)	01-12-81,
		Fracture ID Log w/Correlation Log	02-10-81
		Temperature Log	02-10-81
		Compensated Neutron-Formation Density	12-10-81, 02-18-81
		Induction-Gamma Ray Log	02-18-81
		Dual-Induction-SFL w/Linear Correlation Log	01-23-81
BACA #24		Temperature Log	05-16-81
		Simultaneous Dual Laterolog	05-16-81
		Drilling Logs	04-23-81

4. INDIVIDUAL WELL DATA

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #1

COORDINATES:

COORDINATE SYSTEM:

ELEVATION:

MEASURED FROM:

DRILLING START DATE:

DRILLING COMPLETION DATE:

DEPTH: 3675'

ADDITIONAL INFORMATION: None

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #2

COORDINATES:

COORDINATE SYSTEM:

ELEVATION:

MEASURED FROM:

DRILLING START DATE:

DRILLING COMPLETION DATE:

DEPTH: 5658'

ADDITIONAL INFORMATION: None

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #3

COORDINATES:

COORDINATE SYSTEM:

ELEVATION:

MEASURED FROM:

DRILLING START DATE:

DRILLING COMPLETION DATE:

DEPTH: ~2200'

ADDITIONAL INFORMATION: None

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #4

COORDINATES:

COORDINATE SYSTEM:

ELEVATION: 8319'

MEASURED FROM:

DRILLING START DATE:

DRILLING COMPLETION DATE:

DEPTH: 6378'

ADDITIONAL INFORMATION: None

DAILY TESTING REPORTS

WELL #: 4

RECEIVED:

06 - 09 - 82	to	06 - 14 - 82	- -	to	- -
07 - 01 - 82	to	07 - 12 - 82	- -	to	- -
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TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 4

RECEIVED:

10 - 05 - 72	03 - 08 - 74	11 - 08 - 75
10 - 13 - 72	07 - 23 - 74	11 - 13 - 75
10 - 29 - 72	10 - 17 - 74	11 - 18 - 75
12 - 02 - 72	11 - 07 - 74	11 - 25 - 75
12 - 13 - 72	11 - 11 - 74	12 - 04 - 75
01 - 10 - 73	01 - 10 - 75	12 - 13 - 75
05 - 28 - 73	02 - 12 - 75	12 - 17 - 75
08 - 08 - 73	03 - 05 - 75	12 - 22 - 75
08 - 09 - 73	05 - 06 - 75	01 - 06 - 76
09 - 7-8 - 73	09 - 10 - 75	01 - 20 - 76
11 - 13-15 - 73	09 - 15 - 75	01 - 25 - 76
11 - 16 - 73	10 - 06 - 75	02 - 03 - 76
11 - 17 - 73	10 - 13 - 75	02 - 13 - 76
11 - 19 - 73	10 - 20 - 75	02 - 26 - 76
12 - 03 - 73	10 - 28 - 75	03 - 06 - 76
12 - 17 - 73	11 - 03 - 75	03 - 12 - 76

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 4 (cont.)

RECEIVED:

03 - 19 - 76	10 -11-12 - 76	07 - 13 - 82
04 - 06 - 76	10 - 21 - 82	07 - 14 - 82
04 - 12 - 76	10 - 22 - 82	07 - 15 - 82
04 - 22 - 76	10 -22-23 - 82	07 - 16 - 82
04 - 27 - 76	10 - 25 - 82	07 - 19 - 82
05 - 03 - 76	10 - 27 - 82	07 - 21 - 82
05 - 06 - 76	06 - 07 - 82	07 - 27 - 82
05 - 11 - 76	06 - 14 - 82	08 - 03 - 82
05 - 17 - 76	06 - 15 - 82	- -
05 - 24 - 76	06 - 16 - 82	- -
06 - 22 - 76	06 - 17 - 82	- -
06 - 29 - 76	06 - 18 - 82	- -
07 - 02 - 76	06 - 21 - 82	- -
07 - 08 - 76	06 - 25 - 82	- -
09 - 20 - 76	06 - 29 - 82	- -
09 - 22 - 76	07 - 12 - 82	- -

FLOWTEST # 3

WELL #: 4

RECEIVED:

03 - 31 - 81	to	07 - 22 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

WATER INJECTION

WELL #: 4

RECEIVED:

08 - 15 - 82		- -		- -	to	- -
10 - 21 - 82	to	10 - 22 - 82		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 4

RECEIVED:

COMPOSITIONAL ANALYSIS - 1-4-71

COMPOSITIONAL ANALYSIS - 8-16-73

COMPOSITIONAL ANALYSES - SEPT '73

COMPOSITIONAL ANALYSIS - 9-24-73

COMPOSITIONAL ANALYSIS - 10-3-73

CONPOSITIONAL ANALYSES - NOV '73

COMPOSITIONAL ANALYSIS - 11-5-73

COMPOSITIONAL ANALYSES - 5-6-81

OTHER Flowtest Production Data (Geochemistry)

WELL #: 4

RECEIVED:

08 - 16 - 73	11 - 05 - 73	- -
09 - 13 - 73	11 - 09 - 73	- -
09 - 21 - 73	- -	- -
09 - 24 - 73	- -	- -
09 - 28 - 73	- -	- -
10 - 01 - 73	- -	- -
10 - 05 - 73	- -	- -
10 - 08 - 73	- -	- -
10 - 12 - 73	- -	- -
10 - 15 - 73	- -	- -
10 - 19 - 73	- -	- -
10 - 22 - 73	- -	- -
10 - 26 - 73	- -	- -
10 - 29 - 73	- -	- -
11 - 01 - 73	- -	- -
11 - 02 - 73	- -	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA 5A

COORDINATES: 35.8777°N Latitude; 106.5783°W Longitude

COORDINATE SYSTEM:

ELEVATION: 9290'

MEASURED FROM: Kelly Bushing 18' from ground

DRILLING START DATE: 8-13-71

DRILLING COMPLETION DATE: 9-20-71

DEPTH: 6973'

ADDITIONAL INFORMATION:

DAILY TESTING REPORTS

WELL #: 5 - 5A

RECEIVED:

07- 18-71	to	09 - 20 - 71	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 5

RECEIVED:

10 - 06 - 72	- -	- -
10 - 12 - 72	- -	- -
10 - 14 - 72	- -	- -
10 - 29 - 72	- -	- -
12 - 02 - 72	- -	- -
01 - 11 - 73	- -	- -
01 - 12 - 73	- -	- -
05 - 28 - 73	- -	- -
05 - 29 - 73	- -	- -
08 - 05 - 73	- -	- -
11 - 29 - 73	- -	- -
03 - 07 - 74	- -	- -
09 - 04 - 74	- -	- -
06 - 24 - 76	- -	- -
- -	- -	- -
- -	- -	- -

INTERFERENCE PRESSURE DATA

WELL #: 5A

RECEIVED:

05 - 12 - 81	to	09 - 25 - 81	- -	to	- -
09 - 28 - 81	to	10 - 01 - 81	- -	to	- -
10 - 05 - 81	to	10 - 09 - 81	- -	to	- -
10 - 12 - 81	to	10 - 16 - 81	- -	to	- -
10 - 19 - 81	to	10 - 30 - 81	- -	to	- -
11 - 02 - 81	to	11 - 06 - 81	- -	to	- -
11 - 09 - 81	to	11 - 13 - 81	- -	to	- -
11 - 16 - 81	to	11 - 20 - 81	- -	to	- -
11 - 23 - 81	to	11 - 25 - 81	- -	to	- -
11 - 30 - 81	to	12 - 04 - 81	- -	to	- -
12 - 07 - 81	to	12 - 14 - 81	- -	to	- -
12 - 14 - 81	to	01 - 08 - 82	- -	to	- -
01 - 11 - 82	to	01 - 29 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 5

RECEIVED:

COMPOSITIONAL ANALYSES	10-15-71	
SUSPENDED SOLIDS TESTS	11-07-73	
FLOW DATA	10-14-76	

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA 6

COORDINATES: 35.8880°N Latitude; 106.5823°W Longitude

COORDINATE SYSTEM:

ELEVATION: 8726'

MEASURED FROM: ground surface

DRILLING START DATE: 03-01-75 (from 3715')

DRILLING COMPLETION DATE: 04-14-75 (Deepened)

DEPTH: 4810'

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 6

RECEIVED:

10 - 15 - 72	08 - 03 - 73	08 - 19 - 75
10 - 16 - 72	09 -19-20 - 73	08 - 20 - 75
10 - 24 - 72	10 - 04 - 73	08 - 21 - 75
11 - 03 - 72	10 - 14 - 73	08 - 27 - 75
11 - 05 - 72	10 - 24 - 73	09 - 30 - 75
11 - 06 - 72	11 - 02 - 73	06 - 25 - 76
01 - 14 - 73	11 - 08 - 73	- -
01 - 16 - 73	12 - 10 - 73	- -
01 - 17 - 73	12 - 19 - 73	- -
01 - 18 - 73	03 - 02 - 74	- -
01 - 19 - 73	07 - 17 - 74	- -
01 - 20 - 73	10 - 03 - 74	- -
01 -17-20 - 73	10 - 04 - 74	- -
01 - 31 - 73	02 - 14 - 75	- -
02 - 01 - 73	05 - 27 - 75	- -
05 - 29 - 73	06 - 05 - 75	- -

INTERFERENCE PRESSURE DATA

WELL #: 6

RECEIVED:

05 - 15 - 81	to	09 - 25 - 81	- -	to	- -
09 - 28 - 81	to	10 - 01 - 81	- -	to	- -
10 - 05 - 81	to	10 - 09 - 81	- -	to	- -
10 - 12 - 81	to	10 - 16 - 81	- -	to	- -
10 - 19 - 81	to	10 - 30 - 81	- -	to	- -
11 - 02 - 81	to	11 - 06 - 81	- -	to	- -
11 - 09 - 81	to	11 - 13 - 81	- -	to	- -
11 - 16 - 81	to	11 - 20 - 81	- -	to	- -
11 - 23 - 81	to	11 - 25 - 81	- -	to	- -
11 - 30 - 81	to	12 - 04 - 81	- -	to	- -
12 - 07 - 81	to	12 - 11 - 81	- -	to	- -
12 - 14 - 81	to	01 - 08 - 82	- -	to	- -
12 - 28 - 81	to	06 - 02 - 82	- -	to	- -
05 - 21 - 82	to	09 - 01 - 82	- -	to	- -
08 - 20 - 82	to	10 - 04 - 82	- -	to	- -
09 - 25 - 82	to	11 - 03 - 82	- -	to	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 6

RECEIVED:

NON-CONDENSABLE GASES ANALYSES - 10-14-72

COMPOSITIONAL ANALYSES - 10-20-72

COMPOSITIONAL ANALYSES - 10-26-27-72

COMPOSITIONAL ANALYSES - 11-09-72

COMPOSITIONAL ANALYSES - 12-20-72

COMPOSITIONAL ANALYSES - 01-13-73

COMPOSITIONAL ANALYSES - 08-13-75

COMPOSITIONAL ANALYSES - NOV '75

OTHER Flowtest Production Data (Geochemistry)

WELL #: 6

RECEIVED:

10 - 14 - 72	- -	- -
10 - 26 - 72	- -	- -
10 - 27 - 72	- -	- -
11 - 07 - 72	- -	- -
11 - 09 - 72	- -	- -
11 - 11 - 72	- -	- -
01 - 13 - 73	- -	- -
08 - 13 - 75	- -	- -
11 - 09 - 75	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #7

COORDINATES: 35.9372°N; 106.5912°W

COORDINATE SYSTEM: Lat./Long

ELEVATION: 8724'

MEASURED FROM: ground surface

DRILLING START DATE: 07-26-72

DRILLING COMPLETION DATE: 08-15-72

DEPTH: 5532' (from Kelly Bushing; 14' off ground)

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 7

RECEIVED:

07 - 31 - 74	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #8

COORDINATES: 35.9173°N°; 106.5898°W

COORDINATE SYSTEM: Lat./Long.

ELEVATION: 8631'

MEASURED FROM: Kelly bushing, 14' off ground

DRILLING START DATE: 08-16-72

DRILLING COMPLETION DATE: 09-13-72

DEPTH: 4384' (from Kelly bushing)

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 8

RECEIVED:

08 - 02 - 74	- -	- -
08 - 29 - 74	- -	- -
09 - 05 - 74	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #9

COORDINATES: 35.8825°N; 106.5868°W

COORDINATE SYSTEM: Lat./Long.

ELEVATION: 8605'

MEASURED FROM: ground surface

DRILLING START DATE: 09-16-72

DRILLING COMPLETION DATE: 11-22-72

DEPTH: 5303' (from Kelly bushing, 14')

ADDITIONAL INFORMATION:

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #10

COORDINATES: SEC10, T19N, R3E

COORDINATE SYSTEM:

ELEVATION: 8734'

MEASURED FROM:

DRILLING START DATE: 07-05-73

DRILLING COMPLETION DATE: 09-18-73

DEPTH: 6001'

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 10

RECEIVED:

10 - 03 - 73	02 - 10 - 75	12 - 14 - 75
11 - 18 - 73	04 - 24 - 75	12 - 18 - 75
11 - 27 - 73	09 - 03 - 75	01 - 22 - 76
12 - 06 - 73	09 - 04 - 75	03 - 09 - 76
03 - 04 - 74	09 - 08 - 75	03 - 18 - 76
03 - 05 - 74	09 - 12 - 75	04 - 14 - 76
03 - 09 - 74	09 - 17 - 75	10 - 18 - 76
03 - 10 - 74	10 - 09 - 75	- -
03 - 11 - 74	10 - 21 - 75	- -
03 - 15 - 74	10 - 22 - 75	- -
03 - 21 - 74	10 - 30 - 75	- -
05 - 16 - 74	11 - 05 - 75	- -
07 - 26 - 74	11 - 10 - 75	- -
07 - 27 - 74	11 - 20 - 75	- -
08 - 06 - 74	11 - 26 - 75	- -
12 - 31 - 74	12 - 05 - 75	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #11

COORDINATES: 35.8950°N; 106.5760°W

COORDINATE SYSTEM: Lat./Long.

ELEVATION: 9065'

MEASURED FROM: ground surface

DRILLING START DATE: 09-26-73

DRILLING COMPLETION DATE: 11-13-73

DEPTH: 6924' (from Kelly bushing, 17')

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 11

RECEIVED:

12 - 07 - 73	03 - 13 - 74	05 - 01 - 74
12 - 13 - 73	03 - 14 - 74	05 - 02 - 74
12 - 22 - 73	03 - 15 - 74	05 - 07 - 74
12 - 23 - 73	03 - 16 - 74	05 - 10 - 74
12 - 29 - 73	03 - 20 - 74	05 - 14 - 74
12 - 30 - 73	03 - 26 - 74	05 - 22 - 74
12 - 31 - 73	03 - 27 - 74	09 - 19 - 74
01 - 24 - 74	03 - 28 - 74	10 - 16 - 74
01 - 25 - 74	03 - 30 - 74	11 - 17 - 74
01 - 26 - 74	04 - 04 - 74	11 - 18 - 74
02 - 25 - 74	04 - 08 - 74	11 - 19 - 74
02 - 26 - 74	04 - 11 - 74	11 - 21 - 74
02 - 27 - 74	04 - 18 - 74	12 - 09 - 74
02 - 28 - 74	04 - 21 - 74	12 - 16 - 74
03 - 09 - 74	04 - 22 - 74	12 - 18 - 74
03 - 12 - 74	04 - 26 - 74	12 - 19 - 74

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 11 (cont.)

RECEIVED:

12 - 22 - 74	04 - 30 - 76	09 - 16 - 76
01 - 04 - 75	05 - 02 - 76	09 - 28 - 76
01 - 24 - 75	05 - 04 - 76	10 - 05 - 76
01 - 25 - 75	05 - 06 - 76	- -
02 - 11 - 75	05 - 10 - 76	- -
03 - 26 - 75	05 - 14 - 76	- -
04 - 01 - 75	05 - 18 - 76	- -
05 - 09 - 75	05 - 21 - 76	- -
09 - 26 - 75	05 - 22 - 76	- -
04 - 19 - 76	05 - 28 - 76	- -
04 - 20 - 76	06 - 01 - 76	- -
04 - 21 - 76	06 - 04 - 76	- -
04 - 22 - 76	06 - 07 - 76	- -
04 - 24 - 76	06 - 11 - 76	- -
04 - 27 - 76	06 - 15 - 76	- -
04 - 28 - 76	06 - 21 - 76	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 11

RECEIVED:

COMPOSITIONAL ANALYSES 01-23-74

COMPOSITIONAL ANALYSES 07-24-74

CONDENSATE TESTS 09-06-74

COMPOSITIONAL ANALYSES 09-16, 09-20-74

BETA RADIATION 11-04-74

STEAM CONDENSATE 11-11-74

COMPOSITIONAL ANALYSES NOV. 1975

COMPOSITIONAL ANALYSES JAN. 1976

PRODUCTION ANALYSES FEB. 1976

PRODUCTION ANALYSES APRIL 1976

OTHER Flowtest Production Data (Geochemistry)

WELL #: 11

RECEIVED:

01 - 23 - 74		- -	- -	to	- -
07 - 24 - 74		- -	- -	to	- -
09 - 06 - 74		- -	- -	to	- -
09 - 16 - 74		- -	- -	to	- -
09 - 20 - 74		- -	- -	to	- -
11 - 11 - 74		- -	- -	to	- -
11 - 08 - 75		- -	- -	to	- -
01 - 12 - 76		- -	- -	to	- -
02 - 24 - 76		- -	- -	to	- -
04 - 08 - 76		- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #12

COORDINATES: SEC14, T19N, R3E; 1,773,160'N; 399,360'E; 4,180' fnl, 2820'fel

COORDINATE SYSTEM: New Mexico State Coordinates

ELEVATION: 8427' (ground) 8451' (Kelly bushing)

MEASURED FROM:

DRILLING START DATE: 06-27-81

DRILLING COMPLETION DATE: 09-06-81

DEPTH: 10,637'

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 12

RECEIVED:

07 - 07 - 74	08 - 24 - 76	06 - 09 - 80
09 - 20 - 74	09 - 07 - 76	07 - 07 - 81
09 - 23 - 74	09 - 11 - 76	08 - 03 - 81
09 - 24 - 74	11 - 30 - 76	09 - 01 - 81 (T)
09 - 28 - 74	12 - 15 - 76	01 - 08 - 82
10 - 02 - 74	12 - 22 - 76	06 - 04 - 82
10 - 03 - 74	03 - 31 - 77	- -
10 - 04 - 74	06 - 14 - 77	- -
10 - 09 - 74	12 - 17 - 77	- -
10 - 14 - 74	05 - 05 - 80 (P, P, T)	- -
10 - 15 - 74	05 - 06 - 80 (P)	- -
10 - 21 - 74	05 - 6-7 - 80	- -
05 - 01 - 75	05 - 08 - 80	- -
07 - 13 - 76	05 - 09 - 80	- -
07 - 14 - 76	05 - 12 - 80	- -
07 - 30 - 76	05 - 19 - 80	- -

WATER INJECTION

WELL #: 12

RECEIVED:

10 - 13 - 74	to	10 - 14 - 74	- -	to	- -
10 - 17 - 74		- -	- -	to	- -
05 - 05 - 80	to	05 - 06 - 80	- -	to	- -
06 - 23 - 82	to	07 - 10 - 82	- -	to	- -
07 - 10 - 82	to	07 - 21 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

AVERAGE ANGLE METHOD

WELL #: 12

RECEIVED:

09 - 04 - 81	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
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- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

DEEPENING

WELL #: 12

RECEIVED:

07 - 31 - 81	to	08 - 06 - 81	- -	to	- -
08 - 07 - 81	to	08 - 13 - 81	- -	to	- -
08 - 14 - 81	to	08 - 20 - 81	- -	to	- -
08 - 21 - 81	to	08 - 27 - 81	- -	to	- -
08 - 28 - 81	to	09 - 03 - 81	- -	to	- -
09 - 04 - 81	to	09 - 24 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

OTHER Gyroscopic Multishot Survey

WELL #: 12

RECEIVED:

06 - 30 - 81	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
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- -	- -	- -
- -	- -	- -
- -	- -	- -

REDRILL

WELL #: 12

RECEIVED:

06 - 27 - 81	to	09 - 06 - 81	- -	to	- -
07 - 02 - 81	to	07 - 09 - 81	- -	to	- -
07 - 10 - 81	to	07 - 16 - 81	- -	to	- -
07 - 13 - 81		07 - 15 - 81	- -	to	- -
07 - 17 - 81		- -	- -	to	- -
07 - 23 - 81	to	07 - 24 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

SPINNER

WELL #: 12
RECEIVED:

05 - 06 - 80	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
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- -	- -	- -
- -	- -	- -
- -	- -	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 12

RECEIVED:

REINJECTION WATER COMPOSITION 01-22-76

PRODUCTION ANALYSES 02-25-76

PRODUCTION ANALYSES 04-07-76

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #13

COORDINATES: Sec 12, T19N, R3E

COORDINATE SYSTEM:

ELEVATION: 9292' (ground) 9314' (Kelly bushing)

MEASURED FROM:

DRILLING START DATE: 08-23-74

DRILLING COMPLETION DATE: 11-05-74

DEPTH: 8228'

ADDITIONAL INFORMATION:

DAILY TESTING REPORTS

WELL #: 13

RECEIVED:

07 - 21 - 81	to	07 - 29 - 81	- -	to	- -
02 - 16 - 81	to	04 - 13 - 82	- -	to	- -
06 - 02 - 82	to	06 - 07 - 82	- -	to	- -
06 - 24 - 82	to	07 - 06 - 82	- -	to	- -
08 - 11 - 82		- -	- -	to	- -
08 - 13 - 82	to	08 - 15 - 82	- -	to	- -
09 - 14 - 82	to	09 - 20 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 13

RECEIVED:

11 - 26 - 74	04 - 27 - 76	05 - 28 - 76
11 - 29 - 74	04 - 28 - 76	06 - 03 - 76
03 - 21 - 75	04 - 29 - 76	06 - 28 - 76
04 - 04 - 75	04 - 30 - 76	07 - 01 - 76
04 - 15 - 75	05 - 01 - 76	07 - 07 - 76 (T)
04 - 25 - 75	05 - 02 - 76	09 - 28 - 76
09 - 27 - 75	05 - 03 - 76	10 - 22 - 76 (T)
01 - 24 - 75	05 - 04 - 76	06 - 30 - 77
02 - 19 - 75	05 - 07 - 76 (T)	09 - 15 - 77
02 - 25 - 75	05 - 20 - 76	08 - 05 - 80
02 - 26 - 75	07 - 07 - 76 (T)	09 - 11 - 80
02 - 28 - 75	05 - 09 - 76	03 - 02 - 81
03 - 03 - 75	05 - 11 - 76	05 - 13 - 81
03 - 06 - 75	05 - 13 - 76	05 -13-14 - 81
03 - 20 - 75	05 - 17 - 76	05 - 14 - 81
04 - 25 - 76	05 - 24 - 76	05 - 19 - 81

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 13 (cont.)

RECEIVED:

05 - 20 - 81	06 - 23 - 82	- -
05 - 21 - 81	07 - 06 - 82	- -
02 - 09 - 82	07 - 07 - 82	- -
04 -13-16 - 82	07 - 08 - 82	- -
04 - 19 - 82	07 - 09 - 82	- -
04 - 23 - 82	07 - 10 - 82	- -
05 - 03 - 82	07 - 12 - 82	- -
05 - 12 - 82	07 - 13 - 82	- -
06 - 01 - 82	07 - 14 - 82	- -
06 - 07 - 82	07 - 16 - 82	- -
06 - 08 - 82	07 - 22 - 82	- -
06 - 09 - 82	07 - 30 - 82	- -
06 - 10 - 82	- -	- -
06 - 11 - 82	- -	- -
06 - 14 - 82	- -	- -
06 - 18 - 82	- -	- -

FLOWTEST # 5

WELL #: 13

RECEIVED:

03 - 05 - 81	to	04 - 21 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

FLOWTEST # 6

WELL #: 13

RECEIVED:

07 - 21 - 81	to	09 - 25 - 81	- -	to	- -
09 - 26 - 81	to	10 - 02 - 81	- -	to	- -
10 - 03 - 81	to	10 - 09 - 81	- -	to	- -
10 - 10 - 81	to	10 - 16 - 81	- -	to	- -
10 - 17 - 81	to	10 - 30 - 81	- -	to	- -
10 - 31 - 81	to	11 - 06 - 81	- -	to	- -
11 - 07 - 81	to	11 - 20 - 81	- -	to	- -
11 - 21 - 81	to	11 - 27 - 81	- -	to	- -
11 - 28 - 81	to	12 - 04 - 81	- -	to	- -
12 - 05 - 81	to	12 - 11 - 81	- -	to	- -
12 - 12 - 81	to	12 - 18 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

WATER INJECTION

WELL #: 13

RECEIVED:

05 - 13 - 81	to	05 - 18 - 81	- -	to	- -
08 - 17 - 82		- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 13

RECEIVED:

COMPOSITIONAL ANALYSES 12-07-74	
COMPOSITIONAL ANALYSES 01-15-75	
COMPOSITIONAL ANALYSES JUNE 1975	
COMPOSITIONAL ANALYSES 06-19-75	
COMPOSITIONAL ANALYSES 10-15-75	
COMPOSITIONAL ANALYSES 11-07-75	
COMPOSITIONAL ANALYSES 01-11-76	
PRODUCTION ANALYSES 02-26-76	
PRODUCTION ANALYSES 04-07-76	

OTHER Flowtest Production Data (Geochemistry)

WELL #: 13

RECEIVED:

01 - 15 - 75	- -		- -	to	- -
06 - 13 - 75	- -		- -	to	- -
06 - 19 - 75	- -		- -	to	- -
10 - 15 - 75	- -		- -	to	- -
11 - 07 - 75	- -		- -	to	- -
01 - 11 - 76	- -		- -	to	- -
02 - 26 - 76	- -		- -	to	- -
04 - 07 - 76	- -		- -	to	- -
04 - 08 - 76	- -		- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #14

COORDINATES: 35.8825°N; 106.5868°W

COORDINATE SYSTEM: Lat./Long.

ELEVATION: 8605'

MEASURED FROM: ground surface

DRILLING START DATE: 11-15-75

DRILLING COMPLETION DATE: 02-24-76

DEPTH: 6824'

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 14

RECEIVED:

02 - 07 -75	- -	- -
02 - 20 -75	05 - 25 - 82	- -
02 - 21 -75	- -	- -
08 - 12 -76	- -	- -
08 - 13 -76	- -	- -
06 - 02 -80	- -	- -
06 - 03 -80	- -	- -
06 - 04 -80	- -	- -
06 - 05 -80	- -	- -
06 - 06 -80	- -	- -
06 - 07 -80	- -	- -
06 - 09 -80	- -	- -
06 - 16 -80	- -	- -
07 - 09 -80	- -	- -
05 - 15 -81	- -	- -
06 - 17 -81	- -	- -

INTERFERENCE PRESSURE DATA

WELL #: 14

RECEIVED:

06 - 19 - 81	to	09 - 25 - 81	- -	to	- -
09 - 28 - 81	to	10 - 01 - 81	- -	to	- -
10 - 05 - 81	to	10 - 09 - 81	- -	to	- -
10 - 12 - 81	to	10 - 16 - 81	- -	to	- -
10 - 19 - 81	to	10 - 30 - 81	- -	to	- -
11 - 02 - 81	to	11 - 06 - 81	- -	to	- -
11 - 09 - 81	to	11 - 13 - 81	- -	to	- -
11 - 16 - 81	to	11 - 20 - 81	- -	to	- -
11 - 23 - 81	to	11 - 25 - 81	- -	to	- -
11 - 30 - 81	to	12 - 04 - 81	- -	to	- -
12 - 05 - 81	to	12 - 11 - 81	- -	to	- -
12 - 14 - 81	to	01 - 08 - 82	- -	to	- -
12 - 30 - 81	to	05 - 24 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

WATER INJECTION

WELL #: 14

RECEIVED:

06 - 02 - 80	to	06 - 05 - 80	- -	to	- -
09 - 24 - 80	to	01 - 06 - 81	- -	to	- -
03 - 05 - 81	to	03 - 31 - 81	- -	to	- -
07 - 01 - 81	to	07 - 07 - 81	- -	to	- -
07 - 17 - 81	to	07 - 31 - 81	- -	to	- -
08 - 01 - 81	to	08 - 31 - 81	- -	to	- -
09 - 01 - 81	to	09 - 15 - 81	- -	to	- -
10 - 09 - 81	to	10 - 31 - 81	- -	to	- -
11 - 01 - 81	to	11 - 30 - 81	- -	to	- -
12 - 01 - 81	to	12 - 18 - 81	- -	to	- -
01 - 11 - 82	to	02 - 03 - 82	- -	to	- -
06 - 02 - 82	to	06 - 25 - 82	- -	to	- -
06 - 30 - 82	to	08 - 30 - 82	- -	to	- -
08 - 30 - 82	to	09 - 27 - 82	- -	to	- -
10 - 07 - 82	to	10 - 18 - 82	- -	to	- -
- -	to	- -	- -	to	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #15

COORDINATES: 35.8946°N; 106.5803°W

COORDINATE SYSTEM: Lat./Long.

ELEVATION: 9117'

MEASURED FROM: ground surface

DRILLING START DATE: 04-29-75

DRILLING COMPLETION DATE: 06-12-75

DEPTH: 5505'

ADDITIONAL INFORMATION:

DAILY TESTING REPORTS

WELL #: 15

RECEIVED:

07 - 21 - 82	to	07 - 26 - 82	- -	to	- -
08 - 30 - 82	to	09 - 08 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 15

RECEIVED:

06 - 26 - 75	11 - 09 - 75	05 - 05 - 76
07 - 03 - 75	12 - 02 - 75	05 - 12 - 76
07 - 14 - 75	12 - 08 - 75	05 - 19 - 76
07 - 15 - 75	12 - 15 - 75	06 - 22 - 76
07 - 16 - 75	12 - 19 - 75	06 - 29 - 76
07 - 18 - 75	02 - 12 - 76	07 - 01 - 76
07 - 23 - 75	02 - 04 - 76	07 - 08 - 76
07 - 25 - 75	02 - 23 - 76	09 - 03 - 76
07 - 31 - 75	03 - 03 - 76	09 - 28 - 76
08 - 14 - 75	03 - 10 - 76	10 - 05 - 76
09 - 18 - 75	03 - 18 - 76	06 - 24 - 82
09 - 19 - 75	04 - 02 - 76	06 - 25 - 82
10 - 08 - 75	04 - 05 - 76	06 - 30 - 82
10 - 23 - 75	04 - 06 - 76	07 - 01 - 82
10 - 24 - 75	04 - 23 - 76	07 - 02 - 82
11 - 04 - 75	04 - 27 - 76	07 - 06 - 82

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 15 (cont.)

RECEIVED:

07 - 14 - 82	09 - 16 - 82	- -
07 - 20 - 82	09 - 23 - 82	- -
07 - 26 - 82	- -	- -
07 - 27 - 82	- -	- -
07 - 28 - 82	- -	- -
07 - 29 - 82	- -	- -
07 - 30 - 82	- -	- -
08 - 02 - 82	- -	- -
08 - 05 - 82	- -	- -
08 - 10 - 82	- -	- -
08 - 27 - 82	- -	- -
09 - 08 - 82 (p)	- -	- -
09 - 09 - 82	- -	- -
09 - 10 - 82	- -	- -
09 - 11 - 82	- -	- -
09 - 13 - 82	- -	- -

WATER INJECTION

WELL #: 15

RECEIVED:

06 - 24 - 82	to	06 - 30 - 82	- -	to	- -
08 - 16 - 82		- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

SPINNER

WELL #: 15
RECEIVED:

06 - 25 - 82	- -	- -
06 - 29 - 82	- -	- -
06 - 30 - 82	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 15

RECEIVED:

COMPOSITIONAL ANALYSES June 75

PRODUCTION ANALYSES Feb 76

COMPOSITIONAL ANALYSES 10-14-76

COMPOSITIONAL ANALYSES 11-04-76

COMPOSITIONAL ANALYSES 11-17, 11-22, 11-24-76

COMPOSITIONAL ANALYSES 01-04, 01-05-77

OTHER Flowtest Production Data (Geochemistry)

WELL #: 15

RECEIVED:

06 - 19 - 75	- -	- -
02 - 12 - 76	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #16

COORDINATES: 35.9037°N; 106.5688°W

COORDINATE SYSTEM: Lat./Long.

ELEVATION: 9622'

MEASURED FROM: ground surface

DRILLING START DATE: 06-19-75

DRILLING COMPLETION DATE: 08-21-75

DEPTH: 7002'

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 16

RECEIVED:

07 - 05 - 75	11 - 24 - 75	04 - 08 - 76
07 - 08 - 75	12 - 03 - 75	04 - 22 - 76
07 - 09 - 75	12 - 09 - 75	04 - 28 - 76
07 - 10 - 75	12 - 16 - 75	05 - 07 - 76
08 - 03 - 75	12 - 20 - 75	05 - 14 - 76
08 - 05 - 75	12 - 30 - 75	05 - 21 - 76
08 - 07 - 75	01 - 10 - 76	06 - 22 - 76
09 - 11 - 75	01 - 23 - 76	06 - 30 - 76
09 - 16 - 75	02 - 02 - 76	07 - 02 - 76
09 - 24 - 75	02 - 13 - 76	07 - 09 - 76
09 - 25 - 75	02 - 24 - 76	- -
10 - 07 - 75	03 - 03 - 76	- -
10 - 25 - 75	03 - 11 - 76	- -
10 - 31 - 75	03 - 19 - 76	- -
11 - 11 - 75	03 - 31 - 76	- -
11 - 17 - 75	04 - 07 - 76	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #17

COORDINATES:

COORDINATE SYSTEM:

ELEVATION:

MEASURED FROM:

DRILLING START DATE:

DRILLING COMPLETION DATE:

DEPTH: 6254' (redrill)

ADDITIONAL INFORMATION: none

OTHER DIRECTIONAL SURVEY

WELL #: 17

RECEIVED:

11 - 15 - 79	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #18

COORDINATES:

COORDINATE SYSTEM:

ELEVATION:

MEASURED FROM:

DRILLING START DATE:

DRILLING COMPLETION DATE:

DEPTH: 5250' (redrill 2)

ADDITIONAL INFORMATION: none

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 18

RECEIVED:

06 - 22 - 81	05 - 12 - 82	- -
07 - 06 - 81	05 - 25 - 82	- -
01 - 26 - 82	08 - 09 - 82	- -
02 - 03 - 82	08 - 31 - 82	- -
03 - 09 - 82	09 - 01 - 82	- -
04 - 12 - 82	09 - 02 - 82	- -
04 - 13 - 82	09 - 03 - 82 T/Spin.	- -
13-14 04 - 14 - 82	09 - 07 - 82 (p)	- -
	7-8 (p)	
04 - 15 - 82	09 - 08 - 82	- -
04 - 16 - 82	09 - 8-9 - 82 (p)	- -
04 - 19 - 82	09 - 09 - 82	- -
04 - 21 - 82	09 - 10 - 82	- -
04 - 23 - 82	09 - 13 - 82	- -
05 - 03 - 82	09 - 17 - 82	- -
05 - 04 - 82	09 - 29 - 82	- -
05 - 05 - 82	- -	- -

WATER INJECTION

WELL #: 18

RECEIVED:

02 - 16 - 82	to	04 - 13 - 82	- -	to	- -
06 - 02 - 82	to	06 - 14 - 82	- -	to	- -
06 - 30 - 82	to	07 - 12 - 82	- -	to	- -
09 - 01 - 82	to	09 - 07 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

INTERFERENCE PRESSURE DATA

WELL #: 18

RECEIVED:

07 - 22 - 81	to	07 - 29 - 81	- -	to	- -
07 - 23 - 81	to	09 - 25 - 81	- -	to	- -
09 - 28 - 81	to	10 - 01 - 81	- -	to	- -
10 - 05 - 81	to	10 - 09 - 81	- -	to	- -
10 - 12 - 81	to	10 - 16 - 81	- -	to	- -
10 - 19 - 81	to	10 - 30 - 81	- -	to	- -
11 - 02 - 81	to	11 - 06 - 81	- -	to	- -
11 - 09 - 81	to	11 - 13 - 81	- -	to	- -
11 - 16 - 81	to	11 - 20 - 81	- -	to	- -
11 - 23 - 81	to	11 - 25 - 81	- -	to	- -
11 - 30 - 81	to	12 - 04 - 81	- -	to	- -
12 - 07 - 81	to	12 - 11 - 81	- -	to	- -
12 - 14 - 81	to	01 - 08 - 82	- -	to	- -
12 - 31 - 81	to	01 - 25 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

OTHER DIRECTIONAL SURVEY

WELL #: 18

RECEIVED:

11 - 15 - 79	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #19

COORDINATES:

COORDINATE SYSTEM:

ELEVATION:

MEASURED FROM:

DRILLING START DATE:

DRILLING COMPLETION DATE:

DEPTH: 5610'

ADDITIONAL INFORMATION:

DAILY TESTING REPORTS

WELL #: 19

RECEIVED:

09 - 23 - 82	to	09 - 27 - 82	- -	to	- -
10 - 07 - 82	to	10 - 18 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 19

RECEIVED:

11 - 15 - 79	12 - 14 - 79	09 - 27-28 - 82 (P)
11 - 26 - 79	12 - 17 - 79	09 - 28 - 82
11 - 27 - 79	12 - 27 - 79	09 - 29 - 82
11 - 28 - 79	01 - 03 - 80	09 - 30 - 82
11 - 29 - 79	01 - 14 - 80	10 - 01 - 82
11 - 30 - 79	01 - 23 - 80	10 - 04 - 82
12 - 03 - 79	01 - 24 - 80	10 - 06 - 82
12 - 04 - 79	02 - 13 - 80	10 - 18 - 82
12 - 05 - 79	02 - 21 - 80	10 - 18-19 - 82
12 - 06 - 79	02 - 27 - 80	10 - 19 - 82
12 - 08 - 79	03 - 05 - 80	10 - 19-20 - 82
12 - 09 - 79	03 - 13 - 80	10 - 20 - 82
12 - 9-10 - 79	03 - 26 - 80	10 - 21 - 82
12 - 10 - 79	05 - 14 - 80	10 - 22 - 82
12 - 11 - 79	09 - 22 - 82	10 - 26 - 82
12 - 12 - 79	09 - 27 - 82	10 - 28 - 82

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 19 (cont.)

RECEIVED:

05 - 15 - 80	- -	- -
05 - 16 - 80	- -	- -
05 - 17 - 80	- -	- -
05 - 18 - 80	- -	- -
05 - 20 - 80	- -	- -
05 - 22 - 80	- -	- -
05 - 29 - 80	- -	- -
06 - 10 - 80	- -	- -
06 - 17 - 80	- -	- -
06 - 25 - 80	- -	- -
07 - 09 - 80	- -	- -
07 - 28 - 80	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

OTHER 2Ø TEST

WELL #: 19

RECEIVED:

11 - 15 - 79	to	11 - 27 - 79	- -	to	- -
03 - 26 - 80	to	05 - 14 - 80	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

WATER INJECTION

WELL #: 19

RECEIVED:

06 - 21 - 81	to	07 - 01 - 81	- -	to	- -
07 - 01 - 81	to	07 - 31 - 81	- -	to	- -
08 - 01 - 81	to	08 - 31 - 81	- -	to	- -
09 - 01 - 81	to	09 - 30 - 81	- -	to	- -
10 - 01 - 81	to	10 - 19 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

INTERFERENCE PRESSURE DATA

WELL #: 19

RECEIVED:

01 - 28 - 82	to	06 - 02 - 82	- -	to	- -
05 - 20 - 82	to	08 - 11 - 82	- -	to	- -
08 - 13 - 82	to	09 - 01 - 82	- -	to	- -
08 - 31 - 82	to	09 - 20 - 82	- -	to	- -
09 - 18 - 82	to	09 - 20 - 82	- -	to	- -
10 - 28 - 82	to	11 - 29 - 82	- -	to	- -
12 - 07 - 82	to	12 - 29 - 82	- -	to	- -
01 - 03 - 83	to	01 - 24 - 83	- -	to	- -
02 - 01 - 83	to	02 - 23 - 83	- -	to	- -
03 - 01 - 83	to	03 - 31 - 83	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #20

COORDINATES: SEC 12, T19N, R3E; 1280'fwl, 1495'fnl

COORDINATE SYSTEM: New Mexico State Coordinates

ELEVATION: 9065' (ground) 9089' (Kelly bushing)

MEASURED FROM:

DRILLING START DATE: 06-27-80

DRILLING COMPLETION DATE: 08-30-80

DEPTH: 6374' (redrill)

ADDITIONAL INFORMATION:

DAILY TESTING REPORTS

WELL #: 20

RECEIVED:

08 - 03 - 82	to	- -	- -	to	- -
08 - 04 - 82	to	- -	- -	to	- -
08 - 05 - 82	to	- -	- -	to	- -
08 - 26 - 82	to	- -	- -	to	- -
08 - 27 - 82	to	- -	- -	to	- -
08 - 28 - 82	to	- -	- -	to	- -
08 - 29 - 82	to	- -	- -	to	- -
08 - 30 - 82	to	- -	- -	to	- -
09 - 17 - 80	to	- -	- -	to	- -
09 - 24 - 80	to	01 - 06 - 81	- -	to	- -
- -	to	- -	- -	to	- -
10 - 27 - 81	to	11 - 09 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 20

RECEIVED:

09 - 14 - 80	07 - 27 - 81	08 - 30 - 82 (P)
09 - 23 - 80	07 - 28 - 81	08 - 30-31- 82 (P)
01 - 06 - 81	07 - 29 - 81	08 - 31 - 82
01 - 07 - 81	07 - 30 - 81	08 31 82 09 - 01 - 82
01 - 08 - 81	08 - 01 - 81	09 - 01 - 82
01 - 10 - 81	08 - 03 - 81	09 - 03 - 82
01 - 13 - 81	08 - 04 - 81	09 - 07 - 82
01 - 20 - 81	10 - 23 - 81	09 - 14 - 82
01 - 29 - 81	11 - 09 - 81	09 - 28 - 82
02 - 06 - 81	11 - 17 - 81	- -
02 - 18 - 81	08 - 01 - 82	- -
05 - 07 - 81	08 - 05 - 82	- -
05 - 26 - 81	08 - 06 - 82	- -
07 - 24 - 81	08 - 07 - 82	- -
07 - 25 - 81	08 - 13 - 82	- -
07 - 26 - 81	08 - 25 - 82	- -

INTERFERENCE PRESSURE DATA

WELL #: 20

RECEIVED:

05 - 12 - 81	to	07 - 21 - 81	- -	to	- -
05 - 28 - 81	to	08 - 01 - 81	- -	to	- -
05 - 28 - 82	to	06 - 02 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

SPINNER

WELL #: 20

RECEIVED:

07 - 28 - 81	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

REDRILL

WELL #: 20

RECEIVED:

08 - 28 - 80	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

WATER INJECTION

WELL #: 20

RECEIVED:

07 - 25 - 81	to	07 - 29 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

FLOWTEST # 3

WELL #: 20

RECEIVED:

09 - 16 - 80	to	09 - 17 - 80	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

FLOWTEST # 4

WELL #: 20

RECEIVED:

09 - 26 - 80	to	01 - 06 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

FLOWTEST # 5

WELL #: 20

RECEIVED:

10 - 26 - 81	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

STIMULATION

WELL #: 20

RECEIVED:

09 - 12 - 81	to	09 - 24 - 81	- -	to	- -
09 - 25 - 81	to	10 - 01 - 81	- -	to	- -
10 - 02 - 81	to	10 - 08 - 81	- -	to	- -
10 - 09 - 81	to	10 - 13 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

OTHER Multiple Orifice Metering Test

WELL #: 20

RECEIVED:

11 - 19 - 80	- -	- -
11 - 20 - 80	- -	- -
11 - 21 - 80	- -	- -
11 - 22 - 80	- -	- -
11 - 23 - 80	- -	- -
11 - 24 - 80	- -	- -
11 - 25 - 80	- -	- -
11 - 26 - 80	- -	- -
11 - 27 - 80	- -	- -
11 - 28 - 80	- -	- -
11 - 29 - 80	- -	- -
11 - 30 - 80	- -	- -
12 - 01 - 80	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 20

RECEIVED:

COMPOSITIONAL ANALYSES 10-23-80

COMPOSITIONAL ANALYSES 11-10-80

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #21

COORDINATES: (projected) SEC 1, T19N, R3E; 55'fnl, 725'fel of SW corner.

COORDINATE SYSTEM: New Mexico State Coordinates

ELEVATION: 9361'

MEASURED FROM: ground surface

DRILLING START DATE: 09-09-80

DRILLING COMPLETION DATE: 10-05-80

DEPTH: 3000'

ADDITIONAL INFORMATION:

DAILY TESTING REPORTS

WELL #: 21

RECEIVED:

02 - 11 - 81	to	03 - 21 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 21

RECEIVED:

10 - 01 - 80	- -	- -
11 - 12 - 80	- -	- -
03 - 13 - 81	- -	- -
03 - 21 - 81	- -	- -
03 - 22 - 81	- -	- -
03 - 23 - 81	- -	- -
03 - 23 - 81 (P)	- -	- -
03 - 24 - 81	- -	- -
03 - 25 - 81	- -	- -
03 - 26 - 81	- -	- -
03 - 27 - 81	- -	- -
03 - 30 - 81	- -	- -
04 - 01 - 81	- -	- -
04 - 06 - 81	- -	- -
04 - 23 - 81	- -	- -
05 - 05 - 81	- -	- -

FLOWTEST # 5

WELL #: 21

RECEIVED:

02 - 03 - 81	to	02 - 10 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #22

COORDINATES: SEC12, T19N, R3E; 1,781,851°N, 403.519°E, 770'fnl, 1300'fwl

COORDINATE SYSTEM: New Mexico State Coordinates

ELEVATION: 9270' (ground) 9294' (Kelly bushing)

MEASURED FROM:

DRILLING START DATE: 10-12-80

DRILLING COMPLETION DATE: 01- 3-81

DEPTH: 6017' (O.H.)
6485' (redrill 1)
6006' (redrill 2)

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 22

RECEIVED:

12 - 01 - 80	- -	- -
01 - 22 - 81	- -	- -
01 - 31 - 81	- -	- -
02 - 02 - 81	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

DEEPENING

WELL #: 22

RECEIVED:

10 - 27 - 81	to	11 - 05 - 81	- -	to	- -
11 - 06 - 81	to	11 - 12 - 81	- -	to	- -
11 - 13 - 81	to	11 - 19 - 81	- -	to	- -
11 - 20 - 81	to	12 - 03 - 81	- -	to	- -
12 - 04 - 81	to	12 - 10 - 81	- -	to	- -
12 - 11 - 81	to	12 - 17 - 81	- -	to	- -
10 - 18 - 81	to	10 - 26 - 81 (remedial)	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 22

RECEIVED:

COMPOSITIONAL ANALYSES 02-09-81

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #23

COORDINATES: SEC 11, T19N, R3E

COORDINATE SYSTEM:

ELEVATION: 8735'

MEASURED FROM: ground surface

DRILLING START DATE: 01-12-81

DRILLING COMPLETION DATE: 02-23-81

DEPTH: 5746'

ADDITIONAL INFORMATION:

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 23

RECEIVED:

04 - 09 - 81	- -	- -
04 - 13 - 81	- -	- -
04 - 21 - 81	- -	- -
05 - 12 - 81	- -	- -
05 - 13 - 81	- -	- -
05 - 14 - 81	- -	- -
05 - 16 - 81	- -	- -
05 - 19 - 81	- -	- -
05 - 20 - 81	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -
- -	- -	- -

FLOWTEST # 2

WELL #: 23

RECEIVED:

03 - 28 - 81	to	03 - 30 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

FLOWTEST # 1

WELL #: 23

RECEIVED:

02 - 22 - 81	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

INTERFERENCE PRESSURE DATA

WELL #: 23

RECEIVED:

06 - 19 - 81	to	09 - 25 - 81	10 - 15 - 82	to	03 - 31 - 83
09 - 28 - 81	to	10 - 01 - 81	- -	to	- -
10 - 05 - 81	to	10 - 09 - 81	- -	to	- -
10 - 12 - 81	to	10 - 16 - 81	- -	to	- -
10 - 19 - 81	to	10 - 30 - 81	- -	to	- -
11 - 02 - 81	to	11 - 06 - 81	- -	to	- -
11 - 09 - 81	to	11 - 13 - 81	- -	to	- -
11 - 16 - 81	to	11 - 20 - 81	- -	to	- -
11 - 23 - 81	to	11 - 25 - 81	- -	to	- -
11 - 30 - 81	to	12 - 04 - 81	- -	to	- -
12 - 07 - 81	to	12 - 11 - 81	- -	to	- -
12 - 14 - 81	to	01 - 08 - 82	- -	to	- -
12 - 22 - 81	to	06 - 02 - 82	- -	to	- -
05 - 23 - 82	to	09 - 01 - 82	- -	to	- -
08 - 22 - 82	to	10 - 04 - 82	- -	to	- -
09 - 27 - 82	to	11 - 03 - 82	- -	to	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 23

RECEIVED:

COMPOSITIONAL ANALYSES, 05-05-81

BACA FILES

WELL IDENTIFICATION SHEET

WELL: BACA #24

COORDINATES: SEC11, T19N, R3E; 350'fsl, 350'fel

COORDINATE SYSTEM: New Mexico State Coordinates

ELEVATION: 8740'

MEASURED FROM: ground surface

DRILLING START DATE: 04-23-81

DRILLING COMPLETION DATE: 06-03-81

DEPTH: 5502'

ADDITIONAL INFORMATION:

DAILY TESTING REPORTS

WELL #: 24

RECEIVED:

07 - 03 - 81	to	07 - 29 - 81	- -	to	- -
06 - 16 - 82	to	06 - 21 - 82	- -	to	- -
07 - 08 - 82	to	07 - 19 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
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- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

TEMPERATURE AND PRESSURE GRADIENT RECORDS

(T) = TEMPERATURE ONLY; (P) = PRESSURE ONLY

WELL #: 24

RECEIVED:

06 - 26 - 81	06 - 22 - 82	09 - 17 - 82 T-Spin.
06 - 30 - 81	06 - 23 - 82	09 - 20 - 82 (P)
07 - 07 - 81	06 - 25 - 82	09 - 20-21 - 82 (P)
07 - 08 - 81	06 - 28 - 82	09 - 21 - 82
07 - 09 - 81	07 - 02 - 82	09 - 21-22 - 82
07 - 17 - 81	07 - 07 - 82	09 - 22 - 82
09 - 15 - 81 to	07 - 19 - 82	09 - 24 - 82
09 - 22 - 81	07 - 20 - 82	09 - 27 - 82
09 - 29 - 81	07 - 21 - 82	10 - 04 - 84
10 - 06 - 81	07 - 22 - 82	- -
10 - 19 - 81	07 - 23 - 82	- -
10 - 20 - 81 to	07 - 26 - 82	- -
10 - 24 - 81	07 - 29 - 82	- -
01 - 29 - 82	08 - 09 - 82	- -
06 - 15 - 82	09 - 14 - 82	- -
06 - 21 - 82	09 - 15 - 82	- -

INTERFERENCE PRESSURE DATA

WELL #: 24

RECEIVED:

02 - 02 - 82	to	05 - 27 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
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- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

FLOWTEST # 1

WELL #: 24

RECEIVED:

06 - 29 - 81	to	0920 - 1115	- -	to	- -
06 - 29 - 81	to	1230 - 1500	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
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- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

FLOWTEST # 2

WELL #: 24

RECEIVED:

07 - 01 - 81		- -		- -	to	- -
07 - 02 - 81		- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
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- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -
- -	to	- -		- -	to	- -

FLOWTEST # 3

WELL #: 24

RECEIVED:

07 - 18 - 81	to	09 - 15 - 81	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
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- -	to	- -	- -	to	- -

WATER INJECTION

WELL #: 24

RECEIVED:

10 - 19 - 81	to	10 - 24 - 81	- -	to	- -
08 - 18 - 82	to	08 - 19 - 82	- -	to	- -
09 - 15 - 82	to	09 - 20 - 82	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -
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- -	to	- -	- -	to	- -
- -	to	- -	- -	to	- -

PRODUCED FLUIDS AND GAS ANALYSES

WELL # 24

RECEIVED:

BROMIDE CONTENT 8-5, 8-19, 9-2-81

COMPOSITIONAL ANALYSES, 9-2-81

This report was done with support from the Department of Energy. Any conclusions or opinions expressed in this report represent solely those of the author(s) and not necessarily those of The Regents of the University of California, the Lawrence Berkeley Laboratory or the Department of Energy.

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