

GAS PRODUCING ENTERPRISES, INC.

MARR NO. 3

WEST SAWYER FIELD

LEA COUNTY, NEW MEXICO

CORE LABORATORIES, INC.



June 5, 1978

Gas Producing Enterprises, Inc.
P.O. Box 235
Midland, Texas 79702

File : 3202-10762
Subject: Core Analysis
Marr No. 3
West Sawyer Field
Lea County, New Mexico

Gentlemen:

The subject well was cored using diamond coring equipment and water base mud to obtain 4 inch diameter cores from 4961 to 5082 feet from the San Andres formation.

Core analysis data is presented in tabular and graphical form for your convenience. A procedural page is also included with other pertinent data.

We trust these data will be useful in the evaluation of your property and thank you for the opportunity of serving you.

Very truly yours,

CORE LABORATORIES, INC.

A handwritten signature in black ink that reads "Jack H. Neff". The signature is written in a cursive, flowing style.

Jack H. Neff
Laboratory Supervisor

JHN/jdt/jn

Gas Producing Enterprises, Inc.
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Procedural Page

The cores were preserved at the wellsite in a CO₂ atmosphere and transported to Midland by Core Laboratories, Inc. personnel.

A Core Gamma Log was recorded for downhole E-log correlation.

One set of core chips was taken from each core.

Core analysis was made from intervals requested on whole core diameter samples.

Fluid removal and fluid saturations were determined using controlled temperature vacuum retort techniques.

Porosity was determined using whole core summation of fluids.

Air permeability was measured in two horizontal directions.

The core was boxed after the analysis.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

GAS PRODUCING ENTERPRISES
MARR NO. 3
WEST SAWYER FIELD
LEA COUNTY, NEW MEXICO

DATE: 5-27-78
FORMATION: AS NOTED
DRLG. FLUID: BRINE/OIL
LOCATION: 1980 FSL & 660 FEL, SEC. 33, T-9-S, R-7-E

FILE NO: 3202-10762
ENGINEER: DILLARD
ELEVATION: 3996 KB

* INDICATES PLUG PERM S INDICATES PRESERVED SAMPLE

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM	90 DEG VERT.	POROSITY GEX, FLD.	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
CORE NO. 1 (4961.0-5021.0) CUT 60' REC 60' SAN ANDRES							
4961.0-62.5 ANHY							
1	4962.5-63.8	<0.1	<0.1	2.3	5.8	68.1	DOL, ANHY, SL/F, STY
2	4963.8-65.0	<0.1	<0.1	7.1	13.9	44.5	DOL, ANHY, SHY, STY
3	4965.0-66.1	<0.1	<0.1	4.7	4.8	34.3	DOL, ANHY, STY
4	4966.1-67.1	<0.1	<0.1	3.8	4.4	62.2	DOL, ANHY, F, STY
5	4967.1-68.4	0.7	0.2	5.1	19.2	31.1	DOL, ANHY, SL/F, STY
6	4968.4-69.6	<0.1	<0.1	4.5	17.1	37.8	DOL, ANHY, SL/F, STY
7	4969.6-71.1	<0.1	<0.1	1.2	2.3	77.3	DOL, ANHY, SHY, SL/F, ST
8	4971.1-72.4	0.1	<0.1	6.5	20.8	34.1	DOL, ANHY, SL/F, STY
9	4972.4-74.2	<0.1	<0.1	7.1	27.3	35.6	DOL, ANHY, SHY, STY
10	4974.2-75.4	<0.1	<0.1	4.4	20.2	54.0	DOL, ANHY, SHY, STY
11	4975.4-76.7	0.2	0.1	6.3	17.7	48.1	DOL, ANHY, SL/F, STY
12	4976.7-78.0	1.0	0.5	12.2	19.6	26.5	DOL, ANHY, STY
13	4978.0-79.0	1.8	1.1	13.3	22.9	31.2	DOL, ANHY, STY
14	4979.0-80.3	<0.1	<0.1	4.4	11.3	40.3	DOL, ANHY, SHY, STY
15	4980.3-81.5	37.0	35.0	7.1	12.4	48.5	DOL, ANHY, SL/F, STY
16	4981.5-83.0	0.1	<0.1	6.2	23.9	30.5	DOL, ANHY, STY
17	4983.0-84.0	<0.1	<0.1	0.8	0.0	85.0	DOL, ANHY, V/SHY, STY
18	4984.0-85.3	<0.1	<0.1	3.7	20.8	57.3	DOL, ANHY, STY
19	4985.3-86.9	2.2	1.6	7.8	31.9	28.3	DOL, ANHY, STY
20	4986.9-88.5	<0.1	<0.1	3.8	9.3	50.7	DOL, ANHY, STY
21	4988.5-90.0	0.5	0.1	5.6	33.0	43.2	DOL, ANHY, STY, BREC

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

GAS PRODUCING ENTERPRISES
 MARK NO. 3
 WEST SAWYER FIELD
 LEA COUNTY, NEW MEXICO

DATE: 5-27-78
 FORMATION: AS NOTED
 DRLG. FLUID: BRINE/OIL
 LOCATION: 1980 FSL & 660 FEL, SEC. 33, T-9-S, R-7-E

FILE NO: 3202-10762
 ENGINEER: DILLARD
 ELEVATION: 3996 KB

* INDICATES PLUG PERM

S INDICATES PRESERVED SAMPLE

SMP. NO.	DEPTH	PERM. MAXIMUM	TO AIR MD. 90 DEG	VERT.	POROSITY GEX. FLD.	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
S	4990.0-91.8	4.4	3.5		5.4	25.2		DOL, ANHY, SHY, V/F, V, S
23	4991.8-93.5	0.9	0.4		4.5	12.5		DOL, ANHY, V, STY
24	4994.9-96.4	<0.1	<0.1		2.7	25.6		DOL, ANHY, SL/F, STY
25	4994.9-96.4	4.0	3.7		3.9	15.6		DOL, ANHY, V/F, STY
26	4996.4-98.0	0.8	0.7		5.1	15.9		DOL, ANHY, SHY, STY
27	4998.0-99.1	0.1	<0.1		7.8	7.4		DOL, ANHY
28	4999.1-00.8	1.5	1.0		4.1	1.6		DOL, ANHY, SHY, SL/F, ST
29	5000.8-02.6	<0.1	<0.1		4.3	3.9		DOL, ANHY, STY, SL/F
30	5002.6-03.8	<0.1	<0.1		3.8	10.1		DOL, ANHY, SL/F, STY
31	5003.8-05.5	<0.1	<0.1		5.1	7.2		DOL, ANHY, V/F, STY
32	5005.5-06.6	<0.1	<0.1		4.1	17.5		DOL, ANHY, SHY, STY
33	5006.6-08.0	<0.1	<0.1		5.7	7.9		DOL, ANHY, SHY, SL/F, ST
34	5008.0-09.3	<0.1	<0.1		5.0	7.5		DOL, ANHY, SL/F, STY
35	5009.3-10.8	<0.1	<0.1		4.9	7.4		DOL, ANHY, V/F, STY
36	5010.8-12.3	<0.1	<0.1		8.0	10.9		DOL, ANHY, SL/F, STY
37	5012.3-14.1	<0.1	<0.1		7.0	12.4		DOL, ANHY, SL/F, STY
38	5014.1-15.9	<0.1	<0.1		3.7	9.9		DOL, ANHY, V/F, STY
S	5015.9-17.6	0.6	<0.1		6.2	9.0		DOL, ANHY, F, STY
40	5017.6-19.4	2.9	2.5		8.9	15.6		DOL, ANHY, STY
41	5019.4-21.0	<0.1	<0.1		8.1	4.5		DOL, ANHY, F, STY
CORE NO. 2 (5021.0-5082.0)	CUT 60' REC 61' SAN ANDRES							
42	5021.0-22.5	1.8	1.6		10.0	33.2		DOL, ANHY, STY
43	5022.5-24.0	0.2	0.1		7.0	16.3		DOL, ANHY, STY
44	5024.0-25.7	1.9	0.4		6.5	8.9		DOL, ANHY, SL/F, STY

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 DALLAS, TEXAS

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 MARR NO. 3

DATE: 5-27-78
 FORMATION: AS NOTED

FILE NO: 3202-10762
 ENGINEER: DILLARD

SMP. NO.	DEPTH	PERM. TO AIR MD. MAXIMUM	90 DEG VERT.	POROSITY GEX. FLD.	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
S 45	5025.7-27.5	0.9	0.8	6.0	24.5	44.1	DOL, ANHY, F, GYP, STY
46	5027.5-29.0	2.8	2.4	4.9	15.7	51.4	DOL, ANHY, F, STY, SHR
47	5029.0-30.8	19.0	4.7	4.8	23.8	35.8	DOL, ANHY, F, SL/V, STY
48	5030.8-32.4	0.7	0.2	4.1	21.9	18.8	DOL, ANHY, F, SL/V, STY
49	5032.4-34.0	0.6	0.3	4.8	15.0	40.0	DOL, ANHY, F, V, STY
50	5034.0-35.5	11.0	6.7	4.7	19.2	45.0	DOL, ANHY, SL/V, F, STY
51	5035.5-36.9	6.1	5.6	6.6	26.9	33.6	DOL, ANHY, F, V, PYR
52	5036.9-38.0	0.1	<0.1	6.3	19.8	38.9	DOL, ANHY, SL/F, SL/V
S 53	5038.0-39.7	0.5	0.2	9.7	15.5	38.6	GYP
54	5039.7-41.0	<0.1	<0.1	8.3	8.0	40.1	DOL, ANHY, SL/F, SL/V
55	5041.0-42.4	<0.1	<0.1	11.9	11.3	46.6	STY
56	5042.4-43.5	0.4	0.2	12.3	11.5	31.2	DOL, ANHY, F, STY
57	5043.5-45.2	<0.1	<0.1	6.5	11.7	57.3	DOL, ANHY, STY
S 58	5045.2-46.8	9.6	8.0	10.5	16.2	68.5	DOL, ANHY, SL/F, STY
59	5046.8-48.2	<0.1	*	8.1	3.8	61.5	FOSS
60	5048.2-49.5	6.8	4.5	9.8	18.2	51.2	DOL, ANHY, F, V
61	5049.5-51.2	9.4	5.2	6.3	15.4	58.6	DOL, ANHY, F, STY
62	5051.2-52.7	<0.1	<0.1	2.7	17.7	48.4	DOL, ANHY, F, SL/V, STY
63	5052.7-54.0	1.0	0.6	3.1	7.1	46.9	DOL, ANHY, F, SL/V, ST
64	5054.0-55.3	1.2	0.6	4.4	3.4	80.5	DOL, ANHY, F, SL/V, ST
65	5055.3-56.8	22.0	18.0	10.1	15.2	61.6	DOL, ANHY, SHY, F, STY
66	5056.8-58.4	1.3	<0.1	4.0	6.9	59.8	DOL, ANHY, F, SL/V, STY
67	5058.4-59.5	<0.1	<0.1	8.1	2.0	72.4	DOL, ANHY, STY
68	5059.5-60.6	<0.1	<0.1	16.3	0.7	76.9	DOL, ANHY, STY
69	5060.6-62.0	<0.1	<0.1	15.9	0.7	77.2	DOL, ANHY, STY
70	5062.0-63.8	15.0	4.6	14.3	0.9	77.3	DOL, ANHY, F
71	5063.8-65.4	2.0	0.9	10.0	1.0	78.3	DOL, ANHY, SL/F, STY
72	5065.4-66.8	0.4	0.3	7.9	1.3	81.2	DOL, ANHY, SL/F, STY
73	5066.8-68.4	0.4	0.2	5.6	3.5	78.1	DOL, ANHY, SL/F, STY

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DALLAS, TEXAS

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MARR NO. 3

DATE: 5-27-78
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FILE NO: 3202-10762
ENGINEER: DILLARD

SMP. NO.	DEPTH	PERM. MAXIMUM	TO AIR MD. 90 DEG	VERT.	POROSITY GEX, FLD.	FLUID SATS. OIL WTR.	GR. DEN.	DESCRIPTION
74	5068.4-69.9	0.2	0.1		3.2	0.0	88.4	DOL, ANHY, STY
75	5069.9-71.6	<0.1	<0.1		3.7	4.7	65.8	DOL, ANHY, STY
76	5071.6-73.0	0.3	<0.1		6.9	2.2	70.3	DOL, ANHY, F, STY
77	5073.0-74.8	0.6	0.5		4.9	4.2	68.1	DOL, ANHY, F, STY
78	5074.8-76.0	<0.1	<0.1		4.2	5.6	66.4	DOL, ANHY, F, STY
79	5076.0-77.8	3.2	2.3		12.2	23.7	32.8	DOL, ANHY, F, STY
80	5077.8-79.6	0.5	0.2		12.5	14.0	34.8	DOL, ANHY, F, STY
81	5079.6-81.1	0.6	0.3		8.6	28.9	22.1	DOL, ANHY, SL/F
82	5081.1-82.0	<0.1	<0.1		9.1	3.9	55.0	DOL, ANHY, STY
								DOL, ANHY, F, STY

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