

PHILLIPS PETROLEUM COMPANY
EVGSA TRACT 2801 WELL NO. 4
EAST VACUUM FIELD
LEA COUNTY, NEW MEXICO

CORE LABORATORIES, INC.**LAB**

August 28, 1979

PHILLIPS PETROLEUM COMPANY
4001 Penbrook
Odessa, Texas 79760

File : 3202-11239
Subject: Core Analysis
EVGSA Tract 2801 Well No. 4
East Vacuum Field
Lea County, New Mexico

Gentlemen:

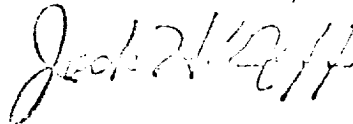
The subject well was cored using diamond coring equipment and salt mud to obtain 4 inch diameter cores from 4291 to 4843 feet from the Grayburg and San Andres formations.

Core analysis data is presented in tabular and graphical form for your convenience. Also an R_g plot, permeability and porosity histograms, water saturation and water cut scalars and a permeability vs porosity plot were prepared for the Phillips' Odessa engineers. 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.



Jack H. Hoff
Laboratory Manager

JHH/Jdt/mg

PHILLIPS PETROLEUM COMPANY
EVGSA Tract 2801 Well No. 4
File No. 3202-11239
Procedural Page

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

Preserved fresh core samples were taken from 161 intervals for future special analysis. A set of core chips was taken from each core.

Core analysis was made from intervals requested on full diameter samples.

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

Porosity and grain density were determined using Boyle's law.

Air permeability was measured in two horizontal directions in a Hassler sleeve.

The preserved samples remain boxed at our Midland lab. The rest of the core was discarded.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS REPORT

FOR

PHILLIPS PETROLEUM COMPANY

EVGSA TRACT 2801 WELL NO. 4
EAST VACUUM FIELD
LEA COUNTY, NEW MEXICO

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. and its officers and employees, assuming no responsibility and make no warranty or representations, as to the productivity, reserves or content of any oil, gas or other mineral well or field in connection with which such reports are prepared upon

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
EVGSA TRACT 2801 WELL NO. 4
EAST VACUUM FIELD
LEA COUNTY, NEW MEXICO

DATE : 8-7-79
FORMATION : GRAYBURG/SAN ANDRES
DELO. FLUID: SALT MUD
LOCATION : 1310' FSL & 1330' FEL, T-27-S, R-35-E, SEC 28

FILE NO : 3202-11239
ANALYSTS : DILLARD
ELEVATION:

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	FEET, TO AIR (HD)		POR., FLUID SATS.		GRAIN DEN	DESCRIPTION	
		MAXIMUM	90 DEG	He	OIL WTR			
CORE NO. 1 4291.0-4350.0 CUT 59' REC 59'								
1	4291.0-92.0	2.8	<0.1	3.8	14.1	48.8	2.82	DOL,STY,SL/F
S	4292.0-93.0	0.1	<0.1	5.3	12.8	33.8	2.79	SD,V/DOLC,STY
3	4293.0-94.0	0.6	<0.1	3.9	10.3	40.1	2.78	DOL,SDY,SH LAM,STY,SL/F
S	4294.0-95.0	0.1	<0.1	2.2	7.3	48.4	2.88	DOL,STY,V/F
5	4295.0-96.0	1.9	1.4	1.0	6.7	52.2	2.87	DOL,V/F,STY
S	4296.0-97.0	0.6	0.2	1.3	8.3	50.0	2.86	DOL,SL/ANHY,STY,V/F
7	4297.0-98.0	1.1	F	0.9	12.5	50.0	2.87	DOL,V/F,STY
8	4298.0-99.0	1.1	<0.1	1.4	7.9	61.4	2.85	DOL,SL/ANHY,V/F,STY
S	4299.0-00.0	3.6	0.6	3.2	8.7	33.7	2.89	DOL,SL/ANHY,STY,SL/F
10	4300.0-01.0	1.1	<0.1	4.7	0.0	41.1	2.79	DOL,SL/ANHY,SDY,SL/F
11	4301.0-02.0	1.1	<0.1	5.8	18.1	31.6	2.80	DOL,SL/ANHY,SDY
S	4302.0-03.0	1.1	<0.1	4.6	13.5	43.2	2.78	DOL,SDY,STY,SL/F
13	4303.0-04.0	0.2	<0.1	4.6	15.3	62.7	2.75	DOL,SL/ANHY,SDY,STY,SL/F
S	4304.0-05.0	0.2	<0.1	6.8	2.6	42.2	2.76	DOL,SDY,SL/ANHY,SL/F
15	4305.0-06.0	<0.1	<0.1	5.8	7.5	45.6	2.74	DOL,SDY
S	4306.0-07.0	<0.1	<0.1	5.5	13.4	50.7	2.74	DOL,SDY
S	4307.0-08.0	0.3	0.1	5.8	10.6	48.2	2.76	DOL,SDY
18	4308.0-09.0	0.2	<0.1	5.8	2.5	56.5	2.77	DOL,SDY,SL/ANHY
19	4309.0-10.0	1.6	0.2	3.5	7.6	48.3	2.84	DOL,STY,V/F
S	4310.0-11.0	0.1	<0.1	2.6	0.0	76.2	2.81	DOL,SHY,SL/F
21	4311.0-12.0	2.9	0.2	3.7	0.0	78.0	2.79	DOL,SL/ANHY,SH LAM
S	4312.0-13.0	2.1	<0.1	1.6	11.4	57.0	2.86	DOL,SH LAM,STY
S	4313.0-14.0	0.3	0.2	1.7	0.5	73.5	2.85	DOL,V/F
24	4314.0-15.0	0.1	<0.1	4.5	0.0	59.0	2.87	DOL,SL/ANHY,SH LAM
25	4315.0-16.0	1.7	0.4	4.2	3.0	70.2	2.74	DOL,SDY,SL/F,STY

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

FILE NO : 3202-11239
 ANALYSTS : WILLARD

DATE : 9-7-79
 FOUNDATION : GRAYBURG/SAN ANDRES

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2001 WELL NO. 4

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	FEED. TO AIR (PS) MAXIMUM	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
26	4316.0-17.0	<0.1	4.6	10.6	61.6	2.75	DOL,SDY,SL/ANHY,STY
27	4317.0-18.0	<0.1	6.1	2.6	44.4	2.73	DOL,SDY,SL/F
28	4318.0-19.0	<0.1	1.8	7.6	71.4	2.86	DOL,SL/ANHY,SL/F,STY
29	4319.0-20.0	0.4	2.1	8.7	81.7	2.88	DOL,STY,SL/F
30	4320.0-21.0	0.3	2.5	11.8	42.5	2.86	DOL,SL/ANHY,F
31	4321.0-22.0	0.2	1.8	24.1	62.5	2.86	DOL,SL/ANHY,STY,F
32	4322.0-23.0	0.1	4.3	3.7	73.8	2.79	DOL,SHY,STY
33	4323.0-24.0	<0.1	2.8	11.0	82.8	2.80	DOL,SHY
34	4324.0-25.0	0.1	3.0	11.8	68.6	2.82	DOL,SL/ANHY
35	4325.0-26.0	0.1	4.3	9.8	54.6	2.84	DOL,SL/ANHY
36	4326.0-27.0	0.1	2.0	14.1	70.3	2.86	DOL,SL/ANHY,F,FOSS
37	4327.0-28.0	1.6	2.1	19.0	31.7	2.86	DOL,SL/ANHY,F
38	4328.0-29.0	0.6	1.8	6.5	46.8	2.86	DOL,SL/ANHY,SL/F
39	4329.0-30.0	0.6	2.4	11.8	45.8	2.84	DOL,STY
40	4330.0-31.0	<0.1	3.9	3.7	57.4	2.88	DOL,SL/ANHY,STY
41	4331.0-32.0	<0.1	4.3	2.3	82.0	2.77	DOL,SH LAM,STY
42	4332.0-33.0	<0.1	4.6	1.1	67.1	2.78	DOL,SHY,SL/ANHY,SL/F,STY
43	4333.0-34.0	<0.1	4.4	4.1	52.5	2.77	DOL,SL/ANHY,SH LAM,STY
44	4334.0-35.0	0.1	1.9	15.3	72.0	2.85	DOL,SL/F,STY
45	4335.0-36.0	0.1	3.1	6.0	80.5	2.84	DOL,SL/ANHY,STY,V/F
46	4336.0-37.0	0.3	3.5	4.5	82.9	2.80	DOL,SHY,SL/F,STY
47	4337.0-38.0	0.7	3.6	6.1	59.7	2.84	DOL,ANHY,SL/F,STY
48	4338.0-39.0	1.4	4.4	2.3	61.4	2.83	DOL,ANHY,SL/F
49	4339.0-40.0	0.3	4.8	6.5	45.0	2.86	DOL,ANHY,SL/F,V,STY
50	4340.0-41.0	0.8	4.4	7.0	40.7	2.85	DOL,SL/V,SL/F,STY
51	4341.0-42.0	<0.1	5.1	10.7	31.7	2.84	DOL,ANHY,SL/F,STY
52	4342.0-43.0	0.2	3.0	3.5	31.5	2.85	DOL,ANHY,PP,SL/F
53	4343.0-44.0	<0.1	4.4	4.4	19.6	2.87	DOL,ANHY,F,STY
54	4344.0-45.0	0.2	5.1	5.1	21.2	2.87	DOL,ANHY,SL/F,PP,STY
55	4345.0-46.0	<0.1	4.0	2.6	23.3	2.83	DOL,SL/F,STY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 4

DATE : 8-7-79

FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
 ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (NO)		PCR. Fe	FLUID SATS.		GRAIN DEN	DESCRIPTION
		MAXIMUM	95 DEG		OIL	WTR		
	4346.0-50.0							LOST CORE
	CORE NO. 2	4350.0-4410.0	DUT 60'	REC 60'				
56	4350.0-51.0	0.1	<0.1	0.0	5.2	48.9	2.82	DOL, ANHY, SH LAM, PP, SL/F, STY
57	4351.0-52.0	1.4	0.1	2.7	10.7	56.5	2.86	DOL, ANHY, SH LAM, F, STY
58	4352.0-53.0	0.5	0.2	2.9	8.9	53.0	2.86	DOL, ANHY, SH LAM, SL/F, STY
59	4353.0-54.0	0.7	0.5	4.9	16.7	57.1	2.84	DOL, ANHY, SL/F, STY
60	4354.0-55.0	0.2	0.1	4.8	20.1	63.2	2.83	DOL, ANHY, SL/F, STY
61	4355.0-56.0	1.2	0.8	4.6	12.2	86.4	2.81	DOL, ANHY, SH LAM, SL/F, STY
62	4356.0-57.0	0.9	0.1	1.5	21.0	70.7	2.83	DOL, ANHY, F, STY
63	4357.0-58.0	0.5	<0.1	3.5	20.5	39.8	2.87	DOL, ANHY, V/F, STY
64	4358.0-59.0	0.3	0.2	4.0	5.8	84.4	2.78	DOL, ANHY, SDY, SHY, F, STY
65	4359.0-60.0	0.8	0.6	4.8	5.0	71.2	2.71	DOL, ANHY, SDY, STY
66	4360.0-61.0	0.3	<0.1	6.2	6.5	63.5	2.68	DOL, ANHY, SDY
67	4361.0-62.0	0.4	0.3	6.8	8.8	66.9	2.77	DOL, ANHY, SDY, SHY
	4362.0-63.0							DOL, ANHY, SHY
68	4366.0-67.0	0.1	<0.1	4.6	4.6	56.0	2.78	DOL, ANHY, SDY, SHY, SL/F, STY
69	4367.0-68.0	0.6	0.3	4.6	10.1	60.4	2.78	DOL, ANHY, SHY, F, STY
	4368.0-70.0							DOL, ANHY, DNS
70	4370.0-71.0	0.1	<0.1	5.2	11.4	58.0	2.81	DOL, ANHY, SDY, FOSS, SL/F, STY
71	4371.0-72.0	0.1	0.1	3.7	16.7	67.1	2.84	DOL, ANHY, V/F, FOSS, STY
	4372.0-75.0							DOL, ANHY, SH LAM, DNS
72	4375.0-76.0	0.5	0.5	3.8	23.1	57.7	2.79	DOL, ANHY, SH LAM, SDY, FOSS, F, STY
73	4376.0-77.0	0.1	<0.1	2.9	14.1	63.8	2.81	DOL, ANHY, SHY, FOSS, PP, SL/F, STY
74	4377.0-78.0	1.2	0.4	2.0	26.5	47.8	2.86	DOL, ANHY, F, SL/V, STY
75	4378.0-79.0	0.1	<0.1	1.6	6.7	63.4	2.86	DOL, ANHY, F, SL/V, STY
76	4379.0-80.0	0.2	0.2	2.0	24.7	41.1	2.87	DOL, ANHY, SL/V, F, STY
77	4380.0-81.0	0.1	<0.1	4.8	14.8	24.6	2.88	DOL, ANHY, V, SL/F, FOSS, STY
78	4381.0-82.0	0.1	<0.1	3.8	8.3	41.3	2.85	DOL, ANHY, SL/V, FOSS, STY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

FILE NO : 3202-11239
 ANALYSTS : DILLARD

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 4

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM	POR. He	FLUID SATS.		GRAIN DEN	DESCRIPTION
				OIL	WTR		
79	4382.0-4383.0	<0.1	3.9	7.5	48.3	2.85	DOL, ANHY, V, FOSS, STY
S 80	4383.0-4384.0	0.2	5.3	21.4	32.1	2.83	DOL, ANHY, V, SL/F, FOSS, STY
81	4384.0-4385.0	0.4	2.3	18.4	44.2	2.88	DOL, ANHY, SL/V, F, STY
82	4385.0-4386.0	<0.1	3.7	7.1	24.9	2.85	DOL, ANHY, SL/F, V, FOSS, STY
S 83	4386.0-4387.0	1.4	6.9	4.0	21.2	2.86	DOL, ANHY, V, OOL, FOSS, STY
84	4387.0-4388.0	<0.1	1.0	16.7	46.3	2.93	DOL, V/ANHY, OOL, FOSS, SL/F, STY
85	4388.0-4389.0	<0.1	3.8	11.8	52.3	2.82	DOL, ANHY, V, F, OOL, STY
S 86	4389.0-4390.0	2.0	2.3	26.5	58.8	2.83	DOL, ANHY, OOL, F, STY
87	4390.0-4391.0	1.5	3.7	10.7	32.7	2.83	DOL, ANHY, OOL, V/F, FF, STY
S 88	4391.0-4392.0	0.2	4.8	10.9	64.8	2.82	DOL, ANHY, SH LAM, SL/V, F, STY
89	4392.0-4393.0	<0.1	4.5	12.8	44.5	2.83	DOL, ANHY, SL/V, SL/F, STY
S 90	4393.0-4394.0	1.6	3.8	17.3	51.9	2.84	DOL, ANHY, SL/V, STY
91	4394.0-4395.0	0.1	2.2	15.3	38.1	2.87	DOL, ANHY, SL/V, STY
S 92	4395.0-4396.0	0.1	3.4	6.1	27.3	2.86	DOL, ANHY, OOL, SL/F, SL/V, STY
93	4396.0-4397.0	<0.1	4.0	12.6	22.7	2.85	DOL, ANHY, SL/V, SL/F, STY
S 94	4397.0-4398.0	2.0	2.6	20.0	40.0	2.87	DOL, ANHY, SL/F, SL/V, OOL, STY
95	4398.0-4399.0	1.7	5.1	9.2	36.0	2.85	DOL, ANHY, SL/F, SL/V, OOL, STY
S 96	4399.0-4400.0	0.2	4.8	13.4	49.3	2.86	DOL, ANHY, SH LAM, SL/F, SL/V, STY
97	4400.0-4401.0	7.5	3.6	20.9	37.2	2.87	DOL, ANHY, SL/F, SL/V, STY
S 98	4401.0-4402.0	0.2	1.8	9.1	80.8	2.85	DOL, ANHY, SL/V, SL/F, STY
99	4402.0-4403.0	0.1	1.5	33.3	55.6	2.86	DOL, ANHY, SL/V, SL/F, STY
100	4403.0-4404.0	0.1	1.9	19.4	53.8	2.88	DOL, ANHY, SL/F, SL/V, OOL, STY
101	4404.0-4405.0	0.2	1.0	32.4	54.1	2.88	DOL, ANHY, SL/F, PP, STY
S 102	4405.0-4406.0	0.2	1.8	18.4	45.9	2.88	DOL, ANHY, SL/V, SL/F, STY
103	4406.0-4407.0	0.2	1.3	14.6	56.9	2.87	DOL, ANHY, F, STY
104	4407.0-4408.0	2.6	1.5	7.3	48.4	2.88	DOL, ANHY, F, STY
S 105	4408.0-4409.0	0.7	3.8	19.1	25.2	2.86	DOL, ANHY, SL/F, SL/V, FOSS, STY
106	4409.0-4410.0	3.3	7.5	12.7	23.9	2.83	DOL, ANHY, SL/F, SL/V, FOSS, STY

CORE NO. 3 4410.0-44170.0 CUT 60' REC 55'

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 4

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
 ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	FEET TO MAXIMUM	AIR (PSI) 90 DEG	POR, He	FLUID SATS.		GRAIN DEN	DESCRIPTION
					OIL	WTR,		
S 107	4410.0-11.0	0.5	0.3	4.5	8.7	24.0	2.86	DOL, ANHY, SL/F, SL/U, STY
108	4411.0-12.0	6.9	2.0	2.9	15.3	42.4	2.84	DOL, ANHY, U, SL/F, STY
S 109	4412.0-13.0	2.5	0.1	2.0	13.5	60.2	2.88	DOL, ANHY, SL/F, U, STY
110	4413.0-14.0	0.6	<0.1	1.5	16.7	37.0	2.87	DOL, ANHY, F, SL/U, STY
111	4414.0-15.0	<0.1	<0.1	0.7	1.1	87.1	2.85	DOL, ANHY, F, STY
112	4415.0-16.0	<0.1	*	1	7	74.8	2.87	DOL, ANHY, F, SL/U, STY
113	4416.0-17.0	<0.1	*	1.2	40.5	62.5	2.85	DOL, ANHY, U/F, PP, STY
114	4417.0-18.0	0.9	0.2	1.2	10.7	71.4	2.85	DOL, ANHY, F, SL/U, STY
S 115	4418.0-19.0	2.5	0.2	1.2	12.2	67.6	2.87	DOL, ANHY, F, STY
116	4419.0-20.0	4.0	1.3	3.2	20.1	42.8	2.85	DOL, ANHY, F, SL/U, STY
117	4420.0-21.0	<0.1	<0.1	1.5	23.1	55.6	2.87	DOL, ANHY, F, STY
118	4421.0-22.0	1.4	0.6	2.6	18.4	37.4	2.85	DOL, ANHY, F, SL/U, STY
119	4422.0-23.0	<0.1	<0.1	0.9	0.9	85.5	2.87	DOL, ANHY, F, STY
S 120	4423.0-24.0	0.2	0.1	1.3	0.7	46.0	2.88	DOL, ANHY, F, PP, STY
S 121	4424.0-25.0	0.2	0.1	2.0	32.9	57.9	2.87	DOL, ANHY, F, SL/U, STY
122	4425.0-26.0	0.1	<0.1	2.1	11.8	78.4	2.87	DOL, ANHY, F, PP, STY
S 123	4426.0-27.0	<0.1	<0.1	2.7	26.5	44.1	2.86	DOL, ANHY, SL/F, STY
124	4427.0-28.0	0.3	<0.1	0.9	23.1	57.7	2.87	DOL, ANHY, F, SL/U, STY
125	4428.0-29.0	0.8	<0.1	0.9	18.4	71.4	2.86	DOL, ANHY, SL/F, STY
S 126	4429.0-30.0	4.0	3.4	3.7	36.5	58.4	2.87	DOL, ANHY, SL/U, SL/F, STY
127	4430.0-31.0	0.4	0.1	3.8	24.3	35.1	2.85	DOL, ANHY, SL/F, STY
S 128	4431.0-32.0	0.2	*	5.3	19.6	23.9	2.86	DOL, ANHY, SL/F, STY
129	4432.0-33.0	0.3	0.1	1.3	31.0	51.7	2.89	DOL, U/ANHY, SL/F, SL/U, STY
S 130	4433.0-34.0	5.2	0.1	1.0	16.7	64.8	2.69	DOL, U/ANHY, SL/U, SL/F
131	4434.0-35.0	1.4	1.0	4.2	25.1	36.6	2.88	DOL, ANHY, SL/F, STY
132	4435.0-36.0	0.9	0.6	4.4	23.3	42.5	2.87	DOL, ANHY, SL/F, PP, STY
S 133	4436.0-37.0	4.3	3.1	6.0	15.5	37.2	2.87	DOL, ANHY, SL/F, PP, STY
134	4437.0-38.0	1.0	0.4	3.9	18.4	37.4	2.88	DOL, ANHY, SL/F, PP, STY
135	4438.0-39.0	0.5	0.5	2.7	8.1	40.4	2.88	DOL, U/ANHY, SL/F, PP, STY
S 136	4439.0-40.0	0.5	<0.1	1.5	18.4	35.7	2.93	DOL, U/ANHY, SL/F, STY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

FILE NO : 3202-11239
 ANALYSTS : DILLARD

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 4

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PRESS. TO AIR (MO) MAXIMUM	POR. H ₂	FLUID SATS.		GRAIN DEN	DESCRIPTION
				OIL	WTR		
S 137	4440.0-41.0	0.4	2.6	27.5	45.8	2.90	DOL, V/ANHY, SL/F, STY
138	4441.0-42.0	1.9	6.5	34.1	47.8	2.83	DOL, ANHY, SL/V, F, STY
S 139	4442.0-43.0	40.	6.3	23.5	60.3	2.82	DOL, ANHY, V/F, STY
140	4443.0-44.0	43.	8.0	21.0	42.4	2.84	DOL, ANHY, V/F, SL/V, STY
141	4444.0-45.0	26.	9.0	7.9	49.7	2.82	DOL, ANHY, SL/V, F, STY
142	4445.0-46.0	5.8	5.4	3.9	42.6	2.86	DOL, ANHY, SL/F, PP, STY
143	4446.0-47.0	1.1	3.2	11.2	45.5	2.88	DOL, ANHY, F, PP, STY
S 144	4447.0-48.0	0.8	3.3	14.1	62.5	2.85	DOL, ANHY, SL/V, SL/F, STY
145	4448.0-49.0	1.4	4.0	6.7	37.3	2.88	DOL, ANHY, PP, SL/F, STY
S 146	4449.0-50.0	2.2	4.8	4.1	38.8	2.88	DOL, ANHY, PP, F, STY
147	4450.0-51.0	43.	19.0	11.4	29.2	2.83	DOL, ANHY, DOL, PP
148	4451.0-52.0	75.	16.7	16.1	29.3	2.84	DOL, ANHY, SL/F, DOL, PP
S 149	4452.0-53.0	35.	21.1	14.1	39.1	2.87	DOL, ANHY, SL/F, DOL, PP, STY
150	4453.0-54.0	90.	15.7	10.4	34.1	2.83	DOL, ANHY, V/F, PP, STY
S 151	4454.0-55.0	142.	17.4	18.8	16.1	2.84	DOL, ANHY, SL/F, PP, STY
152	4455.0-56.0	64.	17.3	8.9	35.6	2.82	DOL, ANHY, SL/F, PP
153	4456.0-57.0	133.	20.2	18.9	30.5	2.86	DOL, ANHY, V/F, PP, STY
S 154	4457.0-58.0	42.	6.9	22.1	38.9	2.84	DOL, ANHY, F, V, STY
155	4458.0-59.0	11.	6.0	13.8	36.4	2.85	DOL, ANHY, F, V, STY
S 156	4459.0-60.0	11.	14.7	13.7	29.2	2.86	DOL, ANHY, SL/F, PP, STY
157	4460.0-61.0	51.	7.0	16.3	33.9	2.83	DOL, ANHY, F, V, STY
158	4461.0-62.0	1.2	9.3	24.4	24.6	2.82	DOL, ANHY, F
159	4462.0-63.0	1.7	11.3	23.1	26.9	2.84	DOL, ANHY, F
160	4463.0-64.0	1.7	11.8	5.8	39.9	2.85	DOL, ANHY, F, PP, STY
S 161	4464.0-65.0	0.3	9.8	9.6	41.4	2.82	DOL, ANHY, F, SL/V, STY
	4465.0-70.0						LOST CORE
S 162	4470.0-71.0	43.	4.9	8.9	59.6	2.82	DOL, ANHY, V/F, STY

CORE NO. 4 4470.0-4530.0 CUT 60' REC 60'

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
EVGSA TRACT 2001 WELL NO. 4

DATE : 8-7-79
FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERC. TO AIR (DD)	PERC. Fe	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
163	4471.0-72.0	4.8	5.8	10.7	49.6	2.83	DOL, ANHY, V/F, SL/V, STY
S 164	4472.0-73.0	1.9	4.9	30.2	44.7	2.84	DOL, ANHY, F, SL/V, STY
165	4473.0-74.0	17.	4.6	21.1	36.5	2.84	DOL, ANHY, V/F, SL/V, STY
S 166	4474.0-75.0	6.3	3.3	23.6	37.1	2.86	DOL, ANHY, F, PP, STY
167	4475.0-76.0	1.1	3.0	7.0	34.9	2.87	DOL, ANHY, SL/V, V/F, STY
S 168	4476.0-77.0	3.4	5.6	18.8	26.2	2.84	DOL, ANHY, SL/F, SL/V, PP, STY
169	4477.0-78.0	22.	9.3	9.3	25.3	2.82	DOL, ANHY, SL/V, SL/F
S 170	4478.0-79.0	21.	9.3	12.4	29.2	2.83	DOL, ANHY, SL/V, SL/F, PP, STY
S 171	4479.0-80.0	2.9	6.2	24.7	27.4	2.87	DOL, ANHY, SL/V, SL/F, STY
172	4480.0-81.0	1.6	7.4	28.7	30.0	2.83	DOL, ANHY, V, SL/F
173	4481.0-82.0	1.5	6.9	31.0	40.0	2.82	DOL, ANHY, V, SL/F, STY
S 174	4482.0-83.0	0.3	2.6	11.8	55.6	2.85	DOL, ANHY, SL/V, SL/F, PP, STY
S 175	4483.0-84.0	0.1	2.6	0.3	72.3	2.87	DOL, ANHY, SL/V, SL/F, STY
S 176	4484.0-85.0	40.	15.9	20.3	24.7	2.83	DOL, ANHY, PP, STY
177	4485.0-86.0	25.	14.6	18.4	30.6	2.86	DOL, ANHY, SL/F, PP
178	4486.0-87.0	2.0	6.5	25.2	39.3	2.84	DOL, ANHY, SL/F, SL/V, STY
S 179	4487.0-88.0	3.6	3.5	17.1	47.4	2.87	DOL, ANHY, SL/V, SL/F, STY
180	4488.0-89.0	0.6	1.1	0.6	87.3	2.84	DOL, ANHY, SL/V, SL/F, STY
S 181	4489.0-90.0	4.9	2.7	24.1	53.6	2.85	DOL, ANHY, SL/V, SL/F, STY
182	4490.0-91.0	5.3	5.1	31.0	30.7	2.86	DOL, ANHY, SL/V, SL/F, STY
S 183	4491.0-92.0	0.3	4.0	32.3	37.3	2.84	DOL, ANHY, PP, STY
184	4492.0-93.0	0.3	0.7	0.0	66.7	2.84	DOL, ANHY, SL/F, SL/V, STY
185	4493.0-94.0	<0.1	4.0	3.3	87.4	2.85	DOL, ANHY, STY
S 186	4494.0-95.0	1.1	3.4	22.3	34.2	2.87	DOL, ANHY, SL/V, SL/F, STY
187	4495.0-96.0	2.7	10.0	23.8	20.4	2.88	DOL, SL/F, STY
S 188	4496.0-97.0	2.3	2.4	27.1	32.7	2.85	DOL, ANHY, SL/V, SL/F, STY
189	4497.0-98.0	149.	1.5	10.7	65.5	2.85	DOL, ANHY, SL/F, SL/V, STY
S 190	4498.0-99.0	138.	<0.1	23.1	64.1	2.84	DOL, ANHY, V/F, SL/V
191	4499.0-00.0	16.1	1.6	0.0	83.3	2.87	DOL, ANHY, F, STY
S 192	4500.0-01.0	13.	<0.1	18.4	76.5	2.86	DOL, ANHY, SL/F, STY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
EVGSA TRACT 2801 WELL NO. 4

DATE

: 8-7-79

FORMATION

: GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PRESS. IN AIR (MB) MAXIMUM 90 DEG	POR. H _o	FLUID SATS.		GRAIN DEN	DESCRIPTION
				OIL	WTR		
193	4501.0-02.0	0.2	3.2	3.9	48.0	2.87	DOL, ANHY, V, STY
194	4502.0-03.0	1.8	1.0	16.7	74.1	2.87	DOL, ANHY, SL/V, STY
195	4503.0-04.0	0.4	2.8	11.6	40.9	2.87	DOL, ANHY, SL/F, STY
196	4504.0-05.0	<0.1	3.5	14.4	58.8	2.83	DOL, ANHY, SL/V
197	4505.0-06.0	4.8	2.9	14.1	60.5	2.83	DOL, ANHY, SL/F, V, STY
198	4506.0-07.0	0.1	6.2	20.1	33.5	2.83	DOL, ANHY, PYR, SHR, V
199	4507.0-08.0	1.0	4.0	14.9	62.2	2.82	DOL, ANHY, SHR, SL/V, SL/F, STY
200	4508.0-09.0	1.1	5.1	14.1	58.6	2.82	DOL, ANHY, V, SL/F, STY
201	4509.0-10.0	3.4	13.9	32.4	30.6	2.83	DOL, ANHY, FOSS, PP, STY
202	4510.0-11.0	332.	10.7	31.4	30.2	2.83	DOL, ANHY, SL/V, SL/F, STY
203	4511.0-12.0	23.	16.3	23.4	32.5	2.87	DOL, ANHY, SL/V, SL/F, FOSS
204	4512.0-13.0	0.5	18.3	14.2	25.9	2.83	DOL, V/F, SL/V, STY
205	4513.0-14.0	0.4	18.6	38.1	24.4	2.83	DOL, V/F
206	4514.0-15.0	0.1	25.4	14.0	35.0	2.83	DOL, V/F, PP
207	4515.0-16.0	1.6	30.5	15.2	31.8	2.81	DOL, V/F, PP
208	4516.0-17.0	11.	33.8	11.1	36.3	2.86	DOL, PP
209	4517.0-18.0	0.5	32.7	17.5	29.9	2.84	DOL, V/F, PP
210	4518.0-19.0	0.1	19.3	39.8	14.7	2.87	DOL, V/F, SL/V
211	4519.0-20.0	3.6	17.2	22.7	43.3	2.81	DOL, SL/V, SL/F, PP, STY
212	4520.0-21.0	49.	17.1	22.4	28.0	2.85	DOL, ANHY, F, SL/V
213	4521.0-22.0	33.	15.6	32.8	23.7	2.85	DOL, ANHY, SL/F, PP
214	4522.0-23.0	1.2	25.8	28.6	13.0	2.87	DOL, PP, FOSS
215	4523.0-24.0	31.	19.5	33.8	32.5	2.84	DOL, V
216	4524.0-25.0	0.7	14.9	40.1	33.0	2.86	DOL, ANHY, V/F, SL/V
217	4525.0-26.0	1.9	20.4	33.5	18.6	2.84	DOL, V/F, PP
218	4526.0-27.0	43.	22.0	20.7	20.7	2.87	DOL, SHR, PP
219	4527.0-28.0	16.	14.4	19.4	34.9	2.82	DOL, SHR, PP
220	4528.0-29.0	30.1	9.6	38.0	28.2	2.80	DOL, SHR, V/F, PP
221	4529.0-30.0	0.1	4.9	29.0	51.6	2.85	DOL, ANHY, SHR, V/F, STY

CORE NO. 5 4530.0-4590.0 CUT 60' REC 60'

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
EVGSA TRACT 2001 WELL NO. 4

DATE : 8-7-79

FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PRESS. TO AIR (HG)		FOR. Hr	FLUID SATS.		GRAIN DEN	DESCRIPTION
		MAXIMUM	90 DEG		OIL	WTR		
S 222	4530.0-31.0	7.5	6.8	5.3	11.8	50.7	2.88	DOL, ANHY, SL/V, V/F, STY
	4531.0-32.0	6.7	4.8	5.1	8.0	89.0	2.86	DOL, ANHY, SHR, SL/F, V, STY
	4532.0-33.0	2.1	0.7	4.8	17.6	79.4	2.84	DOL, SHR, V, SL/F, STY
	4533.0-34.0	<0.1	*	*	9.8	60.1	2.84	DOL, SHR, SH LAM, V, SL/F, STY
	4534.0-35.0	<0.1	*	2.1	24.1	62.5	2.88	DOL, SH LAM, SL/F, STY
	4535.0-39.0	<0.1	*	3.7	12.5	62.5	2.77	DOL, ANHY, SHY, DNS
	4539.0-40.0	0.7	0.2	10.7	16.0	44.5	2.71	DOL, SH LAM, SHY
S 228	4540.0-41.0	1.5	0.6	12.7	19.2	40.0	2.72	SD, DOLC, STY
	4541.0-42.0	0.2	*	10.3	11.9	41.7	2.77	SD, V/DOLC, F
	4542.0-43.0	<0.1	15.	5.6	1.2	78.0	2.84	SD, V/DOLC, STY
S 230	4543.0-47.0	0.2	0.1	11.4	12.2	41.9	2.69	DOL, ANHY, SHY, DNS
	4547.0-48.0	0.2	0.1	1.8	7.3	68.7	2.85	DOL, SHY, DNS
S 232	4548.0-49.0	0.8	0.3	4.1	4.8	50.3	2.88	DOL, SHR, V/F, STY
	4549.0-60.0	0.3	0.1	3.9	4.9	48.9	2.84	DOL, ANHY, SL/F, SL/V
S 233	4560.0-61.0	1.5	0.2	6.8	9.6	46.1	2.85	DOL, ANHY, V/F, SL/V, STY
	4561.0-62.0	2.7	0.4	5.7	6.4	49.5	2.87	DOL, ANHY, V/F, STY
S 234	4562.0-63.0	256.	0.1	1.9	8.7	86.5	2.86	DOL, ANHY, STY
	4563.0-64.0	1.4	0.8	1.9	0.0	90.0	2.87	DOL, ANHY, SH LAM, V/F, STY
S 236	4564.0-65.0	10.1	0.8	2.6	7.6	84.0	2.83	DOL, ANHY, V/F, SL/V, STY
	4565.0-66.0	13.	0.3	1.5	14.1	85.9	2.85	DOL, ANHY, V/F, STY
S 237	4566.0-67.0	3.9	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
	4567.0-68.0	3.7	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
S 238	4568.0-69.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
	4569.0-70.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
S 239	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
S 240	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
S 241	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
S 242	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
S 243	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY
	4570.0-90.0	4570.0-90.0	0.4	1.6	0.6	93.5	2.85	DOL, ANHY, V/F, STY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

FILE NO : 3202-11239
 ANALYSTS : DILLARD

PHILLIPS PETROLEUM COMPANY DATE : 8-7-79
 EVGSA TRACT 2801 WELL NO. 4 FORMATION : GRAYBURG/SAN ANDRES

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	TEMP. TO MAXIMUM 90 DEG	AIR (ADD)	POR. He	FLUID SATS.		GRAIN DEN	DESCRIPTION
					OIL	WTR		
244	4603.0-04.0	1.1	<0.1	1.5	28.6	71.4	2.84	DOL, ANHY, SL/F, PP, STY
S 245	4604.0-05.0	0.5	0.1	1.6	22.2	44.4	2.87	DOL, ANHY, SL/F, STY
246	4605.0-06.0	0.2	0.2	2.8	11.9	59.5	2.87	DOL, ANHY, SL/F, STY
S 247	4606.0-07.0	0.1	<0.1	3.7	8.9	46.4	2.85	DOL, ANHY, SL/F, PP, STY
248	4607.0-08.0	0.3	0.2	4.9	11.9	35.6	2.88	DOL, ANHY, SL/F, PP, STY
S 249	4608.0-09.0	0.1	<0.1	5.5	12.5	47.5	2.85	DOL, ANHY, SL/F, PP, STY
250	4609.0-10.0	0.1	<0.1	0.3	8.7	60.1	2.86	DOL, ANHY, SL/V, SL/F, STY
251	4610.0-11.0	0.1	<0.1	0.3	2.2	49.5	2.96	ANH, DOLC, STY
S 252	4611.0-12.0	0.6	0.5	2.4	10.7	86.3	2.93	ANH, DOLC, SL/F, STY
253	4612.0-13.0	8.0	0.8	9.9	16.5	22.3	2.85	DOL, ANHY, F, PP, STY
S 254	4613.0-14.0	12.0	12.0	10.8	14.9	21.5	2.88	DOL, ANHY, SL/F, PP, STY
255	4614.0-15.0	1.0	0.6	8.0	16.9	28.2	2.84	DOL, ANHY, STY
256	4615.0-16.0	1.1	0.7	9.3	9.2	34.8	2.84	DOL, ANHY, SL/F, PP, STY
257	4616.0-17.0	1.2	1.0	5.5	15.3	48.0	2.85	DOL, ANHY, F, STY
S 258	4617.0-18.0	0.6	0.7	12.0	15.1	37.7	2.91	DOL, V/ANHY, SL/F, STY
259	4618.0-19.0	0.2	0.9	10.6	35.6	19.9	2.81	DOL, ANHY, PP, STY
S 260	4619.0-20.0	0.3	0.4	5.6	19.2	54.9	2.82	DOL, ANHY, PP, SL/F, STY
261	4620.0-21.0	0.7	0.6	6.6	15.0	38.8	2.83	DOL, ANHY, SL/V, SL/F, STY
262	4621.0-22.0	5.9	3.7	5.9	1.9	90.7	2.86	DOL, ANHY, SL/F, STY
263	4622.0-23.0	0.1	0.1	7.2	3.6	51.8	2.84	DOL, ANHY, SL/V, F, PP, STY
S 264	4623.0-24.0	0.1	0.1	11.4	5.7	51.6	2.83	DOL, ANHY, SL/F, PP, STY
265	4624.0-25.0	3.5	0.9	15.4	6.7	42.1	2.82	DOL, ANHY, PP, STY
266	4625.0-26.0	0.4	0.3	17.3	4.3	31.9	2.83	DOL, ANHY, PP, STY
S 267	4626.0-27.0	1.4	1.3	21.3	13.7	12.3	2.86	DOL, ANHY, PP, DOL
268	4627.0-28.0	0.3	0.3	15.1	26.7	25.7	2.84	DOL, ANHY, PP, STY
S 269	4628.0-29.0	0.4	0.2	12.0	25.2	31.2	2.85	DOL, ANHY, SL/F, PP, STY
270	4629.0-30.0	0.3	0.2	10.1	22.5	31.3	2.82	DOL, ANHY, SL/V
S 271	4630.0-31.0	6.9	0.5	8.4	18.4	32.1	2.84	DOL, ANHY, V/F, PP, STY
272	4631.0-32.0	0.8	2.7	5.9	1.6	67.4	2.84	DOL, ANHY, SL/F, PP, STY
S 273	4632.0-33.0	0.1	0.1	2.7	0.0	83.3	2.80	DOL, ANHY, SL/F, PP, STY

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

FILE NO : 3202-11239
 ANALYSTS : DILLARD

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2601 WELL NO. 3

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (ME) MAXIMUM	POR. H ₂	FLUID SATS.		GRAIN DEN	DESCRIPTION
				OIL	WTR		
274	4633.0-34.0	1.2	0.3	3.8	55.6	2.83	DOL, ANHY, SL/F, PP, STY
S 275	4634.0-35.0	0.5	0.3	4.7	62.7	2.85	DOL, ANHY, SL/F, SL/V, STY
276	4635.0-36.0	0.3	0.1	3.3	80.3	2.85	DOL, ANHY, F, STY
277	4636.0-37.0	1.2	1.2	22.3	15.9	2.91	DOL, ANHY, SL/F, STY
S 278	4637.0-38.0	1.0	0.4	26.5	23.1	2.85	DOL, ANHY, SL/F, PP, STY
279	4638.0-39.0	0.1	<0.1	3.8	47.0	2.86	DOL, ANHY, SL/F, STY
S 280	4639.0-40.0	0.7	0.5	3.4	3.4	2.84	DOL, ANHY, F, STY
281	4640.0-41.0	1.3	1.2	3.6	10.1	2.90	DOL, V/ANHY, SL/F, STY
282	4641.0-42.0	0.3	0.1	0.6	10.7	2.94	ANHY, V/DOLC, STY
283	4642.0-43.0	10.	10.	7.8	9.7	2.81	DOL, ANHY, SL/F, PP, STY
S 284	4643.0-44.0	0.1	*	4.9	10.4	2.82	DOL, ANHY, SL/F, PP, STY
285	4644.0-45.0	0.1	*	3.2	2.5	2.82	DOL, ANHY, SL/F, PP, STY
S 286	4645.0-46.0	0.7	0.4	3.8	14.5	2.81	DOL, ANHY, SL/F, SL/V, STY
287	4646.0-47.0	<0.1	*	2.9	14.3	2.84	DOL, ANHY, V, SL/F, STY
288	4647.0-48.0	0.1	*	4.1	9.6	2.84	DOL, SL/V, F, STY
S 289	4648.0-49.0	1.1	0.4	4.4	9.6	2.81	DOL, ANHY, SL/V, SL/F, STY
290	4649.0-50.0	0.1	*	5.8	14.7	2.82	DOL, ANHY, F, V, STY
CORE NO. 7 4650.0-4710.0 CUT 60' REC 60'							
291	4650.0-00.0	0.7	2.3	7.9	20.8	2.80	DOL, ANHY, SHY, DNS
S 292	4700.0-01.0	3.9	3.0	0.3	18.4	2.87	DOL, ANHY, STY
293	4701.0-02.0	11.1	2.0	3.6	0.0	2.88	DOL, ANHY, STY
294	4702.0-03.0	1.1	0.4	5.2	17.6	2.87	DOL, ANHY, SL/F, STY
S 295	4703.0-04.0	0.1	1.0	8.5	9.3	2.83	DOL, ANHY, SL/F, STY
296	4704.0-05.0	12.	5.3	10.6	22.4	2.88	DOL, ANHY, V/F, STY
S 297	4705.0-06.0	1.1	1.3	8.7	21.5	2.85	DOL, SL/ANHY, STY, SL/F
298	4706.0-07.0	0.1	5.1	11.0	20.9	2.85	DOL, SL/ANHY, V/F, STY
S 299	4707.0-08.0	0.1	7.4	13.4	18.0	2.87	DOL, ANHY, STY
299	4708.0-09.0	0.1	13.4	18.0	19.0	2.86	DOL, SL/ANHY, PP

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

FILE NO : 3202-11239
 ANALYSTS : DILLARD

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 1

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERF. TO AIR (HD) MINIMUM	90 DEG	FOR, He	FLUID SATS.		GRAIN DEN	DESCRIPTION
					OIL	WTR		
S 300	4709.0-10.0	8.7	8.4	12.5	21.4	12.1	2.84	DOL,SL/ANHY,STY,PP
	CORE NO. 8 4710.0-4770. CUT 60' REC 60'							
301	4710.0-11.0	8.7	8.2	12.3	13.5	21.3	2.84	DOL,SL/ANHY,STY
302	4711.0-12.0	3.0	#	10.7	5.9	28.2	2.83	DOL,SL/ANHY,STY,V/F,PP
S 303	4712.0-13.0	3.4	4.2	10.3	17.0	19.8	2.84	DOL,SL/ANHY,STY,V/F,PP
304	4713.0-14.0	24.6	4.0	9.3	12.3	30.1	2.82	DOL,SL/ANHY,STY,SL/V,V/F
S 305	4714.0-15.0	3.7	3.1	10.6	18.8	24.3	2.85	DOL,SL/ANHY,SL/V,STY,F
306	4715.0-16.0	2.3	1.3	11.3	20.0	23.6	2.84	DOL,SL/ANHY,SL/V,STY,SL/F
S 307	4716.0-17.0	4.5	0.9	8.6	16.3	33.3	2.84	DOL,SL/ANHY,SL/V,STY,F
308	4717.0-18.0	3.4	0.9	4.1	0.0	60.4	2.81	DOL,SL/ANHY,V/F,SL/V,STY
309	4718.0-19.0	0.8	0.7	3.4	0.0	61.8	2.84	DOL,SL/ANHY,V/F,STY
310	4719.0-20.0	1.4	0.5	4.8	9.3	62.2	2.82	DOL,SL/ANHY,V/F,STY
S 311	4720.0-21.0	14.	13.	2.3	11.8	55.6	2.83	DOL,SL/ANHY,V/F,STY
312	4721.0-22.0	4.0	1.1	2.1	3.4	45.5	2.87	DOL,SL/ANHY,V/F,SL/V,STY
313	4722.0-23.0	20.1	#	4.6	5.7	61.8	2.81	DOL,SL/ANHY,V/F,V,STY
314	4723.0-24.0	7.6	4.1	4.5	10.7	44.6	2.88	DOL,V/ANHY,STY,V/F
S 315	4724.0-25.0	14.	9.6	9.3	6.3	28.9	2.85	DOL,SL/ANHY,V/F,STY,SL/V
316	4725.0-26.0	0.3	0.3	4.8	2.0	46.3	2.86	DOL,ANHY,V/F,SL/V,STY
S 317	4726.0-27.0	8.1	4.7	6.5	4.1	48.5	2.82	DOL,ANHY,V/F,SL/V,STY
318	4727.0-28.0	24.	14.	14.0	15.2	25.3	2.84	DOL,SL/ANHY,PP,STY,SL/F
S 319	4728.0-29.0	31.	29.	14.7	14.0	24.6	2.03	DOL,SL/ANHY,SL/V,SL/F,STY,PP
320	4729.0-30.0	4.8	1.6	5.8	4.5	50.9	2.83	DOL,SL/ANHY,STY,SL/F
321	4730.0-31.0	0.2	1.6	7.7	4.2	42.1	2.82	DOL,SL/ANHY,SL/F,SL/V,STY
S 322	4731.0-32.0	12.	7.1	8.7	10.3	39.1	2.84	DOL,SL/ANHY,SL/F,SL/V
323	4732.0-33.0	5.3	3.1	5.1	1.9	59.1	2.83	DOL,SL/ANHY,SL/F,SL/V
S 324	4733.0-34.0	7.2	3.4	3.9	1.9	60.3	2.84	DOL,SL/ANHY,SL/F,SL/V
325	4734.0-35.0	17.	10.	6.8	8.7	33.7	2.84	DOL,SL/ANHY,F,SL/V,FOSS
S 326	4735.0-36.0	13.	12.	9.0	10.0	23.5	2.86	DOL,SL/ANHY,SL/F,FOSS,STY,V

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

PHILLIPS PETROLEUM COMPANY
EVGSA TRACT 2801 WELL NO. 4

DALLAS, TEXAS

DATE : 8-7-79

FORMATION : GRAYBOURG/SAN ANDRES

FILE NO : 3202-11239
ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM	POR. He	FLUID SATS.		GRAIN DEN	DESCRIPTION
				OIL	WTR		
S 327	4736.0-37.0	83.	7.3	6.0	44.1	2.84	DOL,SL/ANHY,F,V,FOSS
S 328	4737.0-38.0	8.1	5.8	6.7	34.8	2.85	DOL,SL/ANHY,SL/F,V,FOSS
S 329	4738.0-39.0	30.	4.6	5.9	34.7	2.83	DOL,SL/ANHY,SL/F,V
S 330	4739.0-40.0	28.	5.8	2.4	35.2	2.84	DOL,SL/ANHY,SL/F,V
S 331	4740.0-41.0	8.0	5.6	10.9	27.2	2.89	DOL,SL/ANHY,SL/F,V,FOSS
S 332	4741.0-42.0	11.	4.7	15.5	44.8	2.84	DOL,SL/ANHY,V,F
S 333	4742.0-43.0	9.7	4.4	13.3	46.1	2.85	DOL,SL/ANHY,SL/F,V
S 334	4743.0-44.0	2.5	2.8	2.5	57.7	2.86	DOL,SL/ANHY,V,SL/F
S 335	4744.0-45.0	0.7	3.7	2.3	68.5	2.83	DOL,SL/ANHY,SL/V,SL/F
S 336	4745.0-46.0	2.2	5.2	13.7	40.6	2.84	DOL,SL/ANHY,SL/F
S 337	4746.0-47.0	9.1	6.0	8.7	26.4	2.82	DOL,SL/ANHY,F,SL/V
S 338	4747.0-48.0	3.7	4.2	2.9	51.0	2.84	DOL,SL/ANHY,V,SL/F,FOSS
S 339	4748.0-49.0	5.2	5.2	2.9	43.0	2.85	DOL,SL/ANHY,V,SL/F,FOSS
S 340	4749.0-50.0	1.4	9.2	12.6	29.7	2.84	DOL,SL/ANHY,F,V
S 341	4750.0-51.0	22.	12.8	10.0	28.3	2.84	DOL,SL/ANHY,V,FOSS
S 342	4751.0-52.0	39.	10.8	6.7	29.9	2.84	DOL,ANHY,SL/V,SL/F,FOSS
S 343	4752.0-53.0	4.8	8.6	10.0	26.0	2.83	DOL,ANHY,SL/V,SL/F,FOSS
S 344	4753.0-54.0	1.7	3.8	5.0	58.7	2.86	DOL,ANHY,SL/F,V,FOSS
S 345	4754.0-55.0	1.0	4.4	7.9	50.4	2.85	DOL,ANHY,SL/F,SL/V,FOSS,STY
S 346	4755.0-56.0	3.1	7.6	3.6	41.2	2.85	DOL,ANHY,V,FOSS,STY
S 347	4756.0-57.0	0.2	4.4	5.7	72.9	2.86	DOL,ANHY,V,SL/F,FOSS
S 348	4757.0-58.0	0.2	2.7	5.7	62.9	2.87	DOL,ANHY,V,SL/F,FOSS
S 349	4758.0-59.0	0.1	3.4	0.0	51.7	2.86	DOL,ANHY,V,SL/F,FOSS
S 350	4759.0-60.0	0.2	1.9	6.7	70.9	2.86	DOL,ANHY,SL/V,SL/F,FOSS,STY
S 351	4760.0-64.0	0.3	2.8	10.1	50.6	2.85	REMOVED BY CLIENT
S 352	4764.0-65.0	1.1	2.8	5.8	45.5	2.86	DOL,ANHY,SL/V,SL/F,FOSS,STY
S 353	4765.0-66.0	3.8	3.7	0.0	50.0	2.84	DOL,ANHY,SL/V,FOSS
S 354	4767.0-68.0	3.8	2.7	8.7	57.7	2.83	DOL,ANHY,SL/F,SL/V,FOSS,STY
S 355	4768.0-69.0	20.	6.4	20.7	21.7	2.85	DOL,ANHY,F,SL/V,FOSS
							DOL,ANHY,V,F,SL/V,STY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 4

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
 ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM 90 DEG	POR. Fe	FLUID OIL	SATS.		GRAIN DEN	DESCRIPTION
					WTR			
356	4769.0-70.0	0.2	8.2	3.7	28.7		2.83	DOL, F, V
CORE NO. 9 4770.0-4830.0 CUT 60' REC 60'								
357	4770.0-71.0	9.1	4.9	4.1	82.2		2.82	DOL, ANHY, F, V, STY
358	4771.0-72.0	2.2	4.4	3.6	56.2		2.81	DOL, ANHY, F, V, STY
S 359	4772.0-73.0	60.1	5.4	10.1	24.3		2.86	DOL, ANHY, V, F, V
360	4773.0-74.0	39.	5.3	2.8	39.2		2.86	DOL, ANHY, F, V, STY
S 361	4774.0-75.0	26.	7.2	1.5	30.8		2.86	DOL, ANHY, F, V, STY
362	4775.0-76.0	58.	6.4	7.4	34.0		2.85	DOL, ANHY, F, V, STY
S 363	4776.0-77.0	79.	6.3	1.1	40.8		2.86	DOL, ANHY, F, V, STY
364	4777.0-78.0	765.	8.0	5.0	41.3		2.89	DOL, ANHY, F, V, STY
365	4778.0-79.0	738.	6.2	2.6	34.4		2.85	DOL, ANHY, F, V, STY
S 366	4779.0-80.0	36.	4.5	3.5	44.4		2.85	DOL, ANHY, F, V, STY
367	4780.0-81.0	60.1	3.5	6.6	16.5		2.77	DOL, ANHY, V, F, V, STY
368	4781.0-82.0	60.1	7.0	8.3	48.2		2.86	DOL, ANHY, V, F, V
S 369	4782.0-83.0	39.	6.1	8.9	34.8		2.86	DOL, ANHY, F, V, SL, V, STY
370	4783.0-84.0	26.	5.6	6.7	39.2		2.86	DOL, ANHY, F, V, SL, V, STY
371	4784.0-85.0	16.	4.8	1.6	43.3		2.84	DOL, ANHY, F, V, STY
S 372	4785.0-86.0	26.	6.0	3.5	39.2		2.88	DOL, ANHY, F, V, STY
373	4786.0-87.0	60.1	5.1	9.9	27.6		2.82	DOL, ANHY, V, F, V, STY
374	4787.0-88.0	60.1	2.5	2.2	44.0		2.81	DOL, ANHY, V, F, V, STY
375	4788.0-89.0	3.1	5.2	12.7	42.5		2.84	DOL, ANHY, F, V, SL, V, STY
376	4789.0-90.0	4.3	7.5	8.0	39.8		2.88	DOL, ANHY, V, F, V, STY
S 377	4790.0-91.0	1.3	6.6	8.4	43.9		2.85	DOL, ANHY, V, F, V, SL, V, STY
378	4791.0-92.0	6.3	2.0	10.4	43.4		2.90	DOL, V, ANHY, SL, F, PP, STY
379	4792.0-93.0	6.3	3.2	17.2	35.0		2.91	DOL, ANHY, SL, F, PP, STY
380	4793.0-94.0	9.7	2.3	11.8	65.4		2.89	DOL, V, ANHY, SL, F, STY
381	4794.0-95.0	6.3	2.2	22.4	55.9		2.87	DOL, V, ANHY, SL, F, PP, STY
S 382	4795.0-96.0	6.4	2.3	22.4	46.6		2.87	DOL, V, ANHY, SL, F, STY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 4

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
 ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM	POR. He	FLUID SATS. OIL	WTR	GRAIN DEN	DESCRIPTION
383	4796.0-97.0	0.5	2.1	21.7	42.2	2.90	DOL, ANHY, SL/F, STY
S 384	4797.0-98.0	3.6	4.6	18.4	35.7	2.83	DOL, ANHY, SL/V, F, STY
385	4798.0-99.0	3.4	4.5	16.7	35.2	2.88	DOL, ANHY, F, SL/V, STY
S 386	4799.0-00.0	14.	9.1	13.2	35.5	2.84	DOL, ANHY, F, PP, STY
387	4800.0-01.0	3.4	8.4	16.6	28.3	2.82	DOL, ANHY, F, PP, STY
388	4801.0-02.0	21.	9.2	19.0	24.6	2.83	DOL, ANHY, F, SHR, STY
S 389	4802.0-03.0	17.	6.0	22.0	33.4	2.82	DOL, ANHY, F, SL/V, STY
390	4803.0-04.0	5.8	3.4	5.2	60.3	2.83	DOL, ANHY, V/F, V, STY
S 391	4804.0-05.0	10.	4.5	4.2	49.1	2.85	DOL, ANHY, V/F, FOSS, SL/V, STY
392	4805.0-06.0	4.7	2.6	13.0	47.1	2.84	DOL, ANHY, F, V, FOSS, STY
S 393	4806.0-07.0	4.9	4.6	10.4	44.8	2.85	DOL, ANHY, F, V, FOSS, STY
394	4807.0-08.0	0.5	3.3	11.0	70.6	2.82	DOL, ANHY, V/F, SL/V, STY
395	4808.0-09.0	21.	6.9	15.3	48.4	2.76	DOL, ANHY, V/F, PP, V, SHR
S 396	4809.0-10.0	34.	8.7	14.9	33.2	2.80	DOL, ANHY, SHR, V/F, SL/V
397	4810.0-11.0	0.5	7.5	6.5	40.8	2.89	DOL, ANHY, F, SL/V
S 398	4811.0-12.0	1.6	5.8	6.6	46.7	2.87	DOL, ANHY, V/F, SL/V, STY
399	4812.0-13.0	4.9	2.3	5.5	73.2	2.80	DOL, ANHY, V/F, SHR, SL/V
S 400	4813.0-14.0	6.6	2.6	7.4	59.7	2.84	DOL, ANHY, V/F, SL/V, STY
401	4814.0-15.0	0.9	2.2	7.9	65.8	2.80	DOL, ANHY, SL/V, SL/F, FOSS, STY
402	4815.0-16.0	3.0	1.7	0.0	46.7	2.84	DOL, ANHY, SL/V, V/F, STY
S 403	4816.0-17.0	0.1	1.6	0.0	57.9	2.84	DOL, ANHY, V/F, STY
404	4817.0-18.0	1.2	2.0	7.6	75.6	2.83	DOL, ANHY, V/F, SL/V, STY
405	4818.0-19.0	1.1	1.2	6.3	55.6	2.84	DOL, ANHY, V/F, SL/V, STY
406	4819.0-20.0	0.3	0.9	0.0	62.5	2.86	DOL, ANHY, SL/F
407	4820.0-21.0	2.7	2.0	4.2	65.4	2.82	DOL, ANHY, SL/V, F, FOSS, STY
S 408	4821.0-22.0	0.1	2.3	5.6	66.7	2.85	DOL, ANHY, V/F, SL/V, STY
409	4822.0-23.0	14.	2.3	6.5	61.2	2.84	DOL, ANHY, V/F, SL/V, STY
S 410	4823.0-24.0	11.	3.4	7.1	43.5	2.85	DOL, ANHY, V/F, V, STY
411	4824.0-25.0	34.	7.7	11.0	24.5	2.82	DOL, ANHY, F, V, FOSS
412	4825.0-26.0	0.2	7.5	13.7	33.8	2.83	DOL, ANHY, V/F, V, FOSS

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY
 EVGSA TRACT 2801 WELL NO. 4

DATE : 8-7-79
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11239
 ANALYSTS : DILLARD

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM	POR. He	FLUID SATC.		GRAIN DEN	DESCRIPTION
				OIL	WTR		
S 413	4826.0-27.0	32.1	199	14.1	41.7	2.84	DOL, ANHY, SHR, V/F, FOSS, V
414	4827.0-28.0	32.1	*	11.1	38.9	2.83	DOL, ANHY, SHR, V/F, SL/V, STY
415	4828.0-29.0	32.1	*	6.0	44.8	2.81	DOL, ANHY, V/F, V, PP, STY
416	4829.0-30.0	77	20	10.6	58.7	2.83	DOL, ANHY, F, SL/V
CORE NO. 10 4830.0-4843.0 CUT 13' REC 11'							
S 417	4830.0-31.0	30.1	*	2.3	0.0	50.0	DOL, ANHY, PP, STY
418	4831.0-32.0	30.1	*	1.4	0.0	40.0	DOL, ANHY, SL/V, STY
419	4832.0-33.0	30.1	*	1.5	0.0	44.4	DOL, ANHY, SL/F, STY
420	4833.0-34.0	30.1	00.1	1.9	19.4	75.3	DOL, ANHY, SL/F, STY
S 421	4834.0-35.0	3.4	0.2	1.7	15.9	35.4	DOL, ANHY, STY
422	4835.0-36.0	30.1	*	1.5	0.0	40.0	DOL, ANHY, STY
423	4836.0-37.0	3.2	0.1	3.1	0.0	30.3	DOL, ANHY, SL/F, STY
424	4837.0-38.0	32	24	1.6	15.3	63.6	DOL, ANHY, V/F, V, STY
425	4838.0-39.0	30.1	*	2.4	16.7	83.3	DOL, ANHY, V/F, STY
426	4839.0-40.0	0.5	0.2	1.9	21.7	66.3	DOL, ANHY, SL/V, SL/F, STY
S 427	4840.0-41.0	0.4	0.1	2.8	35.6	59.4	DOL, ANHY, PP, SL/F, STY
	4841.0-43.0						LOST CORE

* INDICATES PLUG FERM

S INDICATES PRESERVED SAMPLE

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