

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS REPORT

FOR

COASTAL OIL & GAS CORPORATION

GONZALES FEDERAL "31" NO. 6
FLYING "M" FIELD
LEA COUNTY, NEW MEXICO

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

COASTAL OIL & GAS CORPORATION
GONZALES FEDERAL "31" NO. 6
FLYING "M" FIELD
LEA COUNTY, NEW MEXICO

DATE : 3-11-81
FORMATION : SAN ANDRES
DRLG. FLUID: BRINE GEL
LOCATION : 1990' FSL & 860' FEL,

FILE NO : 3202-12223
ANALYSTS : DEVIER
LABORATORY: MIDLAND TEXAS
SEC. 31, T-9-S, R-33-E

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MAXIMUM	PERM 90 DEG	HE POR	OIL% PORE	WTR% PORE	GRAIN DEN	DESCRIPTION
CORE NO. 1 4210.0-4270.0 CUT 60' REC 60'								
* 1	4210.0-11.0	<0.01		3.7	3.1	75.4	2.87	DOL SL/ANHY SL/SHY SHLAM
2	4211.0-12.0	<0.01	<0.01	2.6	17.0	70.0	2.81	DOL SHY SL/ANHY SHLAM
3	4212.0-13.0	0.08	0.07	2.8	34.5	52.1	2.87	DOL ANHY SL/SHY SHLAM
4	4213.0-22.0							NA ANH SHLAM
5	4222.0-23.0	0.06	0.06	2.4	15.4	61.5	2.87	DOL ANHY SL/SHY STY
6	4223.0-24.0	0.07	0.07	0.9	22.2	66.7	2.87	DOL SL/ANHY SL/F
7	4224.0-25.0	0.07	0.04	1.1	40.0	50.0	2.93	DOL ANHY
8	4225.0-29.0	0.05	0.05	1.1	31.6	63.2	2.92	NA ANH SHLAM
9	4229.0-30.0	2.3	0.13	3.6	15.6	70.3	2.90	DOL ANHY VF
10	4230.0-31.0	0.11	0.08	5.0	16.0	66.7	2.89	DOL ANHY
11	4231.0-32.0	0.44	0.38	4.4	8.0	80.7	2.87	DOL ANHY F
12	4232.0-33.0	1.2	0.08	2.1	23.3	64.4	2.90	DOL ANHY VF
13	4233.0-34.0	0.88	0.08	2.9	29.5	58.9	2.88	NA ANH SHLAM
14	4234.0-37.0	0.07	0.06	2.2	38.7	48.1	2.90	DOL ANHY VF
15	4237.0-39.0	0.05	0.03	1.8	18.2	77.3	2.89	DOL ANHY SL/SHY SHLAM
16	4239.0-40.0	0.04		6.0	24.3	60.1	2.86	NA ANH SHLAM
17	4240.0-44.0	0.25	0.21	6.9	31.8	57.9	2.85	DOL ANHY SL/SHY STY
18	4244.0-45.0	33.	0.48	5.5	16.3	67.3	2.83	DOL ANHY SL/SHY SHLAM
19	4245.0-46.0	0.12		9.1	19.9	51.3	2.80	DOL SL/ANHY SL/SHY VF PP FOSS
20	4246.0-47.0	<0.01	4.6	4.1	16.1	63.2	2.73	DOL SL/ANHY VF PP FOSS
	4247.0-48.0	5.8		17.8	31.0	34.1	2.83	DOL SL/ANHY SL/SALTY VF PP FOSS
	4248.0-49.0							
	4249.0-50.0							

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

PAGE 2 OF

DALLAS, TEXAS

COASTAL OIL & GAS CORPORATION
GONZALES FEDERAL "31" NO. 6

DATE : 3-11-81
FORMATION : SAN ANDRES

FILE NO : 3202-12223
ANALYSTS : DEVIER

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MAXIMUM	PERM 90 DEG	HE POR	OIL% PORE	WTR% PORE	GRAIN DEN	DESCRIPTION
21	4250.0-51.0	0.54	0.49	8.4	23.6	37.8	2.83	DOL ANHY PP FOSS
22	4251.0-52.0	1.1	0.87	8.9	30.9	25.5	2.80	DOL SL/ANHY PP FOSS STY
23	4252.0-53.0	1.4	0.98	7.9	37.8	35.6	2.77	DOL SL/ANHY PP
24	4253.0-54.0	4.8	4.7	14.0	27.1	25.9	2.81	DOL SL/ANHY
25	4254.0-55.0	11.	11.	16.1	26.3	22.9	2.81	DOL ANHY VF PP
26	4255.0-56.0	2.6	2.2	12.2	31.6	28.1	2.78	DOL SL/ANHY SL/LMY PP FOSS
* 27	4256.0-57.0	0.02		4.1	29.5	48.9	2.77	DOL SL/ANHY SL/SHY SL/LMY VF STY
28	4257.0-58.0	35.	0.39	4.6	49.5	34.4	2.79	DOL SL/ANHY SL/LMY VF
29	4258.0-59.0	1.1	0.53	9.1	33.3	22.8	2.79	DOL SL/ANHY SL/LMY VF PP FOSS
30	4259.0-60.0	1.3	1.2	5.8	54.5	34.2	2.79	DOL SL/ANHY SL/LMY SL/V FOSS
31	4260.0-61.0	5.6	2.4	13.6	31.4	29.6	2.80	DOL ANHY SL/LMY VF PP
32	4261.0-62.0	1.8	0.26	7.5	13.3	36.7	2.80	DOL SL/ANHY SL/LMY VF PP
33	4262.0-63.0	0.05	0.02	9.6	28.6	34.6	2.75	DOL LMY SL/ANHY SL/V FOSS
34	4263.0-64.0	1.7	1.1	11.9	15.5	29.3	2.77	DOL SL/ANHY SL/LMY SL/V FOSS
35	4264.0-65.0	3.2	0.38	8.3	36.2	34.0	2.73	DOL LMY SL/ANHY PP FOSS
36	4265.0-66.0	0.03	<0.01	7.2	46.3	29.7	2.84	DOL SL/ANHY PP
37	4266.0-67.0	1.0	0.18	6.4	42.6	31.9	2.83	DOL ANHY PP
38	4267.0-68.0	0.09	0.03	8.4	34.5	25.3	2.84	DOL SL/ANHY PP
* 39	4268.0-69.0	27.		10.3	40.3	48.5	2.77	DOL SL/ANHY SL/LMY VF PP
* 40	4269.0-70.0	21.		6.2	48.9	30.0	2.76	DOL SL/ANHY SL/LMY VF PP
CORE NO. 2 4270.0-4317.0 CUT 47' REC 47'								
41	4270.0-71.0	8.1	2.2	5.4	19.7	57.7	2.83	DOL SHY SL/ANHY VF PP SHLAM
42	4271.0-72.0	2.0	2.0	5.9	21.6	52.9	2.82	DOL SL/ANHY SL/SHY PP STY
43	4272.0-73.0	1.0	0.33	6.2	23.3	26.7	2.79	DOL ANHY SL/LMY PP
44	4273.0-74.0	214.	104.	9.4	25.4	33.3	2.81	DOL ANHY SL/LMY VF PP
* 45	4274.0-75.0	1.1		10.3	34.1	31.9	2.79	DOL SL/ANHY SL/LMY VF PP
46	4275.0-76.0	48.	33.	14.9	28.9	16.0	2.80	DOL SL/ANHY VF PP

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 and in connection with which such report is used or relied upon.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

CONETAL OIL & GAS CORPORATION
 GONZALES FEDERAL "31" NO. 6

DATE : 3-11-81
 FORMATION : SAN ANDRES

FILE NO : 3202-12223
 ANALYSTS : DEVIER

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MAXIMUM	PERM 90 DEG	HE POR	OIL% FORE	WTR% FORE	GRAIN DEN	DESCRIPTION
47	4276.0-77.0	51.	49.	16.2	23.9	17.7	2.80	DOL SL/ANHY PP
48	4277.0-78.0	52.	50.	16.9	18.8	19.2	2.78	DOL SL/ANHY SL/LMY PP
49	4278.0-79.0	3.0	1.6	13.2	26.0	17.8	2.80	DOL SL/ANHY SL/V PP
50	4279.0-80.0	1.7	1.4	13.2	20.9	22.7	2.78	DOL SL/ANHY SL/LMY SL/V PP
51	4280.0-81.0	25.	21.	11.6	21.3	29.0	2.77	DOL LMY SL/ANHY SL/V F
52	4281.0-82.0	14.	14.	15.2	23.5	37.4	2.84	DOL ANHY PP
53	4282.0-83.0	5.8	3.5	8.1	27.5	50.5	2.85	DOL ANHY VF PP
54	4283.0-84.0	55.	20.	4.2	24.3	48.6	2.83	DOL SL/ANHY SL/SHY VF PP STY
55	4284.0-85.0	0.52	0.05	10.1	32.6	48.4	2.81	DOL ANHY VF PP
56	4285.0-86.0	0.23	0.05	4.2	29.2	37.5	2.87	DOL ANHY PP
57	4286.0-87.0	2.1	1.6	3.4	29.0	51.6	2.84	DOL ANHY SL/SHY F STY
58	4287.0-88.0	10.	8.4	11.7	21.6	47.2	2.80	DOL ANHY PP
59	4288.0-89.0	5.6	4.4	13.5	22.1	44.2	2.80	DOL SL/ANHY PP
60	4289.0-90.0	1.9	1.3	8.9	18.4	44.8	2.73	DOL ANHY LMY SL/V FOSS
61	4290.0-91.0	0.32	0.05	5.6	53.3	40.0	2.72	DOL LMY SL/ANHY VF FOSS
62	4291.0-92.0	1.4	1.1	11.7	29.0	21.0	2.78	DOL SL/ANHY SL/LMY VF
63	4292.0-93.0	0.03	0.03	7.9	29.7	42.9	2.78	DOL SL/ANHY SL/LMY SL/V FOSS
64	4293.0-94.0	0.04	0.02	3.2	35.0	58.5	2.71	DOL LMY SL/ANHY V FOSS
65	4294.0-95.0	0.05	0.05	6.3	46.6	48.7	2.73	DOL ANHY LMY SL/V FOSS
66	4295.0-96.0	0.31	2.8	13.2	30.4	30.5	2.85	DOL SL/ANHY SL/V FOSS
67	4296.0-97.0	12.		12.5	28.6	31.4	2.77	DOL SL/ANHY SL/LMY VF PP
68	4297.0-98.0	0.58		8.8	26.4	32.7	2.73	DOL LMY SL/ANHY F PP
69	4298.0-99.0	0.05		5.5	47.8	41.3	2.74	DOL LMY SL/ANHY VF PP
70	4299.0- 0.0	0.45		7.3	32.6	34.9	2.76	DOL LMY SL/ANHY VF PP
71	4300.0- 1.0	0.01		7.0	38.7	37.3	2.76	DOL LMY SL/ANHY VF PP
72	4301.0- 2.0	0.17	0.09	6.9	14.4	47.2	2.77	DOL SL/ANHY SL/LMY SL/SHY PP STY
73	4302.0- 3.0	1.0	0.83	13.6	23.1	22.7	2.79	DOL SL/ANHY SL/LMY PP
74	4303.0- 4.0	0.57	0.52	12.2	17.5	37.7	2.82	DOL SL/ANHY PP
75	4304.0- 5.0	0.25	0.15	12.9	21.0	28.4	2.79	DOL SL/ANHY SL/LMY SL/SHY PP STY
76	4305.0- 6.0	0.18	0.11	11.7	8.8	41.4	2.82	DOL SL/ANHY SL/F PP

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

COASTAL OIL & GAS CORPORATION
 GONZALES FEDERAL "31" NO. 6

DATE : 3-11-81
 FORMATION : SAN ANDRES

FILE NO : 3202-12223
 ANALYSTS : DEVIER

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MAXIMUM	PERM 90 DEG	HE POR	OIL% FORE	WTR% FORE	GRAIN DEN	DESCRIPTION
* 77	4306.0-7.0	1.2		8.1	10.0	71.1	2.77	DOL SL/ANHY SL/LMY F PP
* 78	4307.0-8.0	0.02		8.1	3.3	87.2	2.74	DOL LMY SL/ANHY VF STY
* 79	4308.0-9.0	2.5		9.1	10.0	63.9	2.76	DOL LMY SL/ANHY VF PP
* 80	4309.0-10.0	0.13		10.4	9.9	83.1	2.76	DOL LMY SL/ANHY VF
* 81	4310.0-11.0	0.95		10.3	17.2	56.2	2.77	DOL SL/ANHY SL/LMY VF
* 82	4311.0-12.0	0.36		14.2	15.6	51.5	2.82	DOL SL/ANHY VF PP
* 83	4312.0-13.0	1.9		15.4	12.6	55.9	2.88	DOL SL/ANHY VF
* 84	4313.0-14.0	0.96		7.1	4.1	87.8	2.83	DOL ANHY VF STY
* 85	4314.0-15.0	0.08		10.2	3.2	85.7	2.83	DOL SL/ANHY VF
* 86	4315.0-16.0	0.32		10.3	17.8	58.9	2.80	DOL SL/ANHY VF
* 87	4316.0-17.0	0.90		10.0	17.2	50.0	2.81	DOL SL/ANHY VF

* INDICATES PLUG PERMEABILITY

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

LITHOLOGICAL ABBREVIATIONS

ANH(Y)	ANHYDRITE, ANHYDRITIC	LM(Y)	LIMESTONE, LIMY
ARK	ARKOSE, ARKOSIC	MG	MEDIUM GRAINED
BAN	BAND, BANDED	MTX	MATRIX
BREC	BRECCIA, BRECCIATED	NA	INTERVAL NOT ANALYZED (AT REQUEST OF CLIENT)
CALC	CALCITE, CALCAREOUS		
CARB	CARBONACEOUS		
CG	COARSE GRAINED	NOD	NODULE, NODULAR
CHK(Y)	CHALK, CHALKY	OOL	OOLITIC
CHT(Y)	CHERT, CHERTY	PISO	PISOLITIC
CONGL	CONGLOMERATE, CONGLOMERITIC	PP	PINPOINT POROSITY
CXLN	COARSELY CRYSTALLINE	PT	PARTING
DNS	DENSE	PYR	PYRITE, PYRITIC
DOL(C)	DOLOMITE, DOLOMITIC	SD(Y)	SANDSTONE, SANDY
F	RANDOMLY ORIENTED FRACTURES	SH(Y)	SHALE, SHALY
FG	FINE GRAINED	SHR	SOLID HYDROCARBON RESIDUE
FOSS	FOSSILIFEROUS	SL/	SLIGHTLY
FR	FRIABLE	SLT(Y)	SILT, SILTY
FXLN	FINELY CRYSTALLINE	STY	STYLOLITE, STYLOLITIC
GAL	GALENA	SUC	SUCROSLIC
GLAUC	GLAUCONITE, GLAUCONITIC	SUL	SULPHUR
GRAN	GRANITE	TBFA	TOO BROKEN FOR ANALYSIS
GUP	GYPSUM, GYPSIFEROUS	TRIP	TRIPOLITE
HF	PREDOMINANTLY HORIZONTALLY FRACTURED	V/	VERY
INC	INCLUSION	VF	PREDOMINANTLY VERTICALLY FRACTURED
INTBD	INTERBEDDED	V	VUGULAR
LAM	LAMINATED	XBD	CROSSBEDDED
		XLN	MEDIUM CRYSTALLINE
		XTL	CRYSTAL

THE FIRST WORD IN THE DESCRIPTION COLUMN OF THE CORE ANALYSIS REPORT DESCRIBES THE ROCK TYPE. FOLLOWING ARE ROCK MODIFIERS IN DECREASING ABUNDANCE AND MISCELLANEOUS DESCRIPTIVE TERMS.

LAB

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

Y	COASTAL OIL & GAS CORPORATION	FILE NO.	3202-12223
	GONZALES FEDERAL "31" NO. 6	DATE	3-11-81
	FLYING "M"	FORMATION	SAN ANDRES
	IEA	STATE	NEW MEXICO
		DRLG. FLD.	BRINE GEL
		CORES	ACC
N	1990' FSL & 860' FEL, SEC. 31, T-9-S, R-33-E		

CORRELATION COREGRAPH

These analyses, opinions or interpretations are based on observations and material 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 or 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 operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" 100'

