

CORE ANALYSIS RESULTS FOR
CRYSTAL EXPLORATION & PRODUCTION COMPANY

HAMILTON NO. 43-11

FOSSTON FIELD

WELD COUNTY, COLORADO

N 56 11-7N-53W

~~CONFIDENTIAL~~



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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

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CRYSTAL EXPL. & PROD. CO.
 HAMILTON NO. 43-11
 FOSSTON FIELD
 WELD COUNTY

FORMATION : NIOBRARA
 DRLG. FLUID: WATER BASE MUD
 LOCATION : NE SE SEC. 11-T7N-R63W
 STATE : COLORADO

DATE : 7-27-80
 FILE NO. : RP-2-6224
 ANALYSTS : RG:FD
 ELEVATION: 4838' KB

CONVENTIONAL CORE ANALYSIS

SAMP. NO.	DEPTH	PERM. TO AIR (MD) HORZ. VERTICAL	POR. FLD.	FLUID OIL	SATS. WATER	GR. DNS.	DESCRIPTION
1	6635-36	1.6 F	5.3	52.2	38.5	2.60	SHL BLK
	6636-6640						SHALE - NO ANALYSIS
2	6640-41	<0.01	0.4	66.5	19.0	2.52	SHL BLK
	6641-6645						SHALE - NO ANALYSIS
3	6645-46	0.06	1.7	75.6	18.9	2.51	SHL BLK
	6646-6650						SHALE - NO ANALYSIS
4	6650-51	0.02	1.4	66.0	20.8	2.50	SHL BLK
	6651-6655						SHALE - NO ANALYSIS
5	6655-56	0.10	1.2	60.8	21.3	2.55	SHL BLK
	6656-6660						SHALE - NO ANALYSIS
6	6660-61	0.01	0.4	62.9	33.3	2.48	SHL BLK
	6661-6665						SHALE - NO ANALYSIS
7	6665-66	0.03	1.5	64.7	30.8	2.55	SHL BLK
	6666-6670						SHALE - NO ANALYSIS
8	6670-71	0.01	1.2	64.8	27.0	2.51	SHL BLK
	6671-6675						SHALE - NO ANALYSIS
9	6675-76	*	0.5	67.9	25.0	2.53	SHL BLK
	6676-6680						SHALE - NO ANALYSIS
10	6680-81	0.07 F	1.3	64.4	25.7	2.53	SHL BLK
	6681-6685						SHALE - NO ANALYSIS
11	6685-86	0.01	0.7	58.0	38.7	2.53	SHL BLK
	6686-6690						SHALE - NO ANALYSIS
12	6690-91	*	0.8	69.0	28.4	2.53	SHL BLK
	6691-6693						SHALE - NO ANALYSIS
	6693-6696						LOST CORE

F = FRACTURED PERMEABILITY PLUG

*UNSUITABLE FOR PERMEABILITY MEASUREMENT

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SAMP. NO.	DEPTH	PERM. TO HORZ.	AIR (MD) VERTICAL	POR. FLD.	FLUID OIL	SATS. WATER	GR. DNS.	DESCRIPTION
13	6696-97 6697-6701	0.04		0.8	63.8	28.7	2.49	SHL BLK SHALE - NO ANALYSIS
14	6701 -2 6702-6706	0.02		2.5	80.1	16.0	2.51	SHL BLK SHALE - NO ANALYSIS
15	6706 -7 6707-6711	<0.01		5.4	73.5	22.6	2.71	SHL BLK PYR SHALE - NO ANALYSIS
16	6711-12 6712-6716	<0.01		4.4	76.7	21.2	2.54	SHL BLK SHALE - NO ANALYSIS
17	6716-17 6717-6721	*		3.0	73.6	19.8	2.50	SHL BLK SHALE - NO ANALYSIS
18	6721-22 6722-6722	<0.01		4.8	83.5	14.9	2.53	SHL BLK SHALE - NO ANALYSIS
19	6722-23 6723-6731	<0.01		6.8	80.6	17.5	2.58	SHL BLK SHALE - NO ANALYSIS
20	6731-32 6732-6736	<0.01		2.3	80.0	15.4	2.48	SHL BLK SHALE - NO ANALYSIS
21	6736-37 6737-6741	<0.01		5.3	70.7	22.1	2.57	SHL BLK SHALE - NO ANALYSIS
22	6741-42 6742-6746	0.07		0.8	62.4	31.2	2.53	SHL BLK SHALE - NO ANALYSIS
23	6746-47 6747-6751	<0.01		0.7	81.3	12.5	2.53	SHL BLK SHALE - NO ANALYSIS
24	6751-52 6752-7340	0.01		0.6	65.8	31.0	2.56	SHL BLK DRILLED

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FORMATION : MUDDY "J"
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SAMP. NO.	DEPTH	PERM. TO AIR (MD) HORZ. VERTICAL	POR. FLD.	FLUID SATS. OIL WATER	GR. DNS.	DESCRIPTION
	7340-7348					SHALE - NO ANALYSIS
25	7348-49	0.28	8.4	8.6 29.5		SD GY MED SHLY
26	7349-50	0.57	12.7	0.0 49.3		SD GY MED SHLY
27	7350-51	0.44	8.2	8.4 14.5		SD LT GY MED
28	7351-52	0.17	10.1	6.7 11.4		SD LT GY MED
29	7352-53	7.6	10.0	4.7 9.4		SD LT GY MED
30	7353-54	12	10.8	0.0 8.7		SD LT GY MED
31	7354-55	15	11.8	5.6 22.6		SD LT GY MED
32	7355-56	10	14.5	5.8 23.1		SD LT GY MED
33	7356-57	7.3	11.7	0.0 36.0		SD LT GY MED
34	7357-58	8.3	17.7	0.0 34.6		SD LT GY MED
35	7358-59	2.5	13.5	0.0 43.1		SD LT GY MED
36	7359-60	0.28	11.6	0.0 51.1		SD LT GY MED
37	7360-61	1.9	10.1	0.0 28.6		SD LT GY MED
38	7361-62	6.5	20.6	0.0 46.4		SD LT GY MED
39	7362-63	13	13.5	0.0 51.8		SD LT GY MED
40	7363-64	2.3	14.1	0.0 48.9		SD LT GY MED
41	7364-65	73	16.3	0.0 50.7		SD LT GY FN
42	7365-66	4.9	12.3	0.0 38.6		SD LT GY MED
43	7366-67	0.69	10.9	0.0 46.8		SD LT GY MED
44	7367-68	5.3	13.5	0.0 53.6		SD LT GY MED
45	7368-69	3.9	14.9	0.0 36.5		SD LT GY MED
46	7369-70	3.3	13.0	0.0 43.6		SD LT GY FN
47	7370-71	1.7	15.5	0.0 46.8		SD LT GY FN
48	7371-72	1.2	14.3	0.0 39.8		SD LT GY FN

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49	7372-73	2.7		15.3	0.0	31.4		SD LT GY FN
50	7373-74	6.3		12.6	0.0	29.6		SD LT GY FN
51	7374-75	3.4		15.1	0.0	36.2		SD LT GY FN
52	7375-76	6.0		13.1	0.0	25.4		SD LT GY FN
53	7376-77	4.8		15.6	0.0	29.9		SD LT GY FN
54	7377-78	2.7		14.2	0.0	43.7		SD LT GY FN
55	7378-79	2.5		14.8	0.0	36.5		SD LT GY FN
56	7379-80	2.5		16.1	0.0	44.3		SD LT GY FN
57	7380-81	2.0		14.2	0.0	39.7		SD LT GY FN
58	7381-82	1.5		13.7	0.0	39.7		SD LT GY FN
59	7382-83	1.7		13.4	0.0	36.8		SD LT GY FN
60	7383-84	1.7		10.4	0.0	35.0		SD LT GY FN
61	7384-85	1.5		12.5	0.0	27.3		SD LT GY FN
62	7385-86	2.0		16.0	0.0	33.9		SD LT GY FN
63	7386-87	2.4		14.0	0.0	19.9		SD LT GY FN
64	7387-88	1.1		13.6	0.0	23.7		SD LT GY FN
65	7388-89	2.3		13.5	0.0	22.1		SD LT GY FN
66	7389-90	2.3		16.4	0.0	27.3		SD LT GY FN
67	7390-91	1.8		14.3	0.0	32.6		SD LT GY FN
68	7391-92	1.8		15.2	0.0	21.7		SD LT GY FN
69	7392-93	0.56		10.9	0.0	40.6		SD LT GY FN
70	7393-94	1.1		13.7	0.0	32.9		SD LT GY FN
71	7394-95	1.5		15.3	0.0	36.8		SD LT GY FN
72	7395-96	1.2		12.7	0.0	32.5		SD LT GY FN

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