CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

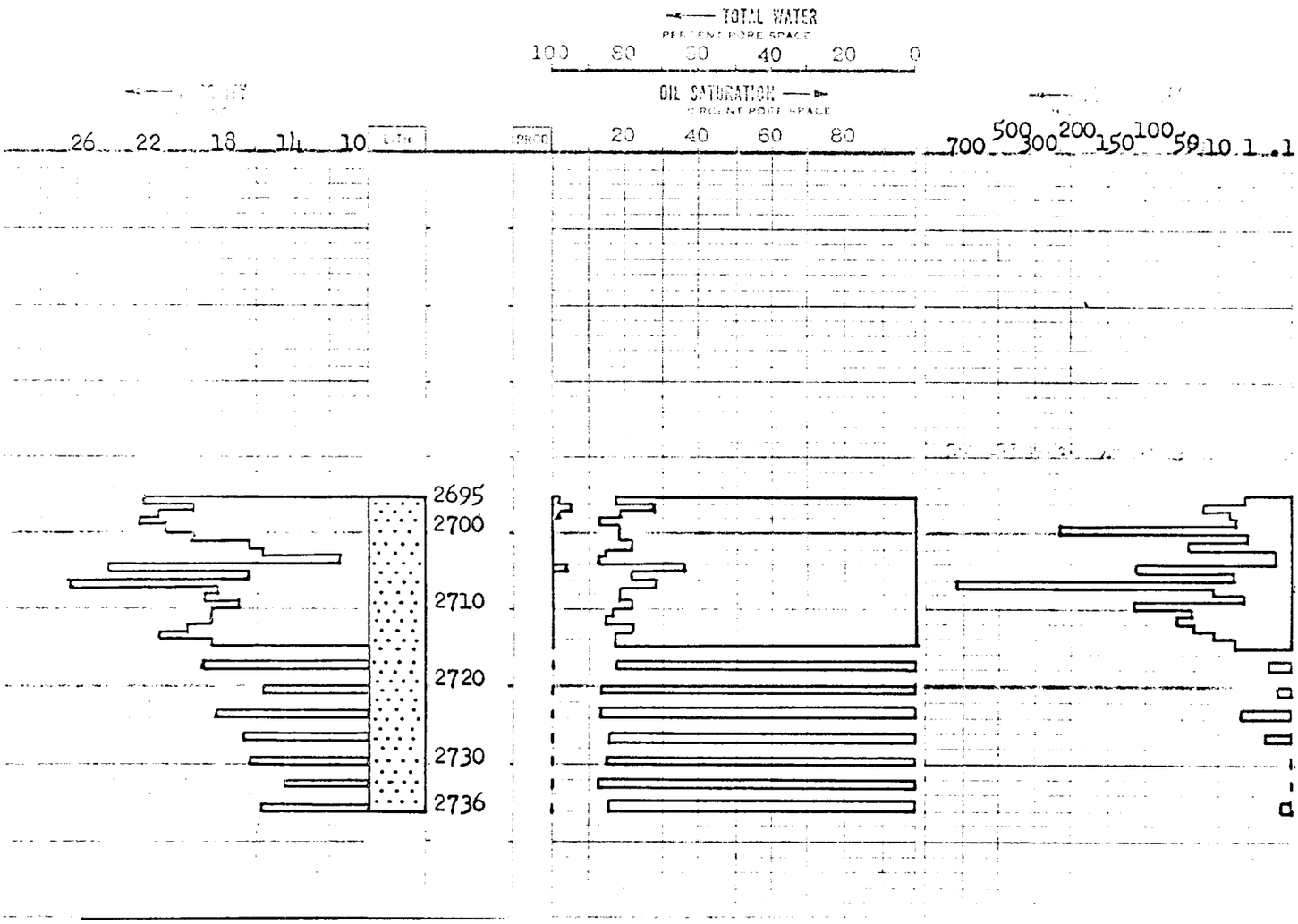
COMPANY	TESORO PETROLEUM CORPORATION	DATE ON	4-22-72
WELL	SANTA FE RAILROAD # 30	DATE OF	4-25-72
FIELD	HOSPAH	FORMATION	DAKOTA
COUNTY	McKINLEY STATE N. MEX.	DRLG. FLD.	CHEM GEL
LOCATION	SE SW SEC 5-T17N-R8W	REMARKS	CONVENTIONAL CORE ANALYSIS

FILE NO	RP-3-2549		
ELEV.	KOHL		
	6901 KB		
	DIA. CONV. 4"		

SAND LIMESTONE CONGLOMERATE CHERT

SHALE DOLOMITE

VERTICAL SCALE: 5" = 100'



(c) Calculated (e) Estimated (m) Measured (*) Refer to attached letter.

INTERPRETATION OF DATA

2695.0 - 2736.0 feet - Primarily water productive.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS RESULTS

Company TESORO PETROLEUM CORPORATION Formation DAKOTA File RP-3-2549
Well SANTA FE RAILROAD # 30 Core Type DIA. CONV. 4" Date Report 4-22-72
Field HOSPAH Drilling Fluid CHEM GEL Analysts MOHL
County McKINLEY State N. MEX. Elev. 6901 KB Location SE SW SEC 5 - T 17N - R 8W

Lithological Abbreviations

SAND-SD, SHALE-SH, LIME-LM, DOLOMITE-DOL, CHERT-CH, GYPSUM-GYP, ANHYDRITE-ANHY, CONGLOMERATE-CONG, FOSSILIFEROUS-FOSS, SANDY-SDY, SHALY-SHY, LIMY-LMY, FINE-FN, MEDIUM-MED, COARSE-CSE, CRYSTALLINE-XLN, GRAIN-GRN, GRANULAR-GRNL, BROWN-BRN, GRAY-GY, VUGGY-VGY, FRACTURED-FRAC, LAMINATION-LAM, STYLOLITIC-STY, SLIGHTLY-SL/, VERY-V/, WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE OIL	RESIDUAL SATURATION PER CENT PORE TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
1	2695-96	2.5	22.1	0.9	82.1	SS, GRY, VFN, CARB
2	2696-97	20	19.8	5.6	72.2	SS, GRY, VFN, CARB
3	2697-98	6.2	21.7	0.9	80.6	SS, GRY, VFN, CARB
4	2698-99	5.8	22.8	0.0	86.4	SS, GRY, VFN, CARB
5	2699-00	224. *	21.3	0.0	81.7	SS, GRY, VFN, CARB
6	2700-01	2.1	19.5	0.0	81.6	SS, GRY, VFN, CARB
7	2701-02	49.	16.4	0.0	79.8	SS, GRY, VFN, CARB
8	2702-03	0.41	15.7	0.0	85.9	SS, GRY, VFN, CARB
9	2703-04	0.41	11.8	0.0	86.4	SS, GRY, FN-MED, CARB, SL CALC
10	2704-05	115	24.2	4.5	63.6	SS, GRY, VFN
11	2705-06	5.7	16.7	0.0	79.0	SS, GRY, VFN
12	2706-07	711	26.4	0.0	70.5	SS, GRY, FN
13	2707-08	11	18.3	0.0	80.3	SS, GRY, VFN, CARB
14	2708-09	2.9	19.0	0.0	80.5	SS, GRY, VFN, CARB
15	2709-10	115	17.0	0.0	78.2	SS, GRY, VFN
16	2710-11	37	18.5	0.0	82.1	SS, GRY, VFN, CARB
17	2711-12	54	18.4	0.0	84.1	SS, GRY, VFN
18	2712-13	37	20.0	0.0	78.0	SS, GRY, VFN
19	2713-14	17	21.7	0.0	82.6	SS, GRY, VFN, CARB
20	2714-15	5.7	18.7	0.0	82.9	SS, GRY, VFN, CARB
21	2717-18	0.39	19.1	0.0	81.7	SS, GRY, VFN, CARB
22	2720-21	0.29	15.8	0.0	86.0	SS, GRY, VFN, CARB
23	2723-24	2.1	18.3	0.0	86.1	SS, GRY, VFN, CARB
24	2726-27	0.41	16.7	0.0	83.9	SS, GRY, VFN, CARB
25	2729-30	0.10	16.3	0.0	85.8	SS, GRY, VFN, CARB
26	2732-33	0.10	14.5	0.0	87.6	SS, GRY, VFN, CARB
27	2735-36	0.14	15.7	0.0	84.0	SS, GRY, VFN, CARB

* DENOTES FRACTURE PERMEABILITY