Schlumberger

COMPUTER PROCESSED LOG

A Synergetic Log System

CASED HOLE RESERVOIR ANALYSIS*

The following logs were used: MONITOR TDT/GR,BASE CRA

COMPANY REICHHOLD ENERGY CORPORATION
WELL COLUMBIA COUNTY #10
FIELD MIST NEHALEM BASIN
COUNTY/PROV. COLUMBIA STATE/COUNTRY OREGON
LOCATION SEC: 3 TWP:6N RGE:5W
DATE LOGGED OH ___ CH 6-10-82
DATE COMPUTED OH ___ CH 6-27-82
ELEVATION KB 1099.7 DF 1089.2 GL ___ API NO. ___

The well name location and borehole reference data were furnished by the customer.

BORE-HOLE RECORD			CASING & TUBING RECORD			
BIT	FROM	TO	SIZE	WGT.	FROM	TO
6-1/4	437	2983	2-3/8	4.7	SURFACE	2836
			4.5	10.5	SURFACE	2900

Field Report: ___ Engineer: MOFFETT Truck No: 5774 District: 4405 Computing Center Job No: 62614
Office Recording Computer Center: PCCC Program No: 8,N14 Analyst: JOHNSTON
Log depths of these records relate to Open hole; Resistivity [X] or Cased hole: TDT [ ] or [ ]

COMPUTATION PARAMETERS

Depth Interval From	To	Σwf	Σwb	Σma	Σhy Min. Max.	ρhy	Rw	Rwf	Rmf	Rwb	@ °F	GR MIN. MAX.	ΣLOG MIN. MAX.	NEUT MIN. MAX.	PHI MIN. MAX.
2650	1000	60	52	10	0/10								19/30		0/40

Note: Total Porosity Determined From: SIGMA-RATIO
REMARKS: Well was ___ Shut In ___ Flowing During Log

BASE RESERVOIR ANALYSIS

FORMATION CHARACTERISTICS	DEPTHS	BASE LOG CHARACTERISTICS		POROSITY AND FLUIDS ANALYSIS BY VOLUME	FORMATION ANALYSIS
GAMMA RAY API UNITS 0 — 150; SPONTANEOUS POTENTIAL MILLIVOLTS 10 − +		GAS INDEX; 50 PHI 0; 50 PHI$_k$ 0	WATER SATURATION %; 100 OPEN HOLE 0; 100 CASED HOLE 0	HYDROCARBON WATER; %; 50 PHI 0	SHALE MATRIX; VSH %; 0 — 100

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AREA VSH  Z4   WATR
AREA VSH  SW1  SAND
AREA DUM  VSH  SHA1
AREA BVW  DUM  WATR
AREA BVWC BVW  MOIL
AREA PHI2 BVWC COAL
AREA PHI1 TPE  GAS
H
CURVE YES SW1  SW    -100.0000      0.0000000E+00  5.750  8.250 LIN SOLID
H
CURVE YES VSH  VSH   -100.0000      100.0000       5.750  8.250 LIN SOLID
L
CURVE YES DUM  PHIE  -4000.000      4000.000       5.750  8.250 LIN SOLID
H
CURVE YES PHI2 PHIE   50.00000     -50.00000       5.750  8.250 LIN SOLID
H
CURVE YES BVWC BVWC   50.00000     -50.00000       5.750  8.250 LIN DASHED
H
CURVE YES BVW  BVW    50.00000     -50.00000       5.750  8.250 LIN SOLID
H
CURVE YES TPE  TPE    50.00000     -50.00000       3.250  5.750 LIN DASHED
H
CURVE YES SWC  SWC    200.0000      0.0000000E+00  3.250  5.750 LIN DASHED
H
CURVE YES SW   SW     200.0000      0.0000000E+00  3.250  5.750 LIN SOLID
H
CURVE YES PHI1 PHIE   50.00000     -50.00000       3.250  5.750 LIN SOLID
H
CURVE YES SP   SP    -140.0000      10.00000       0.000  2.500 LIN DASHED
H
CURVE YES GR   GR     0.0000000E+00 150.0000       0.000  2.500 LIN SOLID
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* A MARK OF SCHLUMBERGER