

ELECTRIC LOG ANALYSIS REPORT

by

Robert F. Harrison
4710 University Way N.E.
Seattle, Washington 98105

ELZA M. SANDERS


Operator: Northwestern Oil Company Well Name: Morrow No. 1 Date 10-13-74
Location: NE SW Sec 18-12S-15E County: Jefferson State: Oregon Elev. N.R.

DEPTH INTERVAL	POROSITY ESTIMATE %	FORMATION WTR. SATURATION ESTIMATE %	REMARKS
2419-22' (3')	Indet.	Indet.	Sand, no mud cake, indeterminant porosity and water saturation.
2430-39' (7')	Indet.	Indet.	As above.
2442-46' (4')	Indet.	Indet.	As above.
2455-61' (6')	Indet.	Indet.	As above.
2479-81' (2')	Indet.	Indet.	As above.
2542-46' (4')	Indet.	Indet.	Probably sub-bituminous coal.
2642-55' (12)	14-18%	Indet.	Sand, too thin and broken to estimate water saturations.
2971-73' (2')	Tight	100%	Sand, too tight for production.
2981-83' (2')	Tight	100%	As above.
2984-89' (3')	Tight	100%	As above.
3181-87' (6')	20-21%	Indet.	Sand, too thin and broken to estimate water saturations.
3189-91' (2')	11.5%	Indet.	As above.

TESTS: None reported.

LITHOLOGY: Mesozoic Shale and Sands.
Rm = 1.5 @ 95 deg. BHT
Rwe = 0.85 @ 86 deg. (SP)

LOG ANALYSIS: Drilling fluid properties as reported on the Schlumberger log heading and the Electric log characteristics indicate that the No. 1 Morrow was drilled with a very inadequate mud program. The Micrologs ability to measure porosity is based on the presence of a mud cake buildup. This bore hole at the time of logging has no mud cake build up from 2419'-2546' and a very thin mud cake build up from 2546'-3316'. The above reported zones of interest are interpreted to be sands even though there is no mention on sands in the geological report of the No. 1 Morrow. It is our opinion that these sands are very friable and possibly even unconsolidated and were so dispersed in the very poor drilling fluid system that they were screened out by the sample catcher

BY: 
Elza M. Sanders

cc: Dr. W. P. Reding