

OILFIELD RESEARCH LABORATORIES

RESULTS OF POLYMER FEASIBILITY TESTS

Completed March 1, 1990

COMPANY James E. Russell Petroleum, Inc.

OIL Lease crude

LEASE Nelson (Lowe) RW-8

SAND _____

WATER Synthetic 6,300 mg/l NaCl

320 mg/l Ca++

24 mg/l Mg++

DEPTH, FEET	TEST CONDITIONS				POROSITY PERCENT	PERMEABILITY, md			MOBILITY RATIO	POLYMER DATA					ADSORP. LB. /A.FT.
	Plug Length cm	Water cp	Oil cp	Temp. °F.		Air	Korw	Kwro		Conc. ppm	Res. Fac.		Viscosities		
											FR	FRR	S.F.	Brook	
645.0	2.50	Syn- thetic	19cp	Room	20.3	52.	30.	9.5	9.2	250	5.0	1.9	8.7	1.95	173.
										500	7.4	2.0	12.7	2.95	
										750	8.4	1.9	15.8	3.7	
										1000*	9.4	2.0	19.9	5.3	
683.6	2.50	Syn- thetic	19cp	Room	23.3	123.	87.	56.	5.0	250	5.3	2.2	8.7	1.95	257.
										500	7.8	2.0	12.7	2.95	
										750	8.8	2.0	15.8	3.7	
										1000*	10.6	2.0	19.9	5.3	

*Note: A second batch of polymer was necessary to finish tests. The 1000 ppm is made from this second batch.