

Schlumberger In-House DST Interpretation Prepared For

COBRA OIL & GAS CORPORATION*Unit m 3-10-36 675/S & 114/W*

WELL: LEWIS UNIT #1
FIELD: S. CROSSROADS
COUNTY: LEA, NM
TEST NUMBER: TWO
TEST DATE: JUN. 9, 1996

FORMATION: DEVONIAN
TEST TYPE: CONVENTIONAL
TEST INTERVAL: 12,155 - 12,269
SWS S.O. NUMBER: 139655
REPORT PREPARED BY: HARVIN L. BROUGHTON

SUMMARY OF RESULTS

K = 56.2	md	BHT = 185	degf
SKIN = 381		INITIAL HYDROSTATIC	6146
RADIUS OF INV = 1510	ft	IFP (15 min)	655 - 751
Pi = 4484	psia	ISI (45min)	4463
THICKNESS (h) = 10	ft	FFP (180 min)	762 - 1107
RESERVOIR Homogeneous		FSI (300 min)	4479
BOUNDARY Infinite		FINAL HYDROSTATIC	6066
WELL Storage & Skin		CUSHION	1500' FRESH WATER

SAMPLE CHAMBER, PRESSURE = 280 GOR = 40 GLR = 16

VOLUME	FLUID TYPE	PROPERTIES
0.244 cu ft	GAS	
900 cc	OIL	41.7 API@60degf
1300 cc	MUD	.177@60, 45,000 ppm

PIPE RECOVERY

VOLUME	FLUID TYPE	PROPERTIES
270 ft	GAS	
475 ft	OIL	41.7 API@60degf
1071 ft	WATER CUSHION	
1166	OIL & GAS CUT MUD	.177@60, 45,000 ppm

COMMENTS: The data from DST #2 best fit the model of a well in a infinite, homogeneous reservoir with fair permeability and high skin at the time and conditions of the test. Some of the high skin could be due to partial penetration of the productive interval. The dip in the late time on the derrivative could be indicative of a two porosity system, possibly fractures, but the limited data made it unable to be correctly modeled. Assuming an area of 80 acres, Pi of 4484, h= 10 ft., and mathematically making SKIN = 0, the AOF calculated to be 5173 BOPD.