



PETROLEUM RESEARCH CORPORATION
P.O. Box 8377
Denver, Colorado

34-30s-42w

Drill-Stem-Test Pressure Analysis Report

LOCATION: 30 T32S-R42W 34 CNW	TIME OPEN: 127 MINUTES	FILE NUMBER: 0943-09-01
COUNTY AND STATE: KANSAS, STANTON	INITIAL SHUT-IN TIME: ☐	I. D. NUMBER: H 98501
COMPANY: J.M. HUBER CORPORATION	FINAL SHUT-IN TIME: 30 MINUTES	DATE COMPUTED: 12/28/59
LEASE AND WELL NUMBER: SPARKS 1	TEST NUMBER: 5	DATE TESTED: 6/29/54
FORMATION TESTED: MORROW	INTERVAL TESTED: 5211-5273	ELEVATION: RB 3492

RECOVERY:
375 FT HEAVILY GAS- AND DISTILLATE-CUT MUD - GAS TO SURFACE IN
3 AND 1/2 MINUTES
REVISED 0938-03-01

HOLE, TOOL AND RECOVERY DATA

DRILL-PIPE CAPACITY (Barrels per foot)	0.01422	FEET OF MUD	375	MUD PERCENTAGE %	0.0
DRILL-COLLAR CAPACITY (Barrels per foot)	0.0073	FEET OF WATER		WATER PERCENTAGE %	0.0
DRILL-COLLAR FOOTAGE (Feet)	375	FEET OF OTHER		OTHER PERCENTAGE %	0.0
HOLE DIAMETER (Inches)	7.875	FEET OF OIL		OIL PERCENTAGE %	0.0
PIPE FOOTAGE EQUIVALENT TO ANNULUS (Feet)	512	FEET OF CUSHION		FORMATION RECOVERY PERCENTAGE %	0.0
INTERVAL THICKNESS (Feet)	62	TOTAL RECOVERY (Feet)	375	AVERAGE PRODUCTION RATE (Barrels per day)	31.03
MUD WEIGHT (Pounds per gallon)	9.3	CAPACITY OF ANNULUS (Barrels)	3.7		
EFFECTIVE FLOWING TIME (Minutes)	127	GROSS RECOVERY VOLUME (Barrels)	2.73		

RECOVERY LESS THAN ANNULAR VOLUME, (X)

X

RECORDER NUMBER
BT-238

FILE NUMBER
0943090110

GAUGE SUMMARY

RECORDER NUMBER
☐

FILE NUMBER

1st GAUGE	2nd GAUGE	1st GAUGE	2nd GAUGE	1st GAUGE	2nd GAUGE
INITIAL (t+θ)/θ CALCULATED FROM REPORTED DATA: ☐		FINAL (t+θ)/θ CALCULATED FROM REPORTED DATA: 5.23		GAUGE DEPTH: 5213	feet
INITIAL (t+θ)/θ CALCULATED FROM MEASURED DATA: ☐		FINAL (t+θ)/θ CALCULATED FROM MEASURED DATA: 5.13		GAUGE DATUM: - 1721	feet
KEY POINT SUMMARY		NON-LINEARITY INDEX: - 1.8	x 10 ⁻⁶	RMS DEVIATION, σ	psig
INITIAL FLOWING PRESSURE: 415	psig	NUMBER OF CALIBRATION POINTS: 9		COEFFICIENT OF VARIATION, 100 σ / $\bar{p}$	%
FINAL FLOWING PRESSURE: 850	psig	FLOWING PRESSURE DIFFERENCE: 435	psig	FLOWING PRESSURE COMPARISON:	%
INITIAL HYDROSTATIC MUD PRESSURE: 2542	psig	MUD PRESSURE DIFFERENCE: 46	psig	INITIAL MUD PRESSURE COMPARISON:	%
FINAL HYDROSTATIC MUD PRESSURE: 2496	psig			FINAL MUD PRESSURE COMPARISON:	%

EXTRAPOLATION SUMMARY

INITIAL SHUT-IN PRESSURE: ☐	psig	INITIAL EXTRAPOLATION CONFIDENCE LIMIT: ☐	psig	SLOPE OF INITIAL BUILD-UP CURVE: ☐	psi/cycle
NUMBER OF POINTS USED FOR INITIAL CURVE-FIT: ☐		INITIAL EXTRAPOLATION C.L. IN FEET OF WATER: feet ☐		INITIAL EXTRAPOLATED PRESSURE: ☐	psig
FINAL SHUT-IN PRESSURE: 1288	psig	FINAL EXTRAPOLATION CONFIDENCE LIMIT: ☐	psig	SLOPE OF FINAL BUILD-UP CURVE: ☐	psi/cycle
NUMBER OF POINTS USED FOR FINAL CURVE-FIT: 3		FINAL EXTRAPOLATION C.L. IN FEET OF WATER: feet ☐		FINAL EXTRAPOLATED PRESSURE: ☐	psig

SUMMARY OF RESULTS

PRODUCTIVITY INDEX: 0.07	Barrels per day per psi	DAMAGE RATIO: ☐		INITIAL POTENTIOMETRIC SURFACE: ☐	feet
EFFECTIVE TRANSMISSIBILITY, $k_{h\mu}$: ☐	md ft per cp	INDICATED AVERAGE PERMEABILITY, k_{μ} : ☐	md/cp	FINAL POTENTIOMETRIC SURFACE: ☐	feet

☐ ABSENT OR DOES NOT APPLY.

FILE	T	P	PSIG
943090111 I X		35.0	419.0
F XX	168.7	71.2	853.2
FSI	181.0	107.0	14.71 1282.5
FSI	194.0	107.0	7.66 1282.5
FSI	210.0	107.0	5.08 1282.5

FILE	T	P	PSIG
943090112 I X		35.0	419.8
F XX	168.0	71.0	850.3
FSI	179.0	107.0	16.27 1280.1
FSI	193.5	107.0	7.58 1280.1
FSI	208.7	107.0	5.12 1280.1



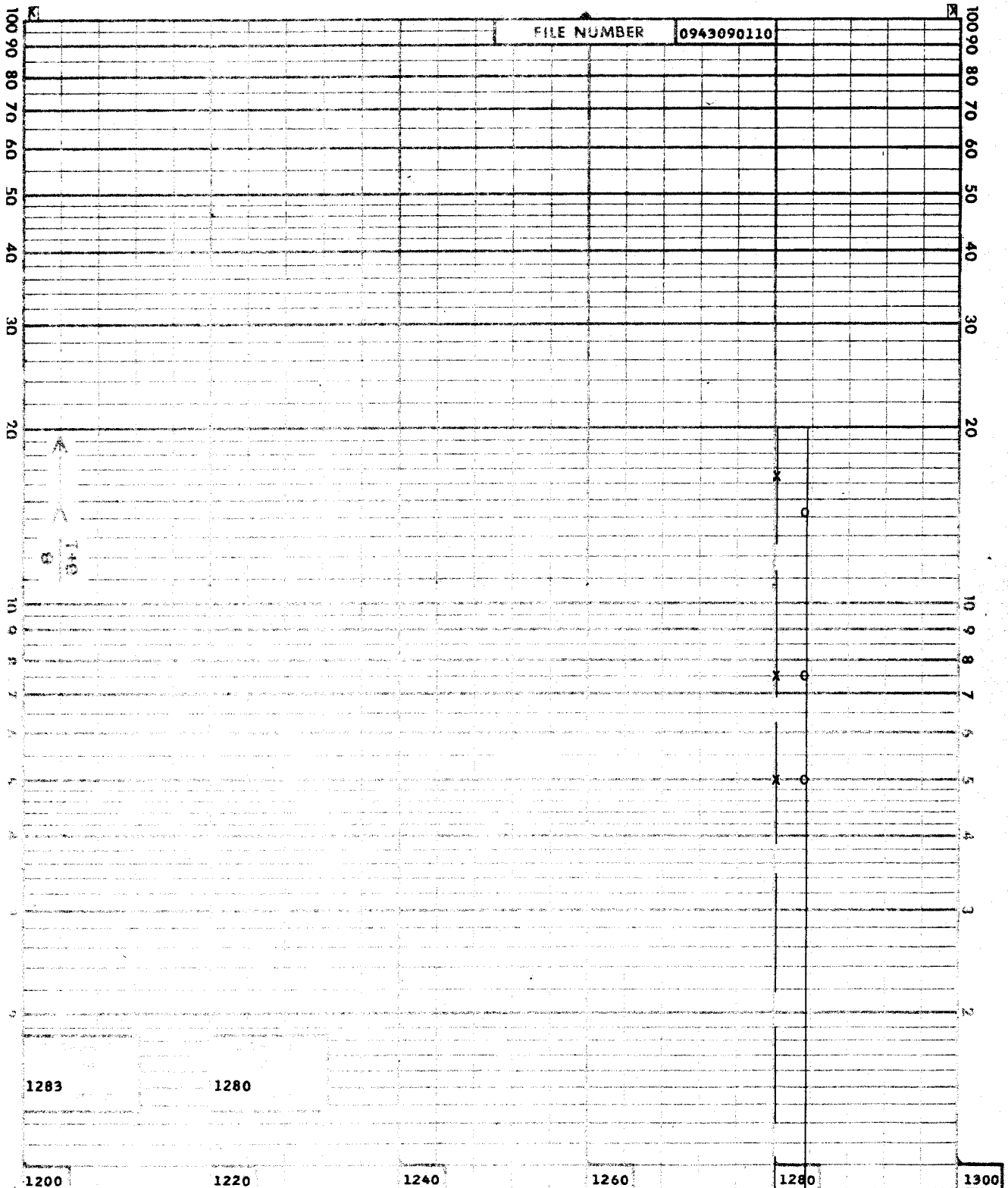
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DRILL-STEM-TEST PRESSURE ANALYSIS

PRESSURE VS. LOG (TOTAL TIME / SHUT-IN TIME)



PRESSURE, PSIG

• FIRST READING
• SECOND READING
• SERVICE COMPANY DATA