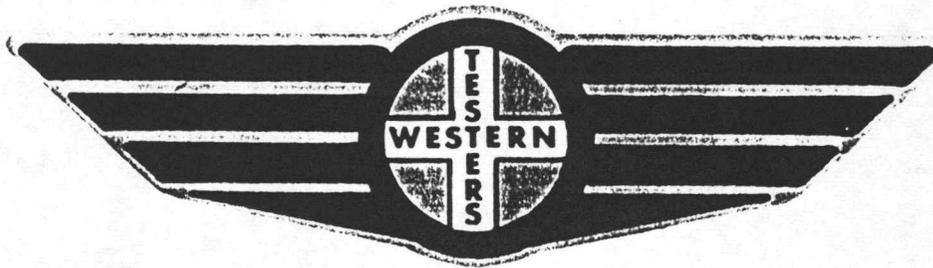


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO., INC.
SUBSURFACE PRESSURE SURVEY

DATE : 7-20-88 TICKET : 13977
CUSTOMER : WILLIAM H. DAVIS LEASE : MORGAN
WELL : #3-1 TEST: 1 GEOLOGIST : P BARKER
ELEVATION : 1325 KB FORMATION : STALNAKER
SECTION : 3 TOWNSHIP : 33S
RANGE : 5W COUNTY : HARPER STATE : KANSAS
GAUGE SN# : 13552 RANGE : 4050 CLOCK : 12

INTERVAL FROM : 3387 TO : 3400 TOTAL DEPTH : 3400
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 3382 SIZE : 6.63
PACKER DEPTH : 3387 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : DUKE RIG 2
MUD TYPE : CHEMICAL VISCOSITY : 51
WEIGHT : 9.2 WATER LOSS (CC) : 8.4
CHLORIDES (PPM) : 4000
JARS-MAKE : WTC SERIAL NUMBER : 407
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 3358 FT I.D. inch : 3.80
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 13 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5 FH

BLOW COMMENT #1 : STRONG BLOW THROUGHOUT BOTH INITIAL & FINAL FLOWS.
BLOW COMMENT #2 :
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 420 FT OF: DRILLING MUD
RECOVERED : 240 FT OF: GAS CUT MUDDY WATER
RECOVERED : 840 FT OF: GASSY SALT WATER

CHLORIDES: 52000 PPM

Total Barrels Fluid = 21.04
Total Fluid Prod Rate = 336.63 BFPD
Indicated Wtr Rate = 224.42 BHPD

REMARK 1 : INITIAL FLOW PLUGGED-OFF
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 9:25 PM
WELL TEMPERATURE : 126
INITIAL HYDROSTATIC PRESSURE (A) 1701
INITIAL FLOW PERIOD MIN: 30 (B) 0 PSI TO (C) : 154
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1600
FINAL FLOW PERIOD MIN: 60 (E) 562 PSI TO (F) : 781
FINAL CLOSED IN PERIOD MIN: 117 (G) 1442
FINAL HYDROSTATIC PRESSURE (H) 1651
TIME STARTED OFF BOTTOM : 1:40 AM

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : WILLIAM H. DAVIS
RIG : HARPER-KANSAS
FIELD : MORGAN
WELL : #3-1
DATE : 7-20-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

INITIAL FLOW PLUGGED-OFF

COMPANY : WILLIAM H. DAVIS
 WELL : #3-1
 GAUGE # : 13552
 DATE : 20/ 7/88

FIELD : MORGAN
 JOB # : 13977
 DEPTH : 3400
 TEST : INITIAL FLOW PLUGGED-OFF

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	9:55: 0	0.500	154.000	126.00	0.000
INITIAL SHUT-IN					
2	9:58: 0	0.550	154.000	126.00	0.000
3	10: 1: 0	0.600	1545.000	126.00	1391.000
4	10: 4: 0	0.650	1567.000	126.00	22.000
5	10: 7: 0	0.700	1577.000	126.00	10.000
6	10:10: 0	0.750	1585.000	126.00	8.000
7	10:13: 0	0.800	1588.000	126.00	3.000
8	10:16: 0	0.850	1591.000	126.00	3.000
9	10:19: 0	0.900	1593.000	126.00	2.000
10	10:22: 0	0.950	1595.000	126.00	2.000
11	10:25: 0	1.000	1597.000	126.00	2.000
12	10:28: 0	1.050	1598.000	126.00	1.000
13	10:31: 0	1.100	1599.000	126.00	1.000
14	10:34: 0	1.150	1599.000	126.00	0.000
15	10:37: 0	1.200	1600.000	126.00	1.000
16	10:40: 0	1.250	1600.000	126.00	0.000
17	10:43: 0	1.300	1600.000	126.00	0.000
18	10:46: 0	1.350	1600.000	126.00	0.000
19	10:49: 0	1.400	1600.000	126.00	0.000
20	10:52: 0	1.450	1600.000	126.00	0.000
21	10:55: 0	1.500	1600.000	126.00	0.000
FINAL FLOW					
22	10:56: 0	1.517	562.000	126.00	-1038.000
23	10:59:59	1.583	562.000	126.00	0.000
24	11: 5: 0	1.667	564.000	126.00	2.000
25	11:10: 0	1.750	586.000	126.00	22.000
26	11:14:59	1.833	621.000	126.00	35.000
27	11:20: 0	1.917	649.000	126.00	28.000
28	11:25: 0	2.000	670.000	126.00	21.000
29	11:29:59	2.083	692.000	126.00	22.000
30	11:35: 0	2.167	716.000	126.00	24.000
31	11:40: 0	2.250	732.000	126.00	16.000
32	11:44:59	2.333	748.000	126.00	16.000
33	11:50: 0	2.417	770.000	126.00	22.000
34	11:55: 0	2.500	781.000	126.00	11.000
FINAL SHUT-IN					
35	11:58: 0	2.550	1060.000	126.00	279.000
36	12: 1: 0	2.600	1133.000	126.00	73.000
37	12: 4: 0	2.650	1184.000	126.00	51.000
38	12: 7: 0	2.700	1226.000	126.00	42.000
39	12:10: 0	2.750	1251.000	126.00	25.000
40	12:13: 0	2.800	1269.000	126.00	18.000
41	12:16: 0	2.850	1290.000	126.00	21.000
42	12:19: 0	2.900	1307.000	126.00	17.000
43	12:22: 0	2.950	1319.000	126.00	12.000
44	12:25: 0	3.000	1331.000	126.00	12.000
45	12:28: 0	3.050	1343.000	126.00	12.000
46	12:31: 0	3.100	1354.000	126.00	11.000
47	12:34: 0	3.150	1361.000	126.00	7.000
48	12:37: 0	3.200	1368.000	126.00	7.000
49	12:40: 0	3.250	1374.000	126.00	6.000

COMPANY : WILLIAM H. DAVIS
WELL : #3-1
GAUGE # : 13552
DATE : 20/ 7/88

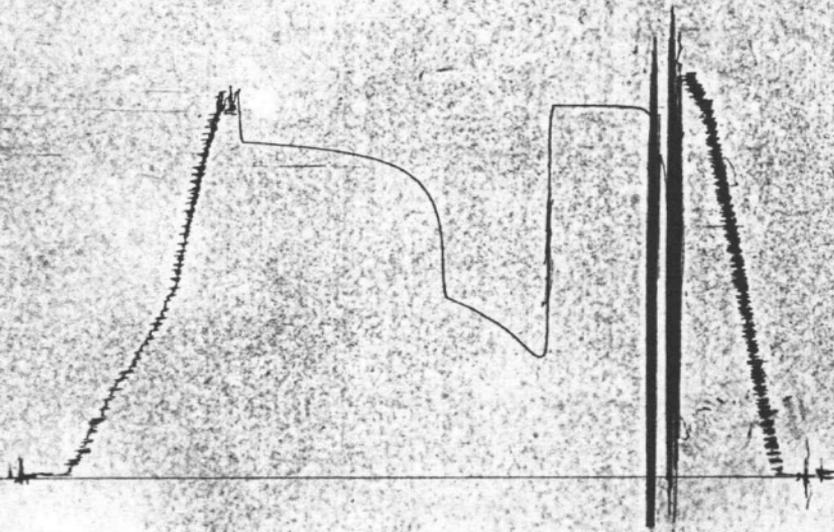
FIELD : MORGAN
JOB # : 13977
DEPTH : 3400
TEST : INITIAL FLOW PLUGGED-OFF

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
50	12:43: 0	3.300	1380.000	126.00	6.000
51	12:46: 0	3.350	1386.000	126.00	6.000
52	12:49: 0	3.400	1392.000	126.00	6.000
53	12:52: 0	3.450	1396.000	126.00	4.000
54	12:55: 0	3.500	1400.000	126.00	4.000
55	12:58: 0	3.550	1404.000	126.00	4.000
56	13: 1: 0	3.600	1408.000	126.00	4.000
57	13: 4: 0	3.650	1411.000	126.00	3.000
58	13: 7: 0	3.700	1413.000	126.00	2.000
59	13:10: 0	3.750	1315.000	126.00	-98.000
60	13:13: 0	3.800	1418.000	126.00	103.000
61	13:16: 0	3.850	1421.000	126.00	3.000
62	13:19: 0	3.900	1424.000	126.00	3.000
63	13:22: 0	3.950	1427.000	126.00	3.000
64	13:25: 0	4.000	1430.000	126.00	3.000
65	13:28: 0	4.050	1432.000	126.00	2.000
66	13:31: 0	4.100	1434.000	126.00	2.000
67	13:34: 0	4.150	1436.000	126.00	2.000
68	13:37: 0	4.200	1437.000	126.00	1.000
69	13:40: 0	4.250	1438.000	126.00	1.000
70	13:43: 0	4.300	1439.000	126.00	1.000
71	13:46: 0	4.350	1440.000	126.00	1.000
72	13:49: 0	4.400	1441.000	126.00	1.000
73	13:52: 0	4.450	1442.000	126.00	1.000

WESTERN TESTING CO. INC.

JK # 13977

0



Sta # 13977

