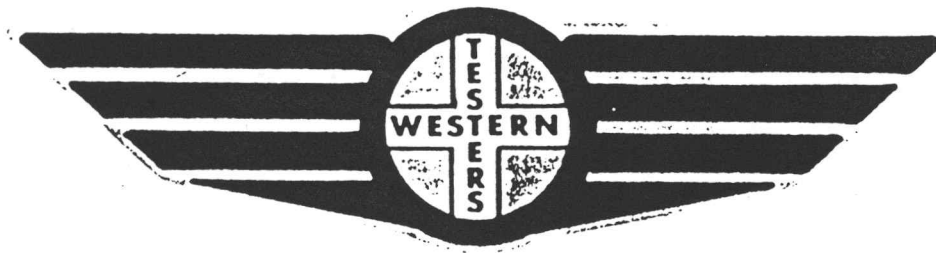


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY MURFIN DRILLING COMPANY LEASE & WELL NO. MACLEAN #7 SEC. 3 TWP. 27S RGE. 6FEST NO. 1 DATE 8-28-87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 8/28/87 TICKET : 12776
CUSTOMER : MURFIN DRILLING COMPANY LEASE : MACLEAN
WELL : 7 TEST: 1 GEOLOGIST : LANDES
ELEVATION : 1415 KB FORMATION : KANSAS CITY
SECTION : 3 TOWNSHIP : 27S
RANGE : 6E COUNTY : BUTLER STATE : KANSAS
GAUGE SN# : 3659 RANGE : 4000 CLOCK : 12

INTERVAL FROM : 2211 TO : 2241 TOTAL DEPTH : 2241
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 2206 SIZE : 6.63
PACKER DEPTH : 2211 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : EDCO DRILLING RIG 6
MUD TYPE : CHEMICAL VISCOSITY : 42
WEIGHT : 9.4 WATER LOSS (CC) : 14.6
CHLORIDES (PPM) : 2000
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : REVERSED OUT ? :

DRILL COLLAR LENGTH : 327 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 1863 FT I.D. inch : 3.80
TEST TOOL LENGTH : 21 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 30 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5XH

BLOW COMMENT #1 : INITIAL FLOW PERIOD WEAK BLOW BUILDING TO
BLOW COMMENT #2 : A STRONG BLOW.
BLOW COMMENT #3 : FINAL FLOW PERIOD WEAK BLOW BUILDING TO A
BLOW COMMENT #4 : FAIR BLOW.

RECOVERED : 15 FT OF: MUD
RECOVERED : 240 FT OF: MUDDY WATER

Total Barrels Fluid = 1.25
Total Fluid Prod Rate = 30.09 BFPD
Indicated Wtr Rate = 14.28 BWPD

REMARK 1 :
REMARK 2 : CHLORIDES 41000 PPM
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 6:50 PM
WELL TEMPERATURE : 96
INITIAL HYDROSTATIC PRESSURE (A) 1132
INITIAL FLOW PERIOD MIN: 30 (B) 61 PSI TO (C) : 86
INITIAL CLOSED IN PERIOD MIN: 60 (D) 814
FINAL FLOW PERIOD MIN: 30 (E) 130 PSI TO (F) : 146
FINAL CLOSED IN PERIOD MIN: 90 (G) 813
FINAL HYDROSTATIC PRESSURE (H) 1097
TIME STARTED OFF BOTTOM : 10:20 PM

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : MURFIN DRILLING COMPANY
RIG : BUTLER-KANSAS
FIELD : MACLEAN
WELL : 7
DATE : 8/28/87
GAUGE NO : 3659

OPERATIONAL COMMENTS

CHLORIDES 41000 PPM

COMPANY : MURFIN DRILLING COMPANY
 WELL : 7
 GAUGE # : 3659
 DATE : 28/ 8/87

FIELD : MACLEAN
 JOB # : 12776
 DEPTH : 2241
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	6:50:00	0.000	61.000	96.00	0.000
2	6:54:59	0.083	61.000	96.00	0.000
3	7:00:00	0.167	62.000	96.00	1.000
4	7:05:00	0.250	65.000	96.00	3.000
5	7:09:59	0.333	71.000	96.00	6.000
6	7:15:00	0.417	77.000	96.00	6.000
7	7:20:00	0.500	86.000	96.00	9.000
8	7:23:00	0.550	617.000	96.00	531.000
9	7:26:00	0.600	679.000	96.00	62.000
10	7:29:00	0.650	709.000	96.00	30.000
11	7:32:00	0.700	731.000	96.00	22.000
12	7:35:00	0.750	749.000	96.00	18.000
13	7:38:00	0.800	758.000	96.00	9.000
14	7:41:00	0.850	766.000	96.00	8.000
15	7:44:00	0.900	775.000	96.00	9.000
16	7:47:00	0.950	782.000	96.00	7.000
17	7:50:00	1.000	788.000	96.00	6.000
18	7:53:00	1.050	792.000	96.00	4.000
19	7:56:00	1.100	796.000	96.00	4.000
20	7:59:00	1.150	800.000	96.00	4.000
21	8:02:00	1.200	803.000	96.00	3.000
22	8:05:00	1.250	806.000	96.00	3.000
23	8:08:00	1.300	808.000	96.00	2.000
24	8:11:00	1.350	810.000	96.00	2.000
25	8:14:00	1.400	812.000	96.00	2.000
26	8:17:00	1.450	813.000	96.00	1.000
27	8:20:00	1.500	814.000	96.00	1.000
28	8:21:00	1.517	130.000	96.00	-684.000
29	8:24:59	1.583	130.000	96.00	0.000
30	8:30:00	1.667	130.000	96.00	0.000
31	8:35:00	1.750	132.000	96.00	2.000
32	8:39:59	1.833	136.000	96.00	4.000
33	8:45:00	1.917	141.000	96.00	5.000
34	8:50:00	2.000	146.000	96.00	5.000
35	8:53:00	2.050	623.000	96.00	477.000
36	8:56:00	2.100	681.000	96.00	58.000
37	8:59:00	2.150	709.000	96.00	28.000
38	9:02:00	2.200	729.000	96.00	20.000
39	9:05:00	2.250	743.000	96.00	14.000
40	9:08:00	2.300	752.000	96.00	9.000
41	9:11:00	2.350	760.000	95.00	8.000
42	9:14:00	2.400	768.000	96.00	8.000
43	9:17:00	2.450	774.000	96.00	6.000
44	9:20:00	2.500	778.000	96.00	4.000
45	9:23:00	2.550	782.000	96.00	4.000
46	9:26:00	2.600	786.000	96.00	4.000
47	9:29:00	2.650	790.000	96.00	4.000
48	9:32:00	2.700	793.000	96.00	3.000
49	9:35:00	2.750	795.000	96.00	2.000
50	9:38:00	2.800	797.000	96.00	2.000
51	9:41:00	2.850	799.000	96.00	2.000
52	9:44:00	2.900	801.000	96.00	2.000

COMPANY : MURFIN DRILLING COMPANY
WELL : 7
GAUGE # : 3659
DATE : 28/ 8/87

FIELD : MACLEAN
JOB # : 12776
DEPTH : 2241
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	9:47: 0	2.950	803.000	96.00	2.000
54	9:50: 0	3.000	805.000	96.00	2.000
55	9:53: 0	3.050	807.000	96.00	2.000
56	9:56: 0	3.100	808.000	96.00	1.000
57	9:59: 0	3.150	809.000	96.00	1.000
58	10: 2: 0	3.200	810.000	96.00	1.000
59	10: 5: 0	3.250	811.000	96.00	1.000
60	10: 8: 0	3.300	812.000	96.00	1.000
61	10:11: 0	3.350	813.000	96.00	1.000
62	10:14: 0	3.400	813.000	96.00	0.000
63	10:17: 0	3.450	813.000	96.00	0.000
64	10:20: 0	3.500	813.000	96.00	0.000

WESTERN TESTING CO. INC.

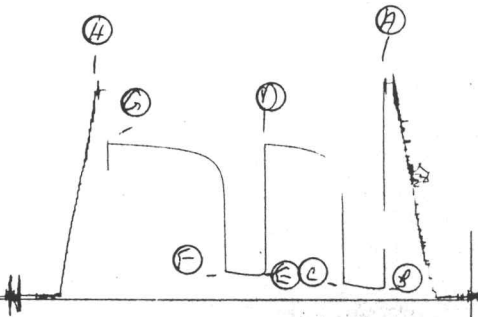
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DST#1



KA-12776

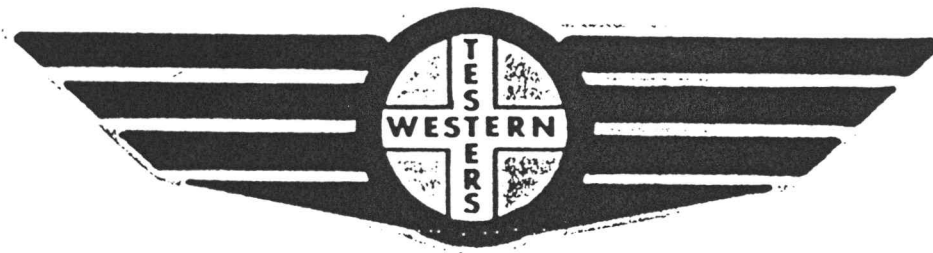
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TK# 12776

Rec 2608

D57# 1

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY MURFIN DRILLING COMPANY LEASE & WELL NO. MACLEAN #7 SEC. 3 TWP. 27S RGE. 6E TEST NO. 2 DATE 8/30/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 8/30/87 TICKET : 12777
CUSTOMER : MURFIN DRILLING COMPANY LEASE : MACLEAN
WELL : 7 TEST: 2 GEOLOGIST : LANDES
ELEVATION : 1415 KB FORMATION : MISSISSIPPI
SECTION : 3 TOWNSHIP : 27S
RANGE : 6E COUNTY : BUTLER STATE : KANSAS
GAUGE SN# : 3659 RANGE : 4100 CLOCK : 12

INTERVAL FROM : 2769 TO : 2778 TOTAL DEPTH : 2778

DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 2764 SIZE : 6.63
PACKER DEPTH : 2769 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : EDCO RIG 6
MUD TYPE : CHEMICAL VISCOSITY : 38
WEIGHT : 9.2 WATER LOSS (CC) : 11.6
CHLORIDES (PPM) : 1800
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : REVERSED OUT ? :

DRILL COLLAR LENGTH : 327 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 2421 FT I.D. inch : 3.80
TEST TOOL LENGTH : 21 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 9 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5XH

BLOW COMMENT #1 : WEAK BLOW BUILDING TO A STRONG BLOW ON
BLOW COMMENT #2 : BOTH FLOW PERIODS.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : MURFIN DRILLING COMPANY
RIG : BUTLER-KANSAS
FIELD : MACLEAN
WELL : 7
DATE : 8/30/87
GAUGE NO : 3659

OPERATIONAL COMMENTS

RECOVERED 390 FEET OF GAS ABOVE FLUID.

COMPANY : MURFIN DRILLING COMPANY
 WELL : 7
 GAUGE # : 3659
 DATE : 30/ 8/87

FIELD : MACLEAN
 JOB # : 12777
 DEPTH : 2778
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	12:50: 0	0.000	20.000	104.00	0.000
2	12:54:59	0.083	20.000	104.00	0.000
3	13: 0: 0	0.167	20.000	104.00	0.000
4	13: 5: 0	0.250	22.000	104.00	2.000
5	13: 9:59	0.333	25.000	104.00	3.000
6	13:15: 0	0.417	27.000	104.00	2.000
7	13:20: 0	0.500	30.000	104.00	3.000
8	13:23: 0	0.550	81.000	104.00	51.000
9	13:26: 0	0.600	226.000	104.00	145.000
10	13:29: 0	0.650	471.000	104.00	245.000
11	13:32: 0	0.700	659.000	104.00	188.000
12	13:35: 0	0.750	743.000	104.00	84.000
13	13:38: 0	0.800	775.000	104.00	32.000
14	13:41: 0	0.850	796.000	104.00	21.000
15	13:44: 0	0.900	810.000	104.00	14.000
16	13:47: 0	0.950	818.000	104.00	8.000
17	13:50: 0	1.000	824.000	104.00	6.000
18	13:53: 0	1.050	830.000	104.00	6.000
19	13:56: 0	1.100	835.000	104.00	5.000
20	13:59: 0	1.150	839.000	104.00	4.000
21	14: 2: 0	1.200	842.000	104.00	3.000
22	14: 5: 0	1.250	844.000	104.00	2.000
23	14: 8: 0	1.300	846.000	104.00	2.000
24	14:11: 0	1.350	848.000	104.00	2.000
25	14:14: 0	1.400	849.000	104.00	1.000
26	14:17: 0	1.450	850.000	104.00	1.000
27	14:20: 0	1.500	851.000	104.00	1.000
28	14:21: 0	1.517	63.000	104.00	-788.000
29	14:24:59	1.583	63.000	104.00	0.000
30	14:30: 0	1.667	63.000	104.00	0.000
31	14:35: 0	1.750	63.000	104.00	0.000
32	14:39:59	1.833	63.000	104.00	0.000
33	14:45: 0	1.917	65.000	104.00	2.000
34	14:50: 0	2.000	67.000	104.00	2.000
35	14:54:59	2.083	69.000	104.00	2.000
36	15: 0: 0	2.167	71.000	104.00	2.000
37	15: 5: 0	2.250	73.000	104.00	2.000
38	15: 8: 0	2.300	191.000	104.00	118.000
39	15:11: 0	2.350	406.000	104.00	215.000
40	15:14: 0	2.400	615.000	104.00	209.000
41	15:17: 0	2.450	713.000	104.00	98.000
42	15:20: 0	2.500	752.000	104.00	39.000
43	15:23: 0	2.550	774.000	104.00	22.000
44	15:26: 0	2.600	788.000	104.00	14.000
45	15:29: 0	2.650	800.000	104.00	12.000
46	15:32: 0	2.700	809.000	104.00	9.000
47	15:35: 0	2.750	813.000	104.00	4.000
48	15:38: 0	2.800	818.000	104.00	5.000
49	15:41: 0	2.850	824.000	104.00	6.000
50	15:44: 0	2.900	828.000	104.00	4.000
51	15:47: 0	2.950	831.000	104.00	3.000
52	15:50: 0	3.000	833.000	104.00	2.000

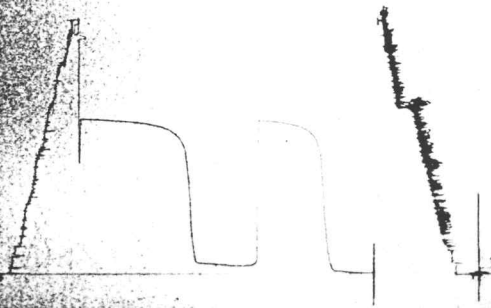
COMPANY : MURFIN DRILLING COMPANY
WELL : 7
GAUGE # : 3659
DATE : 30/ 8/87

FIELD : MACLEAN
JOB # : 12777
DEPTH : 2778
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P P1-P(i-1)
53	15:53: 0	3.050	835.000	104.00	2.000
54	15:56: 0	3.100	837.000	104.00	2.000
55	15:59: 0	3.150	839.000	104.00	2.000
56	16: 2: 0	3.200	841.000	104.00	2.000
57	16: 5: 0	3.250	842.000	104.00	1.000
58	16: 8: 0	3.300	843.000	104.00	1.000
59	16:11: 0	3.350	844.000	104.00	1.000
60	16:14: 0	3.400	845.000	104.00	1.000
61	16:17: 0	3.450	846.000	104.00	1.000
62	16:20: 0	3.500	847.000	104.00	1.000
63	16:23: 0	3.550	848.000	104.00	1.000
64	16:26: 0	3.600	849.000	104.00	1.000
65	16:29: 0	3.650	850.000	104.00	1.000
66	16:32: 0	3.700	851.000	104.00	1.000
67	16:35: 0	3.750	851.000	104.00	0.000

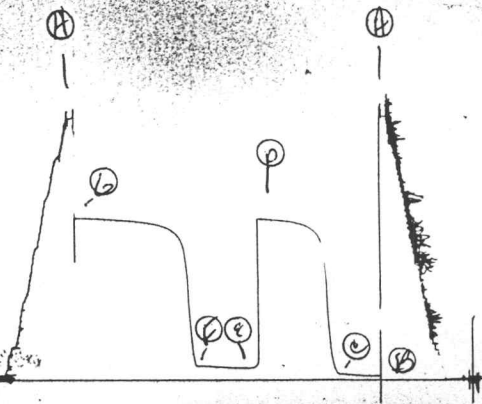
WESTERN TESTING CO. INC.

JK # 12777
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