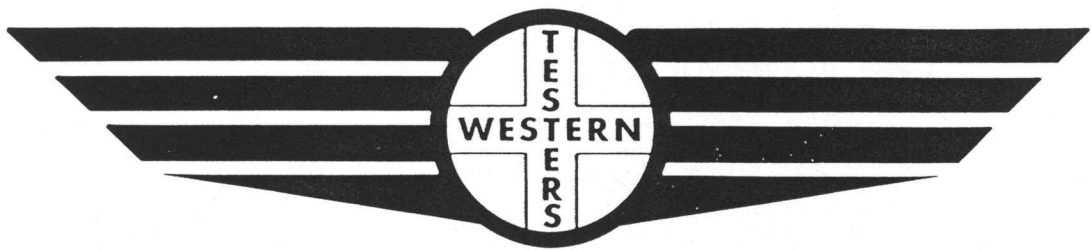


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY RAINS & WILLIAMSON OIL CO., INC. LEASE & WELL NO. #2 STRECKER "A" SEC. 29 TWP. 11S RGE. 14W TEST NO. 1 DATE 3/7/86

SUBSURFACE PRESSURE SURVEY

DATE : 3-7-86 TICKET : 8963
 CUSTOMER : RAINS & WILLIAMSON OIL CO INC LEASE : STRECKER "A"
 WELL : 2 TEST: 1 GEOLOGIST : ENGELBRECHT
 ELEVATION : 1831 FORMATION :
 SECTION : 29 TOWNSHIP : 11S
 RANGE : 14W COUNTY : RUSSELL STATE : KANSAS
 GAUGE SN# : 3086 RANGE : 4500 CLOCK : 12

INTERVAL FROM : 3044 TO : 3072 TOTAL DEPTH : 3072
 DEPTH OF SELECTIVE ZONE :
 PACKER DEPTH : 3039 SIZE : 6 5/8
 PACKER DEPTH : 3044 SIZE : 6 5/8
 PACKER DEPTH : SIZE :
 PACKER DEPTH : SIZE :

DRILLING CON. : RAINS & WILLIAMSON DRLG
 MUD TYPE : STARCH VISCOSITY : 42
 WEIGHT : 9.8 WATER LOSS (CC) : 9.6
 CHLORIDES (PPM) : 68000
 JARS-MAKE : SERIAL NUMBER :
 DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 90 FT I.D. inch : 2.25
 WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
 DRILL PIPE LENGTH : 2933 FT I.D. inch : 3.80
 TEST TOOL LENGTH : 21 FT TOOL SIZE : 5.50
 ANCHOR LENGTH : 28 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 : INITIAL FLOW PERIOD WEAK BLOW. FINAL FLOW PERIOD
 BLOW COMMENT #2 : NO BLOW; FLUSHED TOOL.
 BLOW COMMENT #3 :
 BLOW COMMENT #4 :

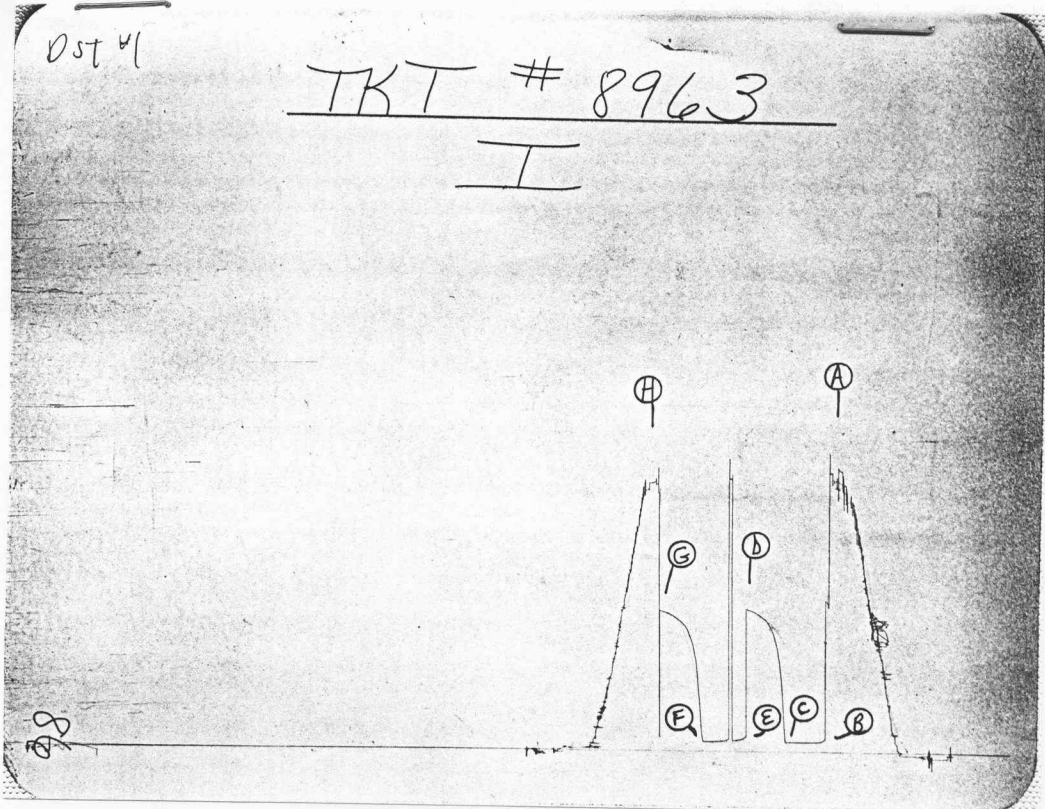
RECOVERED : 60 FT OF: DRILLING MUD. 0.30 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 Total Barrels = 0.3 Total Production = 7.1 Bpd

REMARK 1 :
 REMARK 2 :
 REMARK 3 :
 REMARK 4 :

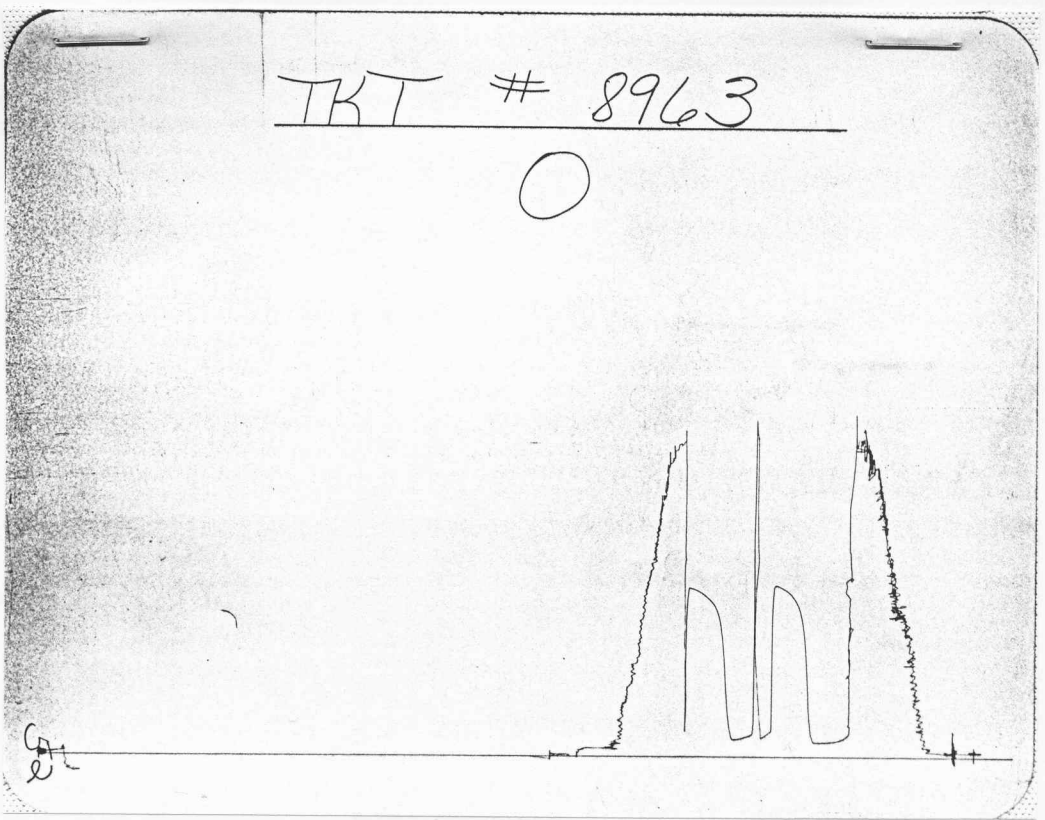
SET PACKER(S) : 12:30 AM TIME STARTED OFF BOTTOM : 2:30 AM
 WELL TEMPERATURE : 110
 INITIAL HYDROSTATIC PRESSURE (A) 1682
 INITIAL FLOW PERIOD MIN: 30 (B) 59 PSI TO (C) : 59
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 864
 FINAL FLOW PERIOD MIN: 30 (E) 65 PSI TO (F) : 58
 FINAL CLOSED IN PERIOD MIN: 36 (G) 853
 FINAL HYDROSTATIC PRESSURE (H) 1620

COMPANY : RAINS & WILLIAMSON OIL CO INC FIELD : STRECKER "A"
WELL : 2 JOB # : 8963
GAUGE # : 3086 DEPTH : 3072
MON/DAY : 3/ 7

REC#	REAL TIME HR:MIN:SEC	ELAPSE TIME MINS	ELAPSE TIME HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P (Po-Pi)	DP/DT Psi/hr
1	12:30: 0	0	0.000	59.00	110.0	0.00	60.09
2	12:35: 0	5	0.083	59.00	110.0	0.00	0.00
3	12:40: 0	10	0.167	59.00	110.0	0.00	0.00
4	12:45: 0	15	0.250	59.00	110.0	0.00	0.00
5	12:50: 0	20	0.333	59.00	110.0	0.00	0.00
6	12:55: 0	25	0.417	59.00	110.0	0.00	0.00
7	13: 0: 0	30	0.500	59.00	110.0	0.00	0.00
8	13: 3: 0	33	0.550	474.00	110.0	415.00	8291.90
9	13: 6: 0	36	0.600	632.00	110.0	573.00	3164.64
10	13: 9: 0	39	0.650	720.00	110.0	661.00	1758.28
11	13:12: 0	42	0.700	762.00	110.0	703.00	841.23
12	13:15: 0	45	0.750	800.00	110.0	741.00	759.26
13	13:18: 0	48	0.800	818.00	110.0	759.00	359.65
14	13:21: 0	51	0.850	837.00	110.0	778.00	380.56
15	13:24: 0	54	0.900	851.00	110.0	792.00	279.73
16	13:27: 0	57	0.950	860.00	110.0	801.00	180.26
17	13:30: 0	60	1.000	864.00	110.0	805.00	79.92
18	13:31: 0	61	1.017	65.00	110.0	6.00	-47776.70
19	13:35: 0	65	1.083	65.00	110.0	6.00	0.00
20	13:40: 0	70	1.167	65.00	110.0	6.00	0.00
21	13:45: 0	75	1.250	65.00	110.0	6.00	0.00
22	13:50: 0	80	1.333	61.00	110.0	2.00	-47.98
23	13:55: 0	85	1.417	58.00	110.0	1.00	-36.04
24	14: 0: 0	90	1.500	58.00	110.0	1.00	0.00
25	14: 3: 0	93	1.550	145.00	110.0	86.00	1738.30
26	14: 6: 0	96	1.600	429.00	110.0	370.00	5688.33
27	14: 9: 0	99	1.650	595.00	110.0	536.00	3316.76
28	14:12: 0	102	1.700	676.00	110.0	617.00	1622.38
29	14:15: 0	105	1.750	734.00	110.0	675.00	1158.87
30	14:18: 0	108	1.800	767.00	110.0	708.00	659.36
31	14:21: 0	111	1.850	790.00	110.0	731.00	460.67
32	14:24: 0	114	1.900	811.00	110.0	752.00	419.59
33	14:27: 0	117	1.950	825.00	110.0	766.00	280.41
34	14:30: 0	120	2.000	838.00	110.0	779.00	259.75
35	14:33: 0	123	2.050	848.00	110.0	789.00	199.80
36	14:36: 0	126	2.100	853.00	110.0	794.00	100.15

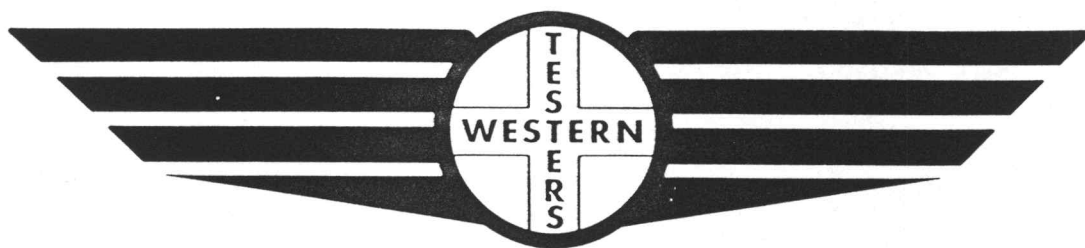


Inside Recorder



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY _____ RAINS & WILLIAMSON OIL CO., INC. LEASE & WELL NO. _____ #2 STRECKER "A" SEC. 29 TWP. 11S RGE. 14W TEST NO. 2 DATE 3/7/86

SUBSURFACE PRESSURE SURVEY

DATE : 3-7-86 TICKET : 8964
 CUSTOMER : RAINS & WILLIAMSON OIL CO INC LEASE : STRECKER "A"
 WELL : 2 TEST: 2 GEOLOGIST : ENGELBRECHT
 ELEVATION : 1831 FORMATION :
 SECTION : 29 TOWNSHIP : 11S
 RANGE : 14W COUNTY : RUSSELL STATE : KANSAS
 GAUGE SN# : 3086 RANGE : 4500 CLOCK : 12

INTERVAL FROM : 3078 TO : 3088 TOTAL DEPTH : 3088
 DEPTH OF SELECTIVE ZONE :
 PACKER DEPTH : 3073 SIZE : 6 5/8
 PACKER DEPTH : 3078 SIZE : 6 5/8
 PACKER DEPTH : SIZE :
 PACKER DEPTH : SIZE :

DRILLING CON. : RAINS & WILLIAMSON DRLG
 MUD TYPE : STARCH VISCOSITY : 46
 WEIGHT : 10.0 WATER LOSS (CC) : 10.4
 CHLORIDES (PPM) : 60000
 JARS-MAKE : SERIAL NUMBER :
 DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 90 FT I.D. inch : 2.25
 WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
 DRILL PIPE LENGTH : 2967 FT I.D. inch : 3.80
 TEST TOOL LENGTH : 21 FT TOOL SIZE : 5.50
 ANCHOR LENGTH : 10 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 : INITIAL FLOW PERIOD WEAK BLOW. FINAL FLOW
 BLOW COMMENT #2 : PERIOD WEAK BLOW. DIED IN 10 MINUTES;
 BLOW COMMENT #3 : FLUSHED TOOL.
 BLOW COMMENT #4 :

RECOVERED : 65 FT OF: SL OIL & GAS CUT MUD. 0.32 Barrels
 RECOVERED : 0 FT OF: (10% OIL; 15% GAS). 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 Total Barrels = 0.3 Total Production = 7.7 Bpd

REMARK 1 :
 REMARK 2 :
 REMARK 3 :
 REMARK 4 :

SET PACKER(S) : 11:00 AM TIME STARTED OFF BOTTOM : 1:00 PM
 WELL TEMPERATURE : 110
 INITIAL HYDROSTATIC PRESSURE (A) 1659
 INITIAL FLOW PERIOD MIN: 30 (B) 46 PSI TO (C) : 46
 INITIAL CLOSED IN PERIOD MIN: 30 (D) 881
 FINAL FLOW PERIOD MIN: 30 (E) 63 PSI TO (F) : 44
 FINAL CLOSED IN PERIOD MIN: 33 (G) 885
 FINAL HYDROSTATIC PRESSURE (H) 1578

Pressure Transient Report

DATA FILE.....
COMPANY.....RAINS & WILLIAMSON OIL CO INC
DATE OF TEST.....3-7-86
FIELD NAME.....STRECKER "A"
WELL NAME.....2
LOCATION.....RUSSELL-KANSAS
JOB NUMBER.....8964
GAUGE NUMBER.....3086
GAUGE DEPTH.....3088

COMMENTS

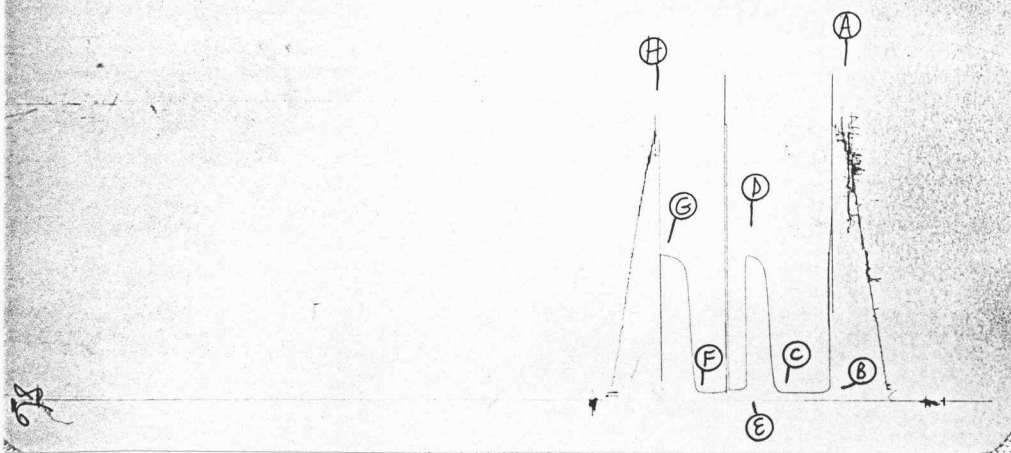
START UP TIME (mo/da/yr) (hr:min:sec)
3./7/86. 11.: 0.: 0.

COMPANY : RAINS & WILLIAMSON OIL CO INC FIELD : STRECKER "A"
WELL : 2 JOB # : 8964
GAUGE # : 3086 DEPTH : 3088
MON/DAY : 3/ 7

REC#	REAL TIME HR:MIN:SEC	ELAPSE TIME MINS HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P (Po-Pi)	DP/DT Psi/hr
1	11: 0: 0	0 0.000	46.00	110.0	0.00	100.15
2	11: 5: 0	5 0.083	46.00	110.0	0.00	0.00
3	11:10: 0	10 0.167	46.00	110.0	0.00	0.00
4	11:15: 0	15 0.250	46.00	110.0	0.00	0.00
5	11:20: 0	20 0.333	46.00	110.0	0.00	0.00
6	11:25: 0	25 0.417	46.00	110.0	0.00	0.00
7	11:30: 0	30 0.500	46.00	110.0	0.00	0.00
8	11:33: 0	33 0.550	46.00	110.0	0.00	0.00
9	11:36: 0	36 0.600	46.00	110.0	0.00	0.00
10	11:39: 0	39 0.650	64.00	110.0	18.00	359.65
11	11:42: 0	42 0.700	180.00	110.0	134.00	2323.40
12	11:45: 0	45 0.750	570.00	110.0	524.00	7792.39
13	11:48: 0	48 0.800	793.00	110.0	747.00	4455.65
14	11:51: 0	51 0.850	843.00	110.0	797.00	1001.47
15	11:54: 0	54 0.900	862.00	110.0	816.00	379.63
16	11:57: 0	57 0.950	873.00	110.0	827.00	220.32
17	12: 0: 0	60 1.000	881.00	110.0	835.00	159.84
18	12: 1: 0	61 1.017	63.00	110.0	17.00	-48912.82
19	12: 5: 0	65 1.083	63.00	110.0	17.00	0.00
20	12:10: 0	70 1.167	63.00	110.0	17.00	0.00
21	12:15: 0	75 1.250	52.00	110.0	6.00	-131.94
22	12:20: 0	80 1.333	47.00	110.0	1.00	-59.97
23	12:25: 0	85 1.417	45.00	110.0	1.00	-24.02
24	12:30: 0	90 1.500	44.00	110.0	2.00	-11.99
25	12:33: 0	93 1.550	46.00	110.0	0.00	39.96
26	12:36: 0	96 1.600	54.00	110.0	8.00	160.23
27	12:39: 0	99 1.650	213.00	110.0	167.00	3176.90
28	12:42: 0	102 1.700	609.00	110.0	563.00	7931.62
29	12:45: 0	105 1.750	790.00	110.0	744.00	3616.47
30	12:48: 0	108 1.800	837.00	110.0	791.00	939.08
31	12:51: 0	111 1.850	858.00	110.0	812.00	420.62
32	12:54: 0	114 1.900	870.00	110.0	824.00	239.77
33	12:57: 0	117 1.950	877.00	110.0	831.00	140.21
34	13: 0: 0	120 2.000	880.00	110.0	834.00	59.94
35	13: 3: 0	123 2.050	885.00	110.0	839.00	99.90

TKT # 8964

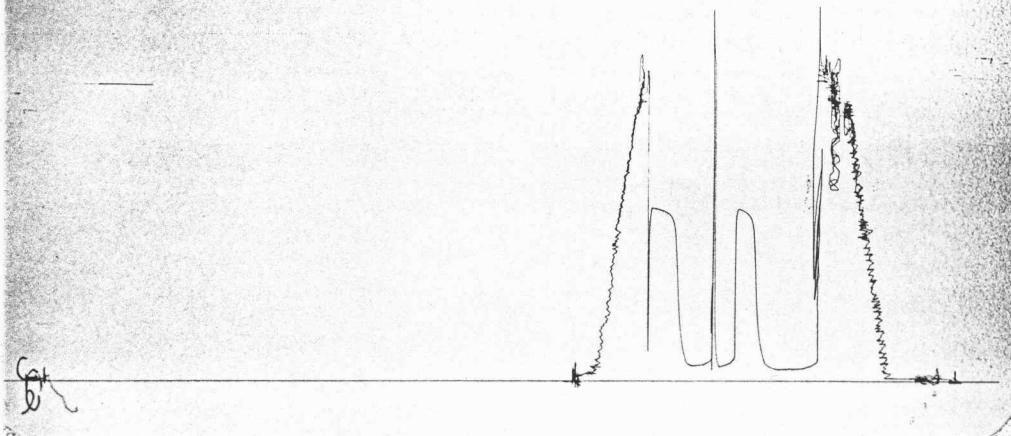
I



Inside Recorder

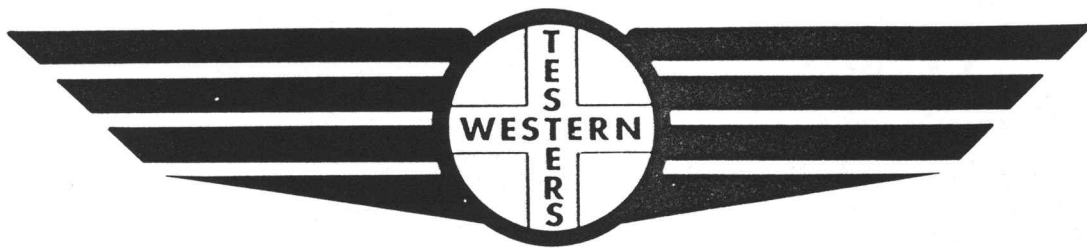
TKT # 8964

O



Outside Recorder

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY RAINS & WILLIAMSON OIL CO., INC. LEASE & WELL NO. #2 STRECKER "A" SEC. 29 TWP. 11S RGE. 14W TEST NO. 3 DATE 3/8/86

SUBSURFACE PRESSURE SURVEY

DATE : 3-8-86 TICKET : 8965
 CUSTOMER : RAINS & WILLIAMSON OIL CO INC LEASE : STRECKER "A"
 WELL : 2 TEST: 3 GEOLOGIST : ENGELBRECHT
 ELEVATION : 1831 FORMATION : KANSAS CITY
 SECTION : 29 TOWNSHIP : 11S
 RANGE : 14W COUNTY : RUSSELL STATE : KANSAS
 GAUGE SN# : 3086 RANGE : 4500 CLOCK : 12

INTERVAL FROM : 3192 TO : 3217 TOTAL DEPTH : 3217
 DEPTH OF SELECTIVE ZONE :
 PACKER DEPTH : 3187 SIZE : 6 5/8
 PACKER DEPTH : 3192 SIZE : 6 5/8
 PACKER DEPTH : SIZE :
 PACKER DEPTH : SIZE :

DRILLING CON. : RAINS & WILLIAMSON DRLG
 MUD TYPE : STARCH VISCOSITY : 46
 WEIGHT : 10.0 WATER LOSS (CC) : 10.4
 CHLORIDES (PPM) : 60000
 JARS-MAKE : SERIAL NUMBER :
 DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 90 FT I.D. inch : 2.25
 WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
 DRILL PIPE LENGTH : 3081 FT I.D. inch : 3.80
 TEST TOOL LENGTH : 21 FT TOOL SIZE : 5.50
 ANCHOR LENGTH : 25 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 : WEAK BLOW THROUGHOUT TEST.
 BLOW COMMENT #2 :
 BLOW COMMENT #3 :
 BLOW COMMENT #4 :

RECOVERED : 60 FT OF: MUDDY WATER. 0.64 Barrels
 RECOVERED : 180 FT OF: SALT WATER. 1.91 Barrels
 RECOVERED : 0 FT OF: CHLORIDES 67000 PPM. 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 RECOVERED : 0 FT OF: 0.00 Barrels
 Total Barrels = 2.5 Total Production = 38.6 Bpd

REMARK 1 :
 REMARK 2 :
 REMARK 3 :
 REMARK 4 :

SET PACKER(S) : 2:45 AM TIME STARTED OFF BOTTOM : 5:45 AM
 WELL TEMPERATURE : 111
 INITIAL HYDROSTATIC PRESSURE (A) 1755
 INITIAL FLOW PERIOD MIN: 30 (B) 68 PSI TO (C) : 70
 INITIAL CLOSED IN PERIOD MIN: 33 (D) 829
 FINAL FLOW PERIOD MIN: 65 (E) 121 PSI TO (F) : 137
 FINAL CLOSED IN PERIOD MIN: 60 (G) 823
 FINAL HYDROSTATIC PRESSURE (H) 1712

Pressure Transient Report

DATA FILE.....
COMPANY.....RAINS & WILLIAMSON OIL CO INC
DATE OF TEST.....3-8-86
FIELD NAME.....STRECKER "A"
WELL NAME.....2
LOCATION.....RUSSELL-KANSAS
JOB NUMBER.....8965
GAUGE NUMBER.....3086
GAUGE DEPTH.....3217

COMMENTS

START UP TIME	(mo/da/yr)	(hr:min:sec)
	3./8/86.	2.: 45.: 0.

COMPANY : RAINS & WILLIAMSON OIL CO INC FIELD : STRECKER "A"
 WELL : 2 JOB # : 8965
 GAUGE # : 3086 DEPTH : 3217
 MON/DAY : 3/ 8

REC#	REAL TIME HR:MIN:SEC	ELAPSE TIME MINS	ELAPSE TIME HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P (Po-Pi)	DP/DT Psi/hr
1	2:45: 0	0	0.000	68.00	111.0	0.00	0.00
2	2:50: 0	5	0.083	68.00	111.0	0.00	0.00
3	2:55: 0	10	0.167	68.00	111.0	0.00	0.00
4	3: 0: 0	15	0.250	68.00	111.0	0.00	0.00
5	3: 5: 0	20	0.333	68.00	111.0	0.00	0.00
6	3:10: 0	25	0.417	69.00	111.0	1.00	12.01
7	3:15: 0	30	0.500	70.00	111.0	2.00	11.99
8	3:18: 0	33	0.550	632.00	111.0	564.00	11229.03
9	3:21: 0	36	0.600	704.00	111.0	636.00	1442.11
10	3:24: 0	39	0.650	741.00	111.0	673.00	739.28
11	3:27: 0	42	0.700	760.00	111.0	692.00	380.56
12	3:30: 0	45	0.750	776.00	111.0	708.00	319.69
13	3:33: 0	48	0.800	790.00	111.0	722.00	279.73
14	3:36: 0	51	0.850	802.00	111.0	734.00	240.35
15	3:39: 0	54	0.900	809.00	111.0	741.00	139.86
16	3:42: 0	57	0.950	818.00	111.0	750.00	180.26
17	3:45: 0	60	1.000	825.00	111.0	757.00	139.86
18	3:48: 0	63	1.050	829.00	111.0	761.00	79.92
19	3:49: 0	64	1.067	121.00	111.0	53.00	-42646.59
20	3:53: 0	68	1.133	121.00	111.0	53.00	0.00
21	3:58: 0	73	1.217	121.00	111.0	53.00	0.00
22	4: 3: 0	78	1.300	121.00	111.0	53.00	0.00
23	4: 8: 0	83	1.383	121.00	111.0	53.00	0.00
24	4:13: 0	88	1.467	121.00	111.0	53.00	0.00
25	4:18: 0	93	1.550	121.00	111.0	53.00	0.00
26	4:23: 0	98	1.633	121.00	111.0	53.00	0.00
27	4:28: 0	103	1.717	122.00	111.0	54.00	11.99
28	4:33: 0	108	1.800	123.00	111.0	55.00	11.99
29	4:38: 0	113	1.883	126.00	111.0	58.00	36.04
30	4:43: 0	118	1.967	130.00	111.0	62.00	47.98
31	4:48: 0	123	2.050	134.00	111.0	66.00	47.98
32	4:53: 0	128	2.133	137.00	111.0	69.00	36.04
33	4:56: 0	131	2.183	593.00	111.0	525.00	9111.10
34	4:59: 0	134	2.233	660.00	111.0	592.00	1341.97
35	5: 2: 0	137	2.283	693.00	111.0	625.00	659.36
36	5: 5: 0	140	2.333	711.00	111.0	643.00	359.65
37	5: 8: 0	143	2.383	726.00	111.0	658.00	300.44
38	5:11: 0	146	2.433	741.00	111.0	673.00	299.71
39	5:14: 0	149	2.483	755.00	111.0	687.00	280.41
40	5:17: 0	152	2.533	765.00	111.0	697.00	199.80
41	5:20: 0	155	2.583	772.00	111.0	704.00	139.86
42	5:23: 0	158	2.633	779.00	111.0	711.00	140.21
43	5:26: 0	161	2.683	788.00	111.0	720.00	179.82
44	5:29: 0	164	2.733	793.00	111.0	725.00	100.15
45	5:32: 0	167	2.783	797.00	111.0	729.00	79.92
46	5:35: 0	170	2.833	802.00	111.0	734.00	99.90
47	5:38: 0	173	2.883	807.00	111.0	739.00	100.15
48	5:41: 0	176	2.933	811.00	111.0	743.00	79.92
49	5:44: 0	179	2.983	814.00	111.0	746.00	60.09

COMPANY : RAINS & WILLIAMSON OIL CO INC
WELL : 2 JOB # : 8965
GAUGE # : 3086 DEPTH : 3217
MON/DAY : 3/ 8

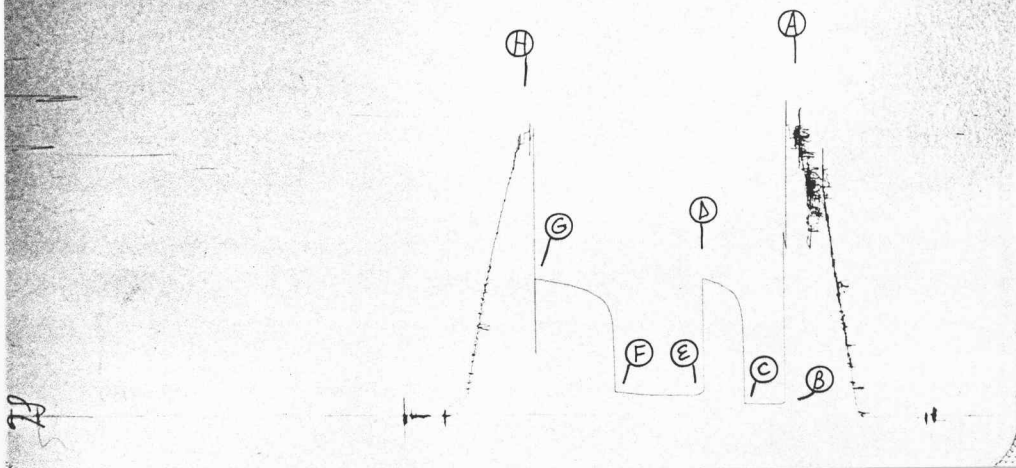
FIELD : STRECKER "A"

PAGE 2

REC#	REAL TIME HR:MIN:SEC	ELAPSE TIME MINS	ELAPSE TIME HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P (Po-Pi)	DP/DT Psi/hr
50	5:47: 0	182	3.033	817.00	111.0	749.00	59.94
51	5:50: 0	185	3.083	820.00	111.0	752.00	59.94
52	5:53: 0	188	3.133	823.00	111.0	755.00	60.09

TKT # 8965

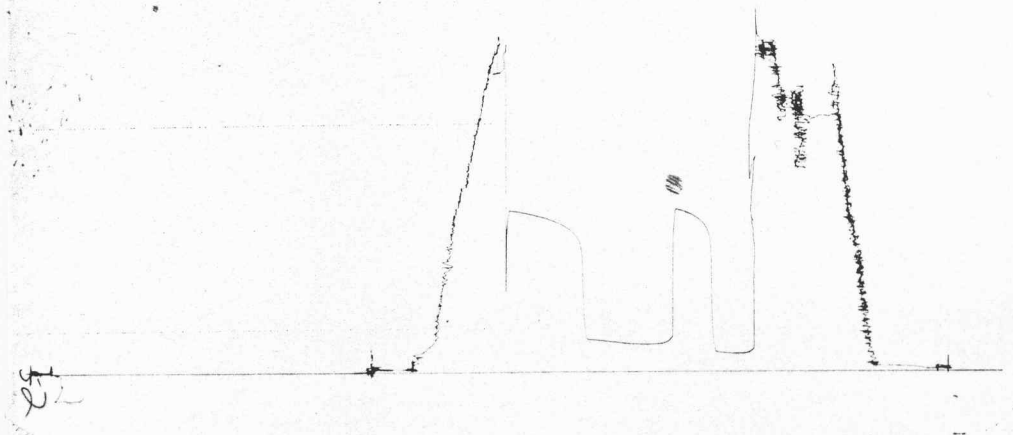
I



Inside Recorder

TKT # 8965

O



Outside Recorder