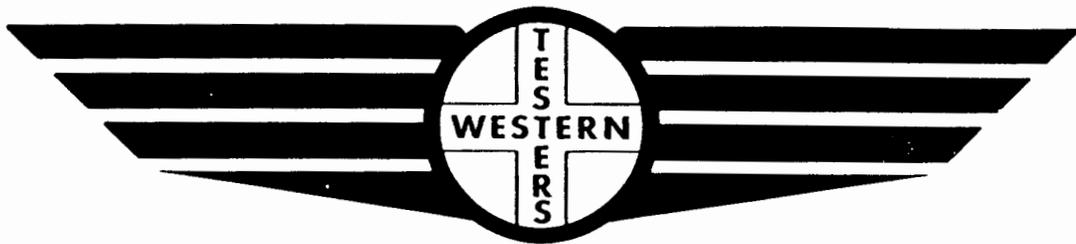


15-035-23690

18-325-6E

COMPANY R R ABDERHALDEN LEASE & WELL NO. #11 DUCKWORTH SEC. 18 TWP. 32S RGE. 6E TEST NO. 1 DATE 3/1/86

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

SUBSURFACE PRESSURE SURVEY

DATE : 3-1-86 TICKET : 8861  
 CUSTOMER : R.R. ABDERHALDEN LEASE : DUCKWORTH  
 WELL : 11 TEST: 1 GEOLOGIST : HANCOCK  
 ELEVATION : 1339 FORMATION : LAYTON  
 SECTION : 18 TOWNSHIP : 32S  
 RANGE : 6E COUNTY : COWLEY STATE : KANSAS  
 GAUGE SN# : 3354 RANGE : 4200 CLOCK : 12

INTERVAL FROM : 2246 TO : 2285 TOTAL DEPTH : 2285  
 DEPTH OF SELECTIVE ZONE :  
 PACKER DEPTH : 2241 SIZE : 6.75  
 PACKER DEPTH : 2246 SIZE : 6.75  
 PACKER DEPTH : SIZE :  
 PACKER DEPTH : SIZE :

DRILLING CON. : R.R.A. DRIG  
 MUD TYPE : CHEMICAL VISCOSITY : 40  
 WEIGHT : 9.6 WATER LOSS (CC) : 12.8  
 CHLORIDES (PPM) : 1500  
 JARS-MAKE : SERIAL NUMBER :  
 DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 420 FT I.D. inch : 2.25  
 WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00  
 DRILL PIPE LENGTH : 1806 FT I.D. inch : 3.80  
 TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50  
 ANCHOR LENGTH : 39 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 XH

BLOW COMMENT #1 : FAIR BLOW THROUGHOUT TEST.  
 BLOW COMMENT #2 :  
 BLOW COMMENT #3 :  
 BLOW COMMENT #4 :

RECOVERED : 810 FT OF: MUD. 7.54 Barrels  
 RECOVERED : 0 FT OF: 0.00 Barrels  
 Total Barrels = 7.5 Total Production = 120.6 Bpd

REMARK 1 : HOLE IN DRILL COLLARS.  
 REMARK 2 :  
 REMARK 3 :  
 REMARK 4 :

SET PACKER(S) : 12:05 AM TIME STARTED OFF BOTTOM : 3:35 AM  
 WELL TEMPERATURE : 102  
 INITIAL HYDROSTATIC PRESSURE (A) 1114  
 INITIAL FLOW PERIOD MIN: 45 (B) 432 PSI TO (C) : 432  
 INITIAL CLOSED IN PERIOD MIN: 54 (D) 722  
 FINAL FLOW PERIOD MIN: 45 (E) 439 PSI TO (F) : 441  
 FINAL CLOSED IN PERIOD MIN: 60 (G) 717  
 FINAL HYDROSTATIC PRESSURE (H) 1103

Pressure Transient Report

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DATA FILE.....  
COMPANY.....R.R. ABDERHALDEN  
DATE OF TEST.....3-1-86  
FIELD NAME.....DUCKWORTH  
WELL NAME.....11  
LOCATION.....COWLEY-KANSAS  
JOB NUMBER.....8861  
GAUGE NUMBER.....3354  
GAUGE DEPTH.....2285

COMMENTS  
HOLE IN DRILL COLLARS.

START UP TIME	(mo/da/yr)	(hr:min:sec)
	3./1/86.	12.: 5.: 0.

COMPANY : R.R. ABDERHALDEN FIELD : DUCKWORTH

WELL : 11 JOB # : 8861

GAUGE # : 3354 DEPTH : 2285

MON/DAY : 3/ 1

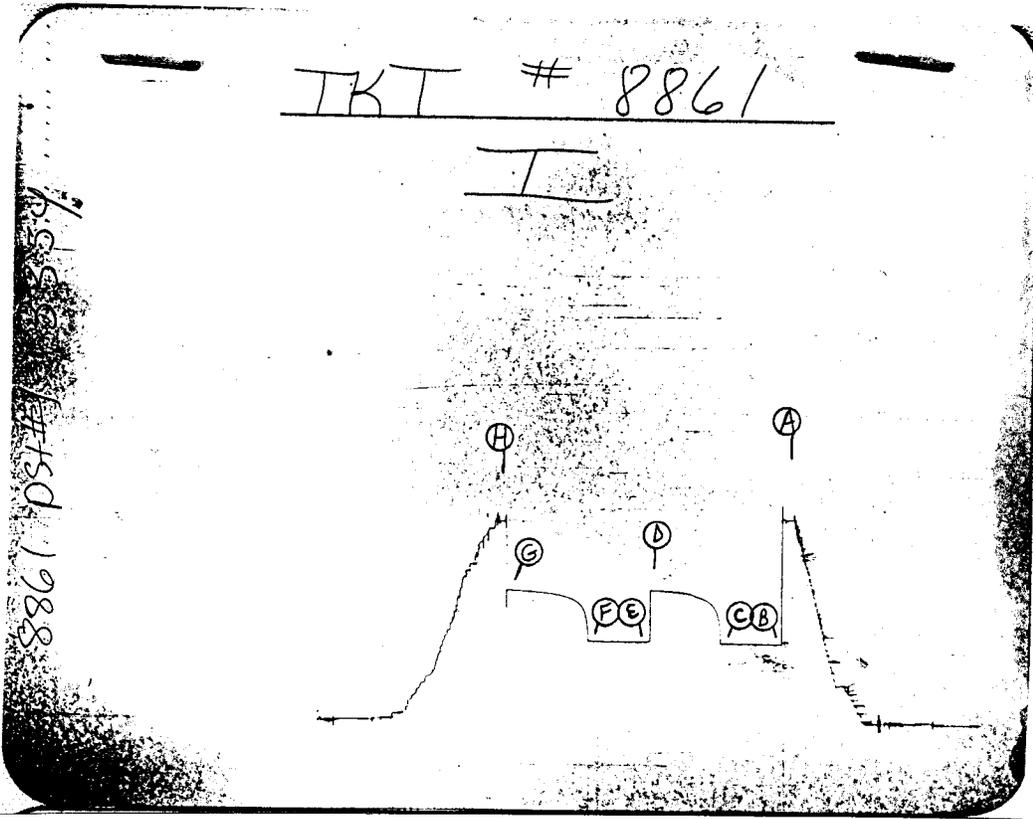
PAGE 1

REC#	REAL TIME HR:MIN:SEC	ELAPSE TIME MINS	HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P (Po-Pi)	DP/DT Psi/hr
1	12: 5: 0	0	0.000	432.00	102.0	0.00	0.00
2	12:10: 0	5	0.083	432.00	102.0	0.00	0.00
3	12:15: 0	10	0.167	432.00	102.0	0.00	0.00
4	12:20: 0	15	0.250	432.00	102.0	0.00	0.00
5	12:25: 0	20	0.333	432.00	102.0	0.00	0.00
6	12:30: 0	25	0.417	432.00	102.0	0.00	0.00
7	12:35: 0	30	0.500	432.00	102.0	0.00	0.00
8	12:40: 0	35	0.583	432.00	102.0	0.00	0.00
9	12:45: 0	40	0.667	432.00	102.0	0.00	0.00
10	12:50: 0	45	0.750	432.00	102.0	0.00	0.00
11	12:53: 0	48	0.800	595.00	102.0	163.00	3264.78
12	12:56: 0	51	0.850	635.00	102.0	203.00	799.22
13	12:59: 0	54	0.900	654.00	102.0	222.00	380.56
14	13: 2: 0	57	0.950	669.00	102.0	237.00	299.71
15	13: 5: 0	60	1.000	680.00	102.0	248.00	219.79
16	13: 8: 0	63	1.050	686.00	102.0	254.00	120.18
17	13:11: 0	66	1.100	694.00	102.0	262.00	159.84
18	13:14: 0	69	1.150	705.00	102.0	273.00	220.32
19	13:17: 0	72	1.200	709.00	102.0	277.00	79.92
20	13:20: 0	75	1.250	712.00	102.0	280.00	59.94
21	13:23: 0	78	1.300	714.00	102.0	282.00	40.06
22	13:26: 0	81	1.350	716.00	102.0	284.00	39.96
23	13:29: 0	84	1.400	718.00	102.0	286.00	40.06
24	13:32: 0	87	1.450	720.00	102.0	288.00	39.96
25	13:35: 0	90	1.500	721.00	102.0	289.00	19.98
26	13:38: 0	93	1.550	721.00	102.0	289.00	0.00
27	13:41: 0	96	1.600	722.00	102.0	290.00	19.98
28	13:44: 0	99	1.650	722.00	102.0	290.00	0.00
29	13:45: 0	100	1.667	439.00	102.0	7.00	-16922.16
30	13:49: 0	104	1.733	439.00	102.0	7.00	0.00
31	13:54: 0	109	1.817	439.00	102.0	7.00	0.00
32	13:59: 0	114	1.900	439.00	102.0	7.00	0.00
33	14: 4: 0	119	1.983	439.00	102.0	7.00	0.00
34	14: 9: 0	124	2.067	439.00	102.0	7.00	0.00
35	14:14: 0	129	2.150	439.00	102.0	7.00	0.00
36	14:19: 0	134	2.233	439.00	102.0	7.00	0.00
37	14:24: 0	139	2.317	439.00	102.0	7.00	0.00
38	14:29: 0	144	2.400	441.00	102.0	9.00	24.02
39	14:32: 0	147	2.450	589.00	102.0	157.00	2957.11
40	14:35: 0	150	2.500	633.00	102.0	201.00	879.14
41	14:38: 0	153	2.550	654.00	102.0	222.00	420.62
42	14:41: 0	156	2.600	667.00	102.0	235.00	259.75
43	14:44: 0	159	2.650	677.00	102.0	245.00	200.29
44	14:47: 0	162	2.700	684.00	102.0	252.00	139.86
45	14:50: 0	165	2.750	689.00	102.0	257.00	99.90
46	14:53: 0	168	2.800	694.00	102.0	262.00	100.15
47	14:56: 0	171	2.850	699.00	102.0	267.00	99.90
48	14:59: 0	174	2.900	703.00	102.0	271.00	80.12
49	15: 2: 0	177	2.950	705.00	102.0	273.00	39.96

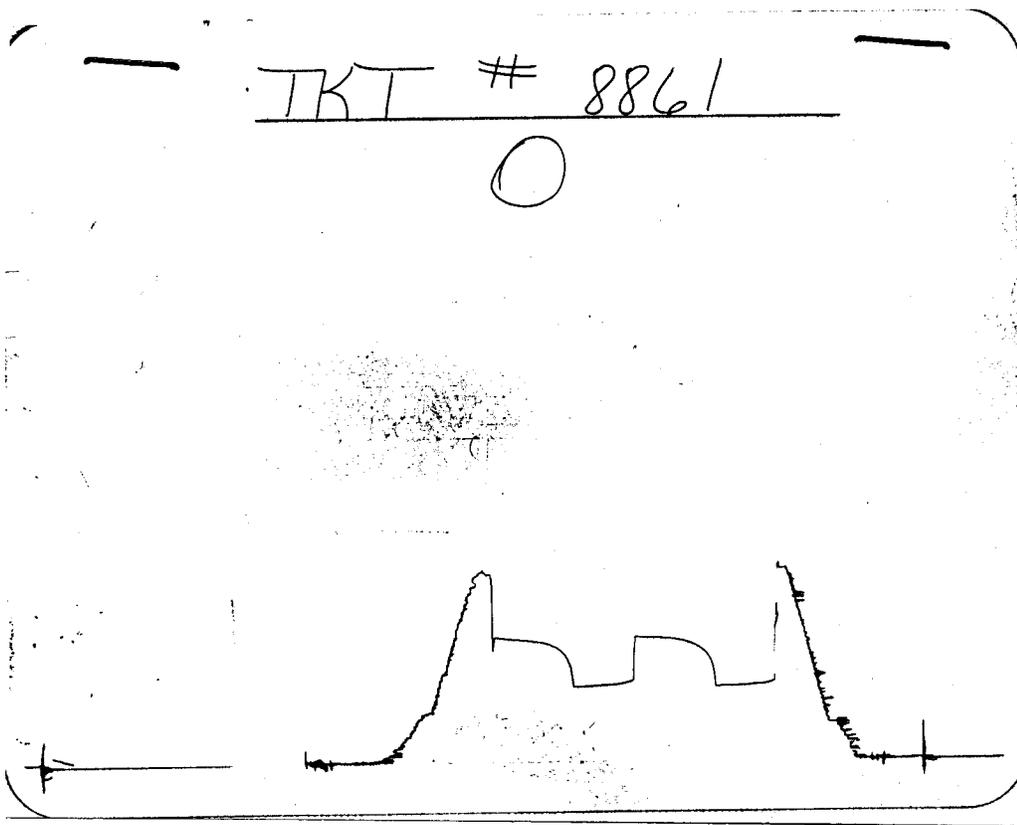
COMPANY : R.R. ABDERHALDEN FIELD : DUCKWORTH  
WELL : 11 JOB # : 8861  
GAUGE # : 3354 DEPTH : 2285  
MON/DAY : 3/ 1

PAGE 2

REC#	REAL TIME HR:MIN:SEC	ELAPSE TIME MINS HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P (Po-Pi)	DP/DT Psi/hr
50	15: 5: 0	180 3.000	707.00	102.0	275.00	39.96
51	15: 8: 0	183 3.050	709.00	102.0	277.00	40.06
52	15:11: 0	186 3.100	711.00	102.0	279.00	39.96
53	15:14: 0	189 3.150	712.00	102.0	280.00	20.03
54	15:17: 0	192 3.200	713.00	102.0	281.00	19.98
55	15:20: 0	195 3.250	714.00	102.0	282.00	19.98
56	15:23: 0	198 3.300	715.00	102.0	283.00	20.03
57	15:26: 0	201 3.350	716.00	102.0	284.00	19.98
58	15:29: 0	204 3.400	717.00	102.0	285.00	20.03

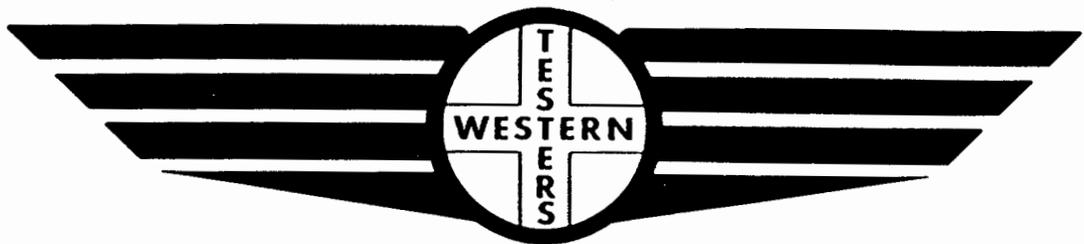


Inside Recorder



Outside Recorder

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY R. R. ABDERHALDEN  
LEASE & WELL NO. #11 DUCKWORTH  
SEC. 18 TWP. 32S RGE. 6E TEST NO. 2  
DATE 3/3/86

SUBSURFACE PRESSURE SURVEY

DATE	: 3-3-86	TICKET	: 8862
CUSTOMER	: R.R. ABDERHALDEN	LEASE	: DUCKWORTH
WELL	: 11 TEST: 2	GEOLOGIST	: HANCOCK
ELEVATION	: 1339	FORMATION	: BARTLESVILLE
SECTION	: 18	TOWNSHIP	: 32S
RANGE	: 6E COUNTY : COWLEY	STATE	: KANSAS
GAUGE SN#	: 3354 RANGE : 4200	CLOCK	: 12

INTERVAL FROM	: 2937	TO	: 2956	TOTAL DEPTH	: 2980
DEPTH OF SELECTIVE ZONE	:				
PACKER DEPTH	: 2937	SIZE	: 6.75		
PACKER DEPTH	: 2956	SIZE	: 6.75		
PACKER DEPTH	:	SIZE	:		
PACKER DEPTH	:	SIZE	:		

DRILLING CON.	: R.R.A. DRLG	VISCOSITY	: 40
MUD TYPE	: CHEMICAL	WATER LOSS (CC)	: 12.8
WEIGHT	: 9.6		
CHLORIDES (PPM)	: 1000	SERIAL NUMBER	:
JARS-MAKE	:	REVERSED OUT ?	: NO
DID WELL FLOW ?	: NO		

DRILL COLLAR LENGTH	: 360 FT	I.D. inch	: 2.25
WEIGHT PIPE LENGTH	: 0 FT	I.D. inch	: 0.00
DRILL PIPE LENGTH	: 2586 FT	I.D. inch	: 3.80
TEST TOOL LENGTH	: 15 FT	TOOL SIZE	: 5.50
ANCHOR LENGTH	: 19 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 XH

BLOW COMMENT #1 : WEAK BLOW THROUGHOUT TEST (1 1/2" INTO BUCKET).  
 BLOW COMMENT #2 :  
 BLOW COMMENT #3 :  
 BLOW COMMENT #4 :

RECOVERED	: 30	FT OF:	OIL SPOTTED MUD.	0.15 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 =	0.1	Total Production =	2.4 Bpd	

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

SET PACKER(S)	: 10:40 PM	TIME STARTED OFF BOTTOM	: 2:10 AM
WELL TEMPERATURE	: 102		
INITIAL HYDROSTATIC PRESSURE		(A)	1474
INITIAL FLOW PERIOD	MIN: 45	(B)	19 PSI TO (C) : 28
INITIAL CLOSED IN PERIOD	MIN: 63	(D)	114
FINAL FLOW PERIOD	MIN: 45	(E)	42 PSI TO (F) : 42
FINAL CLOSED IN PERIOD	MIN: 60	(G)	97
FINAL HYDROSTATIC PRESSURE		(H)	1451

Pressure Transient Report

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DATA FILE.....  
COMPANY.....R.R. ABDERHALDEN  
DATE OF TEST.....3-3-86  
FIELD NAME.....DUCKWORTH  
WELL NAME.....11  
LOCATION.....COWLEY-KANSAS  
JOB NUMBER.....8862  
GAUGE NUMBER.....3354  
GAUGE DEPTH.....2980

COMMENTS

START UP TIME	(mo/da/yr)	(hr:min:sec)
	3./3/86.	10.: 40.: 0.

COMPANY : R.R. ABDERHALDEN FIELD : DUCKWORTH  
 WELL : 11 JOB # : 8862  
 GAUGE # : 3354 DEPTH : 2980  
 MON/DAY : 3/ 3

PAGE 1

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	10:40: 0	0	0.000	19.00	102.0	0.00	0.00
2	10:45: 0	5	0.083	19.00	102.0	0.00	0.00
3	10:50: 0	10	0.167	22.00	102.0	3.00	35.98
4	10:55: 0	15	0.250	24.00	102.0	5.00	24.02
5	11: 0: 0	20	0.333	26.00	102.0	7.00	23.99
6	11: 5: 0	25	0.417	27.00	102.0	8.00	11.99
7	11:10: 0	30	0.500	28.00	102.0	9.00	12.01
8	11:15: 0	35	0.583	28.00	102.0	9.00	0.00
9	11:20: 0	40	0.667	28.00	102.0	9.00	0.00
10	11:25: 0	45	0.750	28.00	102.0	9.00	0.00
11	11:28: 0	48	0.800	28.00	102.0	9.00	0.00
12	11:31: 0	51	0.850	28.00	102.0	9.00	0.00
13	11:34: 0	54	0.900	32.00	102.0	13.00	80.12
14	11:37: 0	57	0.950	36.00	102.0	17.00	79.92
15	11:40: 0	60	1.000	40.00	102.0	21.00	80.12
16	11:43: 0	63	1.050	44.00	102.0	25.00	79.92
17	11:46: 0	66	1.100	48.00	102.0	29.00	79.92
18	11:49: 0	69	1.150	52.00	102.0	33.00	80.12
19	11:52: 0	72	1.200	56.00	102.0	37.00	79.92
20	11:55: 0	75	1.250	60.00	102.0	41.00	80.12
21	11:58: 0	78	1.300	64.00	102.0	45.00	79.92
22	12: 1: 0	81	1.350	68.00	102.0	49.00	79.92
23	12: 4: 0	84	1.400	72.00	102.0	53.00	80.12
24	12: 7: 0	87	1.450	76.00	102.0	57.00	79.92
25	12:10: 0	90	1.500	80.00	102.0	61.00	80.12
26	12:13: 0	93	1.550	84.00	102.0	65.00	79.92
27	12:16: 0	96	1.600	89.00	102.0	70.00	99.90
28	12:19: 0	99	1.650	94.00	102.0	75.00	100.15
29	12:22: 0	102	1.700	100.00	102.0	81.00	119.88
30	12:25: 0	105	1.750	107.00	102.0	88.00	140.21
31	12:28: 0	108	1.800	114.00	102.0	95.00	139.86
32	12:29: 0	109	1.817	42.00	102.0	23.00	-4336.94
33	12:33: 0	113	1.883	42.00	102.0	23.00	0.00
34	12:38: 0	118	1.967	42.00	102.0	23.00	0.00
35	12:43: 0	123	2.050	42.00	102.0	23.00	0.00
36	12:48: 0	128	2.133	42.00	102.0	23.00	0.00
37	12:53: 0	133	2.217	42.00	102.0	23.00	0.00
38	12:58: 0	138	2.300	42.00	102.0	23.00	0.00
39	13: 3: 0	143	2.383	42.00	102.0	23.00	0.00
40	13: 8: 0	148	2.467	42.00	102.0	23.00	0.00
41	13:13: 0	153	2.550	42.00	102.0	23.00	0.00
42	13:16: 0	156	2.600	44.00	102.0	25.00	39.96
43	13:19: 0	159	2.650	46.00	102.0	27.00	40.06
44	13:22: 0	162	2.700	48.00	102.0	29.00	39.96
45	13:25: 0	165	2.750	51.00	102.0	32.00	60.09
46	13:28: 0	168	2.800	54.00	102.0	35.00	59.94
47	13:31: 0	171	2.850	57.00	102.0	38.00	59.94
48	13:34: 0	174	2.900	60.00	102.0	41.00	60.09
49	13:37: 0	177	2.950	63.00	102.0	44.00	59.94

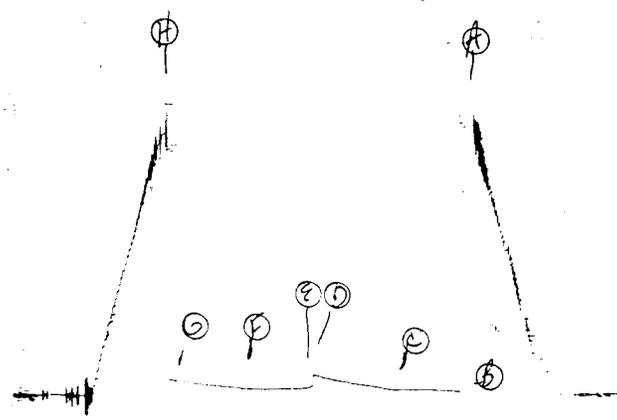
COMPANY : R.R. ABDERHALDEN FIELD : DUCKWORTH  
WELL : 11 JOB # : 8862  
GAUGE # : 3354 DEPTH : 2980  
MON/DAY : 3/ 3

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	13:40: 0	180	3.000	65.00	102.0	46.00	40.06
51	13:43: 0	183	3.050	68.00	102.0	49.00	59.94
52	13:46: 0	186	3.100	71.00	102.0	52.00	59.94
53	13:49: 0	189	3.150	74.00	102.0	55.00	60.09
54	13:52: 0	192	3.200	77.00	102.0	58.00	59.94
55	13:55: 0	195	3.250	80.00	102.0	61.00	60.09
56	13:58: 0	198	3.300	83.00	102.0	64.00	59.94
57	14: 1: 0	201	3.350	86.00	102.0	67.00	59.94
58	14: 4: 0	204	3.400	89.00	102.0	70.00	60.09
59	14: 7: 0	207	3.450	92.00	102.0	73.00	59.94
60	14:10: 0	210	3.500	95.00	102.0	76.00	60.09
61	14:13: 0	213	3.550	97.00	102.0	78.00	39.96

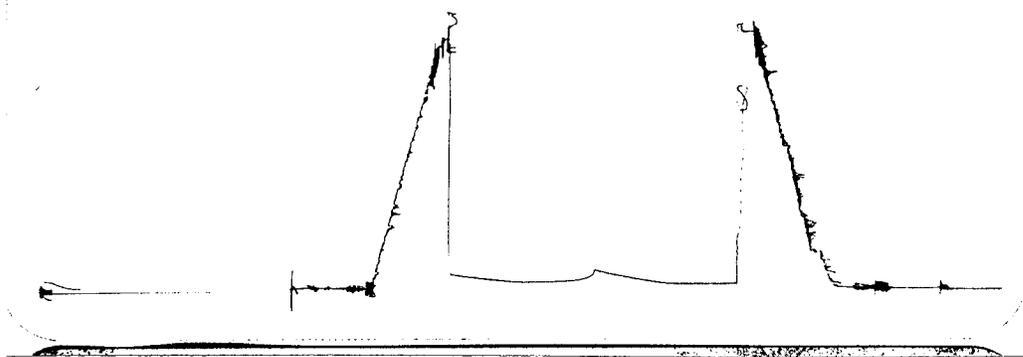
3354 054 7764-8862

2988 # 8862  
I



Inside Recorder

2988 # 8862  
O



Outside Recorder