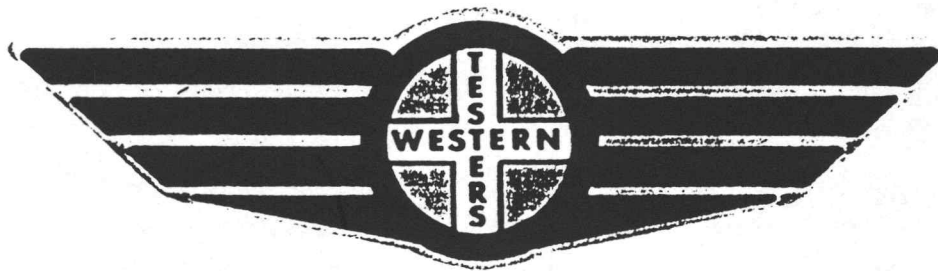


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY BEREXCO, INC. LEASE & WELL NO. HAHN #1-18 SEC. 18 TWP. 23S RGE. 32W TEST NO. 1 DATE 1/8/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 1-08-88 TICKET : 13019
CUSTOMER : BEREXCO INC. LEASE : HAHN
WELL : #1-18 TEST: 1 GEOLOGIST : C. SPRADLIN
ELEVATION : FORMATION :
SECTION : 18 TOWNSHIP : 23S
RANGE : 32W COUNTY : FINNEY STATE : KS
GAUGE SN# : 13552 RANGE : 4050 CLOCK : 12

INTERVAL FROM : 4411 TO : 4446 TOTAL DEPTH : 4446
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4406 SIZE : 6.63
PACKER DEPTH : 4411 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : BEREDCO RIG #4
MUD TYPE : CHEMICAL VISCOSITY : 47
WEIGHT : 9.1 WATER LOSS (CC) : 6.1
CHLORIDES (PPM) : 900
JARS-MAKE : WTC SERIAL NUMBER : 420
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 620 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 3762 FT I.D. inch : 3.80
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 35 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5FH

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

RECOVERED : 20 FT OF: DRILLING MUD

Total Barrels Fluid = 0.10
Total Fluid Prod Rate = 2.36 BFPD
Indicated Wtr Rate = 0.24 BWPD

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

SET PACKER(S) : 10:20 AM

TIME STARTED OFF BOTTOM : 12:50 PM

WELL TEMPERATURE : 117

INITIAL HYDROSTATIC PRESSURE

(A) 2113

INITIAL FLOW PERIOD MIN: 30

(B) 40 PSI TO (C) : 40

INITIAL CLOSED IN PERIOD MIN: 30

(D) 953

FINAL FLOW PERIOD MIN: 30

(E) 48 PSI TO (F) : 48

FINAL CLOSED IN PERIOD MIN: 63

(G) 1017

FINAL HYDROSTATIC PRESSURE

(H) 2102

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : BEREXCO INC.
RIG : FINNEY-JS
FIELD : HAHN
WELL : #1-18
DATE : 1-08-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

COMPANY : BEREXCO INC.
WELL : #1-18
GAUGE # : 13552
DATE : 8/ 1/88

FIELD : HAHN
JOB # : 13019
DEPTH : 4446
TEST :

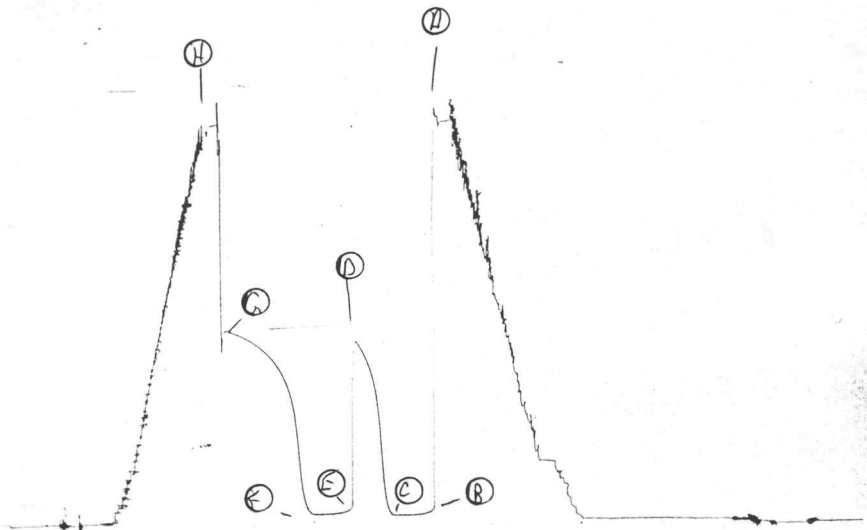
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P $P_i - P_{(i-1)}$
1	10:20: 0	0.000	40.000	117.00	0.000
2	10:24:59	0.083	40.000	117.00	0.000
3	10:30: 0	0.167	40.000	117.00	0.000
4	10:35: 0	0.250	40.000	117.00	0.000
5	10:39:59	0.333	40.000	117.00	0.000
6	10:45: 0	0.417	40.000	117.00	0.000
7	10:50: 0	0.500	40.000	117.00	0.000
8	10:53: 0	0.550	56.000	117.00	16.000
9	10:56: 0	0.600	191.000	117.00	135.000
10	10:59: 0	0.650	421.000	117.00	230.000
11	11: 2: 0	0.700	622.000	117.00	201.000
12	11: 5: 0	0.750	742.000	117.00	120.000
13	11: 8: 0	0.800	813.000	117.00	71.000
14	11:11: 0	0.850	866.000	117.00	53.000
15	11:14: 0	0.900	909.000	117.00	43.000
16	11:17: 0	0.950	940.000	117.00	31.000
17	11:20: 0	1.000	953.000	117.00	13.000
18	11:21: 0	1.017	48.000	117.00	-905.000
19	11:24:59	1.083	48.000	117.00	0.000
20	11:30: 0	1.167	48.000	117.00	0.000
21	11:35: 0	1.250	48.000	117.00	0.000
22	11:39:59	1.333	48.000	117.00	0.000
23	11:45: 0	1.417	48.000	117.00	0.000
24	11:50: 0	1.500	48.000	117.00	0.000
25	11:53: 0	1.550	71.000	117.00	23.000
26	11:56: 0	1.600	162.000	117.00	91.000
27	11:59: 0	1.650	315.000	117.00	153.000
28	12: 2: 0	1.700	518.000	117.00	203.000
29	12: 5: 0	1.750	640.000	117.00	122.000
30	12: 8: 0	1.800	711.000	117.00	71.000
31	12:11: 0	1.850	769.000	117.00	58.000
32	12:14: 0	1.900	807.000	117.00	38.000
33	12:17: 0	1.950	840.000	117.00	33.000
34	12:20: 0	2.000	868.000	117.00	28.000
35	12:23: 0	2.050	894.000	117.00	26.000
36	12:26: 0	2.100	913.000	117.00	19.000
37	12:29: 0	2.150	930.000	117.00	17.000
38	12:32: 0	2.200	946.000	117.00	16.000
39	12:35: 0	2.250	961.000	117.00	15.000
40	12:38: 0	2.300	974.000	117.00	13.000
41	12:41: 0	2.350	983.000	117.00	9.000
42	12:44: 0	2.400	994.000	117.00	11.000
43	12:47: 0	2.450	1003.000	117.00	9.000
44	12:50: 0	2.500	1012.000	117.00	9.000
45	12:53: 0	2.550	1017.000	117.00	5.000

WESTERN TESTING CO. INC.

AK 13019

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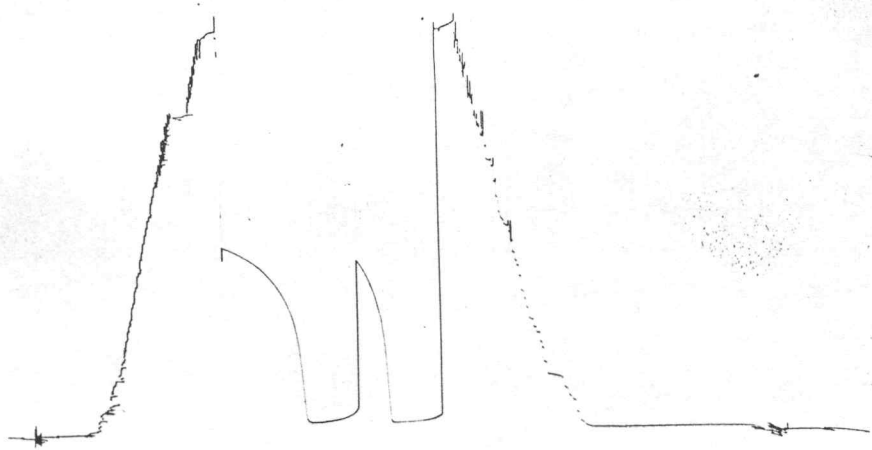


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AK 13019

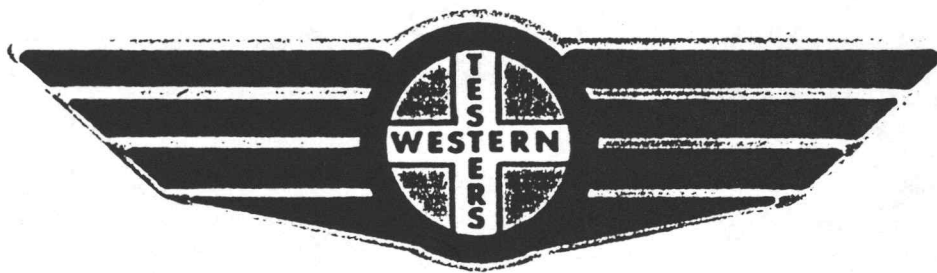
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62

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY BEREXCO, INC. LEASE & WELL NO. HAHN #1-18 SEC. 18 TWP. 23S RGE. 32W TEST NO. 2 DATE 1/9/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 1-09-88 TICKET : 13020
CUSTOMER : BEREXCO INC. LEASE : HAHN
WELL : #1-18 TEST: 2 GEOLOGIST : C. SPRADLIN
ELEVATION : FORMATION : PAWNEE
SECTION : 18 TOWNSHIP : 23S
RANGE : 32W COUNTY : FINNEY STATE : KS
GAUGE SN# : 13552 RANGE : 4050 CLOCK : 12

INTERVAL FROM : 4452 TO : 4470 TOTAL DEPTH : 4470

DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4447 SIZE : 6.63
PACKER DEPTH : 4452 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : BEREDCO #4
MUD TYPE : CHEMICAL VISCOSITY : 50
WEIGHT : 9.1 WATER LOSS (CC) : 6.4
CHLORIDES (PPM) : 1200
JARS-MAKE : WTC SERIAL NUMBER : 420
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 620 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 3803 FT I.D. inch : 3.80
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 18 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5FH

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

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : BEREXCO INC.
RIG : FINNEY-KS
FIELD : HAHN
WELL : #1-18
DATE : 1-09-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

CHLORIDES 40000 PPM
RESISITIVITY .03 AT 50 DEGREES F.

COMPANY : BEREXCO INC.
 WELL : #1-18
 GAUGE # : 13552
 DATE : 9/ 1/88

FIELD : HAHN
 JOB # : 13020
 DEPTH : 4470
 TEST :

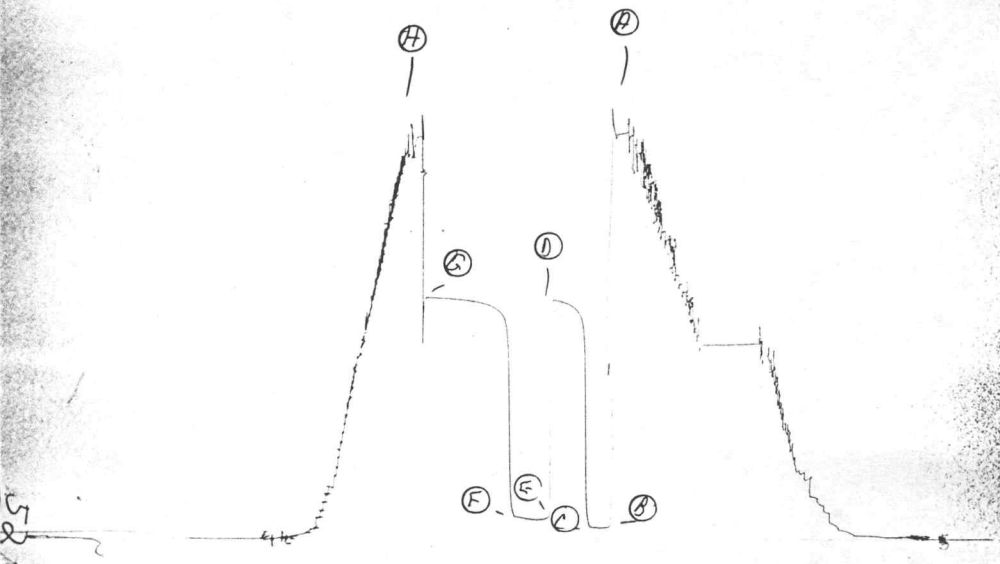
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P $P_i - P(i-1)$
1	6:15:0	0.000	62.000	117.00	0.000
2	6:19:59	0.083	62.000	117.00	0.000
3	6:25:0	0.167	62.000	117.00	0.000
4	6:30:0	0.250	64.000	117.00	2.000
5	6:33:0	0.300	400.000	117.00	336.000
6	6:36:0	0.350	942.000	117.00	542.000
7	6:39:0	0.400	1150.000	117.00	208.000
8	6:42:0	0.450	1198.000	117.00	48.000
9	6:45:0	0.500	1220.000	117.00	22.000
10	6:48:0	0.550	1233.000	117.00	13.000
11	6:51:0	0.600	1243.000	117.00	10.000
12	6:54:0	0.650	1251.000	117.00	8.000
13	6:57:0	0.700	1257.000	117.00	6.000
14	7:0:0	0.750	1262.000	117.00	5.000
15	7:1:0	0.767	107.000	117.00	-1155.000
16	7:4:59	0.833	107.000	117.00	0.000
17	7:10:0	0.917	107.000	117.00	0.000
18	7:15:0	1.000	108.000	117.00	1.000
19	7:19:59	1.083	114.000	117.00	6.000
20	7:25:0	1.167	119.000	117.00	5.000
21	7:28:0	1.217	214.000	117.00	95.000
22	7:31:0	1.267	709.000	117.00	495.000
23	7:34:0	1.317	1083.000	117.00	374.000
24	7:37:0	1.367	1174.000	117.00	91.000
25	7:40:0	1.417	1203.000	117.00	29.000
26	7:43:0	1.467	1217.000	117.00	14.000
27	7:46:0	1.517	1230.000	117.00	13.000
28	7:49:0	1.567	1239.000	117.00	9.000
29	7:52:0	1.617	1246.000	117.00	7.000
30	7:55:0	1.667	1251.000	117.00	5.000
31	7:58:0	1.717	1255.000	117.00	4.000
32	8:1:0	1.767	1258.000	117.00	3.000
33	8:4:0	1.817	1262.000	117.00	4.000
34	8:7:0	1.867	1265.000	117.00	3.000
35	8:10:0	1.917	1267.000	117.00	2.000
36	8:13:0	1.967	1269.000	117.00	2.000
37	8:16:0	2.017	1271.000	117.00	2.000
38	8:19:0	2.067	1273.000	117.00	2.000
39	8:22:0	2.117	1274.000	117.00	1.000
40	8:25:0	2.167	1275.000	117.00	1.000
41	8:28:0	2.217	1276.000	117.00	1.000
42	8:31:0	2.267	1277.000	117.00	1.000
43	8:34:0	2.317	1278.000	117.00	1.000

WESTERN TESTING CO. INC.

KT 13020

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KT 13020

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY BEREXCO, INC. LEASE & WELL NO. HAHN #1-18 SEC. 18 TWP. 23S RGE. 32W TEST NO. 3 DATE 1/12/88

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 1-12-88
CUSTOMER : BEREXCO INC.
WELL : #1-18 TEST: 3
ELEVATION : 2855
SECTION : 18
RANGE : 32W COUNTY : FINNEY
GAUGE SN# : 13552 RANGE : 4050
TICKET : 13021
LEASE : HAHN
GEOLOGIST : C. SPRADLIN
FORMATION : ST. LOUIS
TOWNSHIP : 23S
STATE : KS
CLOCK : 12

INTERVAL FROM : 4813 TO : 4834 TOTAL DEPTH : 4950
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4808 SIZE : 6.63
PACKER DEPTH : 4813 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : BEREDCO #4
MUD TYPE : CHEMICAL VISCOSITY : 60
WEIGHT : 9.3 WATER LOSS (CC) : 5.6
CHLORIDES (PPM) : 1100
JARS-MAKE : WTC SERIAL NUMBER : 420
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 530 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 4254 FT I.D. inch : 3.80
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 21 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5FH

BLOW COMMENT #1 : WEAK BLOW THROUGHOUT INITIAL FLOW PERIOD.
BLOW COMMENT #2 : NO BLOW ON FINAL FLOW PERIOD.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 20 FT OF: DRILLING MUD

Total Barrels Fluid = 0.10
Total Fluid Prod Rate = 1.89 BFPD
Indicated Wtr Rate = 0.19 BWPD

REMARK 1 :
REMARK 2 : 116 FT. OF TAIL PIPE
REMARK 3 :
REMARK 4 :

SET PACKER(S) :	6:45 AM	TIME STARTED OFF BOTTOM :	9:30 AM
WELL TEMPERATURE :	119		
INITIAL HYDROSTATIC PRESSURE		(A)	2406
INITIAL FLOW PERIOD MIN:	15	(B)	65 PSI TO (C) : 40
INITIAL CLOSED IN PERIOD MIN:	36	(D)	1231
FINAL FLOW PERIOD MIN:	60	(E)	40 PSI TO (F) : 40
FINAL CLOSED IN PERIOD MIN:	120	(G)	1282
FINAL HYDROSTATIC PRESSURE		(H)	2381

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : BEREXCO INC.
RIG : FINNEY-KS
FIELD : HAHN
WELL : #1-18
DATE : 1-12-88
GAUGE NO : 13552

OPERATIONAL COMMENTS

116 FT. OF TAIL PIPE

COMPANY : BEREXCO INC.
 WELL : #1-18
 GAUGE # : 13552
 DATE : 12/ 1/88

FIELD : HAHN-
 JOB # : 13021
 DEPTH : 4950
 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P $P_i - P_{(i-1)}$
1	6:45: 0	0.000	65.000	119.00	0.000
2	6:49:59	0.083	51.000	119.00	-14.000
3	6:55: 0	0.167	44.000	119.00	-7.000
4	7: 0: 0	0.250	40.000	119.00	-4.000
5	7: 3: 0	0.300	144.000	119.00	104.000
6	7: 6: 0	0.350	663.000	119.00	519.000
7	7: 9: 0	0.400	894.000	119.00	231.000
8	7:12: 0	0.450	961.000	119.00	67.000
9	7:15: 0	0.500	1057.000	119.00	96.000
10	7:18: 0	0.550	1118.000	119.00	61.000
11	7:21: 0	0.600	1152.000	119.00	34.000
12	7:24: 0	0.650	1181.000	119.00	29.000
13	7:27: 0	0.700	1196.000	119.00	15.000
14	7:30: 0	0.750	1217.000	119.00	21.000
15	7:33: 0	0.800	1227.000	119.00	10.000
16	7:36: 0	0.850	1231.000	119.00	4.000
17	7:37: 0	0.867	40.000	119.00	-1191.000
18	7:40:59	0.933	40.000	119.00	0.000
19	7:46: 0	1.017	40.000	119.00	0.000
20	7:51: 0	1.100	40.000	119.00	0.000
21	7:55:59	1.183	40.000	119.00	0.000
22	8: 1: 0	1.267	40.000	119.00	0.000
23	8: 6: 0	1.350	40.000	119.00	0.000
24	8:10:59	1.433	40.000	119.00	0.000
25	8:16: 0	1.517	40.000	119.00	0.000
26	8:21: 0	1.600	40.000	119.00	0.000
27	8:25:59	1.683	40.000	119.00	0.000
28	8:31: 0	1.767	40.000	119.00	0.000
29	8:36: 0	1.850	40.000	119.00	0.000
30	8:39: 0	1.900	416.000	119.00	376.000
31	8:42: 0	1.950	681.000	119.00	265.000
32	8:45: 0	2.000	876.000	119.00	195.000
33	8:48: 0	2.050	968.000	119.00	92.000
34	8:51: 0	2.100	1028.000	119.00	60.000
35	8:54: 0	2.150	1075.000	119.00	47.000
36	8:57: 0	2.200	1106.000	119.00	31.000
37	9: 0: 0	2.250	1128.000	119.00	22.000
38	9: 3: 0	2.300	1150.000	119.00	22.000
39	9: 6: 0	2.350	1167.000	119.00	17.000
40	9: 9: 0	2.400	1178.000	119.00	11.000
41	9:12: 0	2.450	1191.000	119.00	13.000
42	9:15: 0	2.500	1201.000	119.00	10.000
43	9:18: 0	2.550	1210.000	119.00	9.000
44	9:21: 0	2.600	1217.000	119.00	7.000
45	9:24: 0	2.650	1225.000	119.00	8.000
46	9:27: 0	2.700	1231.000	119.00	6.000
47	9:30: 0	2.750	1236.000	119.00	5.000
48	9:33: 0	2.800	1239.000	119.00	3.000
49	9:36: 0	2.850	1243.000	119.00	4.000
50	9:39: 0	2.900	1247.000	119.00	4.000
51	9:42: 0	2.950	1250.000	119.00	3.000
52	9:45: 0	3.000	1254.000	119.00	4.000

COMPANY : BEREXCO INC.

WELL : #1-18

GAUGE # : 13552

DATE : 12/ 1/88

FIELD : HAHN

JOB # : 13021

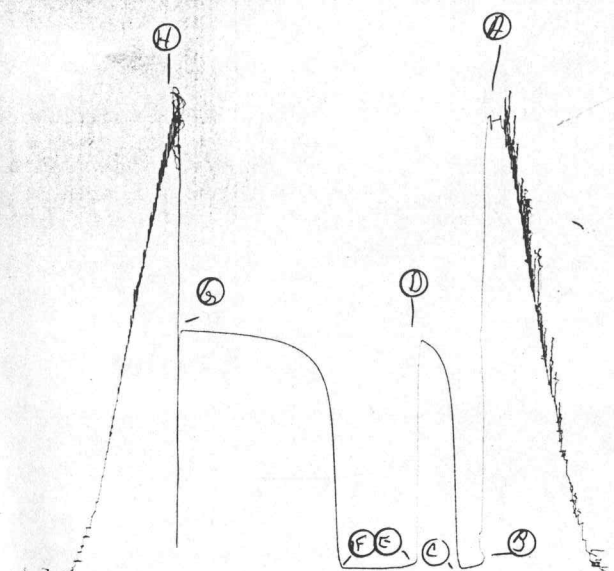
DEPTH : 4950

TEST :

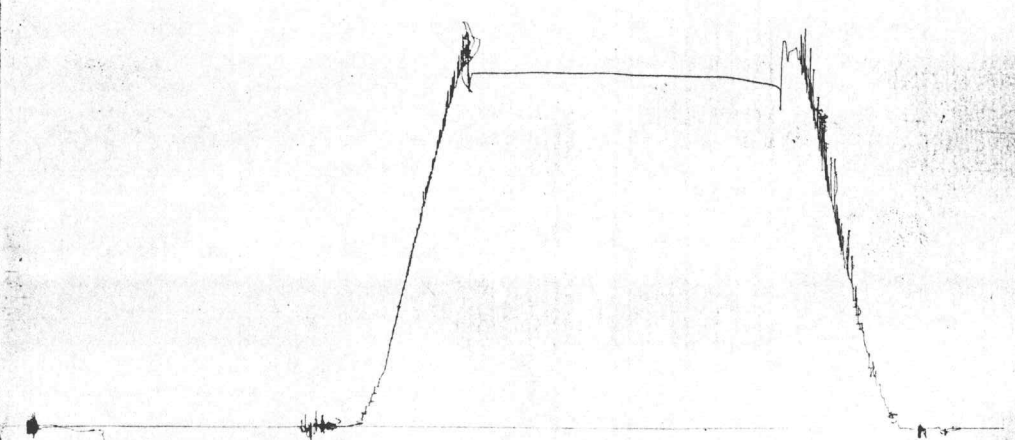
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	9:48: 0	3.050	1256.000	119.00	2.000
54	9:51: 0	3.100	1258.000	119.00	2.000
55	9:54: 0	3.150	1260.000	119.00	2.000
56	9:57: 0	3.200	1262.000	119.00	2.000
57	10: 0: 0	3.250	1264.000	119.00	2.000
58	10: 3: 0	3.300	1266.000	119.00	2.000
59	10: 6: 0	3.350	1268.000	119.00	2.000
60	10: 9: 0	3.400	1270.000	119.00	2.000
61	10:12: 0	3.450	1272.000	119.00	2.000
62	10:15: 0	3.500	1274.000	119.00	2.000
63	10:18: 0	3.550	1276.000	119.00	2.000
64	10:21: 0	3.600	1277.000	119.00	1.000
65	10:24: 0	3.650	1278.000	119.00	1.000
66	10:27: 0	3.700	1279.000	119.00	1.000
67	10:30: 0	3.750	1280.000	119.00	1.000
68	10:33: 0	3.800	1281.000	119.00	1.000
69	10:36: 0	3.850	1282.000	119.00	1.000

WESTERN TESTING CO. INC.

TK4 BDD1 16
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TK4 BDD1 16
Below Straddle



TK4 BDD1 16
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