

# FORMATION TEST REPORT



Home Office:

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MPANY GRAVES DRILLING & BANKS OIL LEASE & WELL NO. PACKARD #2 SEC. 15 TWP. 31S RGE. 13W TEST NO. DATE 11-13-87  
CO.

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE : 11-13-87 TICKET : 11580  
CUSTOMER : GRAVES DRILLING CO INC & BANKS OIL CO  
LEASE : PACKARD  
WELL : #2 TEST: 1 GEOLOGIST : S. BANKS  
ELEVATION : - FORMATION : MISSISSIPPI  
SECTION : 15 TOWNSHIP : 31S  
RANGE : 13W COUNTY : BARBER STATE : KANSAS  
GAUGE SN# : 4376 RANGE : 4000 CLOCK : 12

INTERVAL FROM : 4202 TO : 4243 TOTAL DEPTH : 4243  
DEPTH OF SELECTIVE ZONE :  
PACKER DEPTH : 4197 SIZE : 6.63  
PACKER DEPTH : 4202 SIZE : 6.63  
PACKER DEPTH : SIZE :  
PACKER DEPTH : SIZE :

DRILLING CON. : DUKE RIG #2  
MUD TYPE : STARCH VISCOSITY : 42  
WEIGHT : 9.8 WATER LOSS (CC) : 12.8  
CHLORIDES (PPM) : 21000  
JARS-MAKE : WTC SERIAL NUMBER : 420  
DID WELL FLOW ? : NO REVERSED OUT ? : YES

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00  
WEIGHT PIPE LENGTH : 300 FT I.D. inch : 2.70  
DRILL PIPE LENGTH : 3873 FT I.D. inch : 3.80  
TEST TOOL LENGTH : 29 FT TOOL SIZE : 5.50  
ANCHOR LENGTH : 41 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 :  
BLOW COMMENT #2 :  
BLOW COMMENT #3 :  
BLOW COMMENT #4 :

RECOVERED : 240 FT OF: MUDDY WATER  
RECOVERED : 3180 FT OF: SALT WATER

CHLORIDES: 123000 PPM

Total Barrels Fluid = 45.89  
Total Fluid Prod Rate = 550.64 BFPD  
Indicated Wtr Rate = 531.32 BWPD

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

SET PACKER(S) : 5:30 AM

TIME STARTED OFF BOTTOM : 9:15 AM

WELL TEMPERATURE : 126

INITIAL HYDROSTATIC PRESSURE

(A) 2251

INITIAL FLOW PERIOD MIN: 30

(B) 972 PSI TO (C) : 1474

INITIAL CLOSED IN PERIOD MIN: 45

(D) 1678

FINAL FLOW PERIOD MIN: 90

(E) 1554 PSI TO (F) : 1687

FINAL CLOSED IN PERIOD MIN: 54

(G) 1688

FINAL HYDROSTATIC PRESSURE

(H) 2225

WESTERN TESTING CO. INC.  
WICHITA - KANSAS

Pressure Transient Report  
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COMPANY : GRAVES DRILLING CO INC & BANKS OIL CO  
RIG : BARBER-KANSAS  
FIELD : PACKARD  
WELL : #2  
DATE : 11-13-87  
GAUGE NO : 4376

OPERATIONAL COMMENTS

COMPANY : GRAVES DRILLING CO INC & BANKS OIL CO

FIELD : PACKARD

WELL : #2

JOB # : 11580

GAUGE # : 4376

DEPTH : 4243

DATE : 13/11/87

TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P P1-P(1-1)
1	5:30:00	0.000	972.000	126.00	0.000
2	5:34:59	0.083	996.000	126.00	24.000
3	5:40:00	0.167	1103.000	126.00	107.000
4	5:45:00	0.250	1217.000	126.00	114.000
5	5:49:59	0.333	1329.000	126.00	112.000
6	5:55:00	0.417	1416.000	126.00	87.000
7	6:00:00	0.500	1474.000	126.00	58.000
8	6:03:00	0.550	1635.000	126.00	161.000
9	6:06:00	0.600	1651.000	126.00	16.000
10	6:09:00	0.650	1657.000	126.00	6.000
11	6:12:00	0.700	1664.000	126.00	7.000
12	6:15:00	0.750	1666.000	126.00	2.000
13	6:18:00	0.800	1667.000	126.00	1.000
14	6:21:00	0.850	1668.000	126.00	1.000
15	6:24:00	0.900	1669.000	126.00	1.000
16	6:27:00	0.950	1671.000	126.00	2.000
17	6:30:00	1.000	1674.000	126.00	3.000
18	6:33:00	1.050	1676.000	126.00	2.000
19	6:36:00	1.100	1677.000	126.00	1.000
20	6:39:00	1.150	1678.000	126.00	1.000
21	6:42:00	1.200	1678.000	126.00	0.000
22	6:45:00	1.250	1678.000	126.00	0.000
23	6:46:00	1.267	1554.000	126.00	-124.000
24	6:49:59	1.333	1569.000	126.00	15.000
25	6:55:00	1.417	1607.000	126.00	38.000
26	7:00:00	1.500	1637.000	126.00	30.000
27	7:04:59	1.583	1652.000	126.00	15.000
28	7:10:00	1.667	1663.000	126.00	11.000
29	7:15:00	1.750	1672.000	126.00	9.000
30	7:19:59	1.833	1679.000	126.00	7.000
31	7:25:00	1.917	1681.000	126.00	2.000
32	7:30:00	2.000	1682.000	126.00	1.000
33	7:34:59	2.083	1682.000	126.00	0.000
34	7:40:00	2.167	1682.000	126.00	0.000
35	7:45:00	2.250	1682.000	126.00	0.000
36	7:49:59	2.333	1682.000	126.00	0.000
37	7:55:00	2.417	1682.000	126.00	0.000
38	8:00:00	2.500	1682.000	126.00	0.000
39	8:04:59	2.583	1683.000	126.00	1.000
40	8:10:00	2.667	1685.000	126.00	2.000
41	8:15:00	2.750	1687.000	126.00	2.000
42	8:18:00	2.800	1687.000	126.00	0.000
43	8:21:00	2.850	1687.000	126.00	0.000
44	8:24:00	2.900	1687.000	126.00	0.000
45	8:27:00	2.950	1687.000	126.00	0.000
46	8:30:00	3.000	1687.000	126.00	0.000
47	8:33:00	3.050	1687.000	126.00	0.000
48	8:36:00	3.100	1687.000	126.00	0.000
49	8:39:00	3.150	1687.000	126.00	0.000
50	8:42:00	3.200	1687.000	126.00	0.000
51	8:45:00	3.250	1687.000	126.00	0.000
52	8:48:00	3.300	1687.000	126.00	0.000

COMPANY : GRAVES DRILLING CO INC & BANKS OIL CO

FIELD : PACKARD

WELL : #2

JOB # : 11580

GAUGE # : 4376

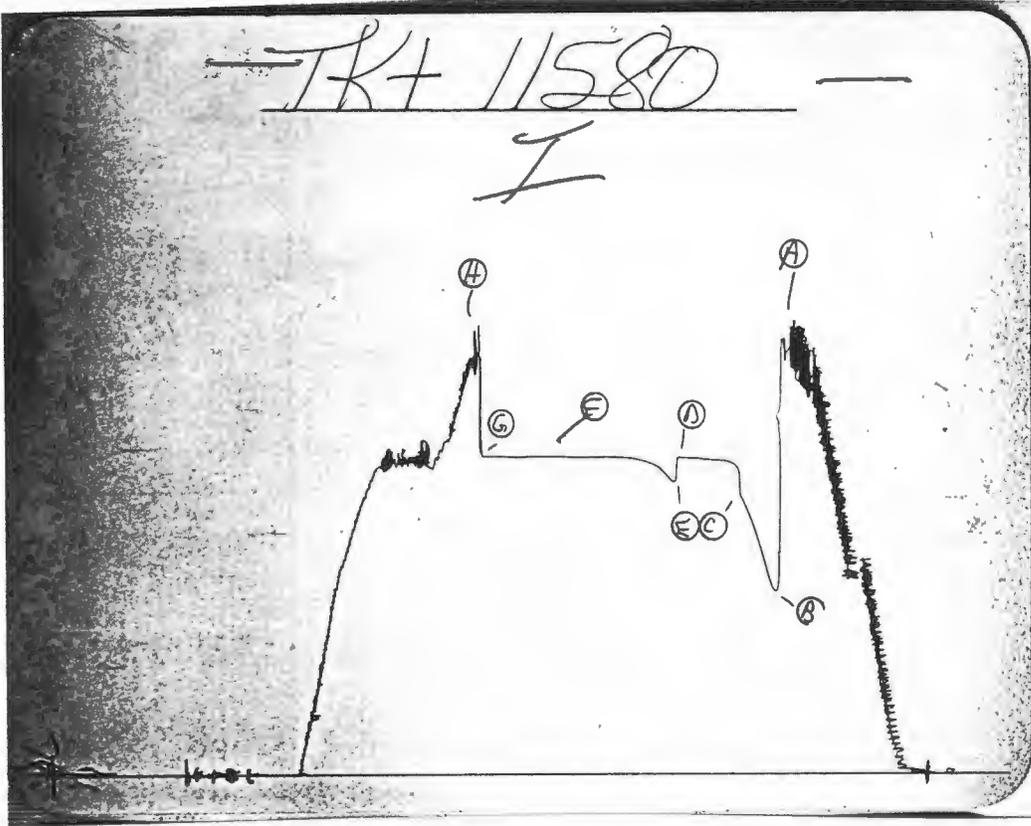
DEPTH : 4243

DATE : 13/11/87

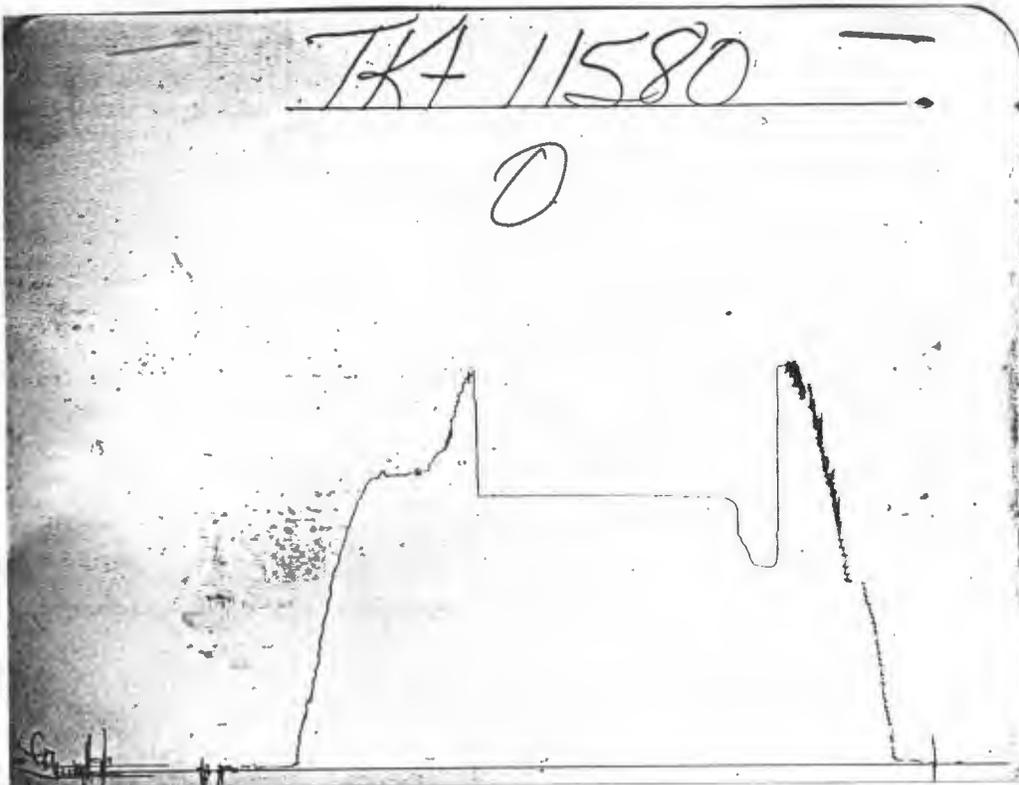
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	8:51: 0	3.350	1687.000	126.00	0.000
54	8:54: 0	3.400	1688.000	126.00	1.000
55	8:57: 0	3.450	1688.000	126.00	0.000
56	9: 0: 0	3.500	1688.000	126.00	0.000
57	9: 3: 0	3.550	1688.000	126.00	0.000
58	9: 6: 0	3.600	1688.000	126.00	0.000
59	9: 9: 0	3.650	1688.000	126.00	0.000

WESTERN TESTING CO. INC.



Inside Recorder

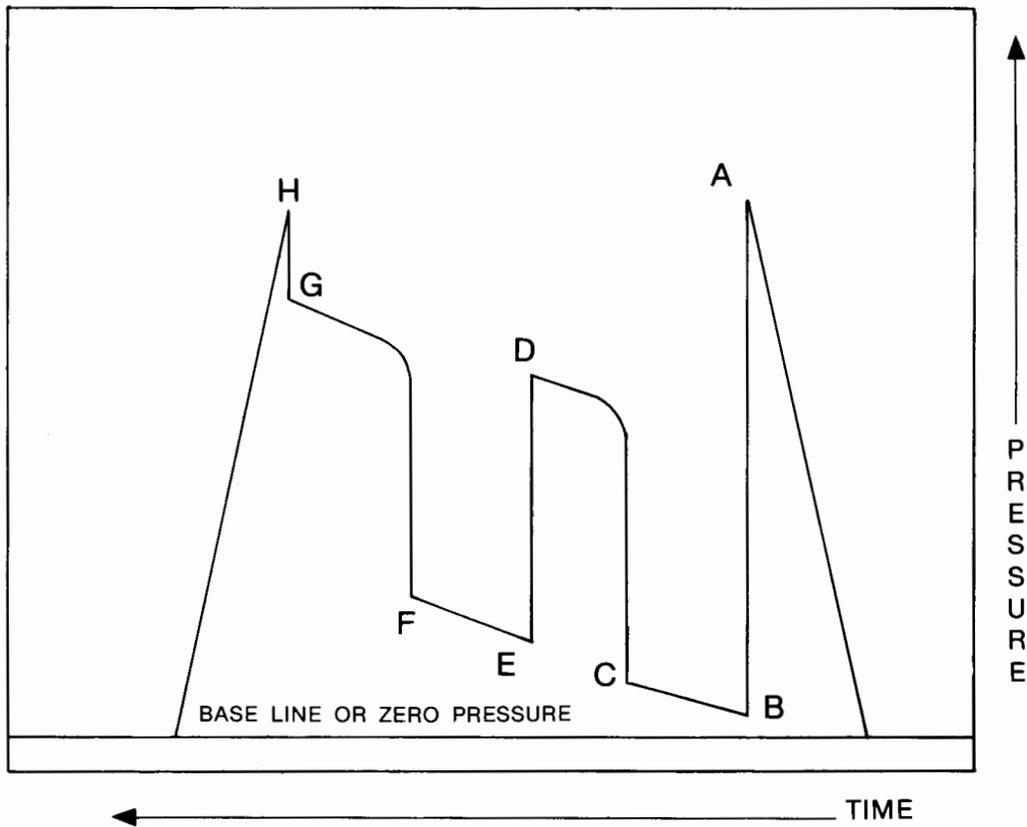


Outside Recorder

### COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

### AK-1 Recorders



A - Initial Hydrostatic

B - First Initial Flow

C - First Final Flow

D - Initial Shut-In

E - Second Initial Flow

F - Second Final Flow

G - Final Shut-In

H - Final Hydrostatic