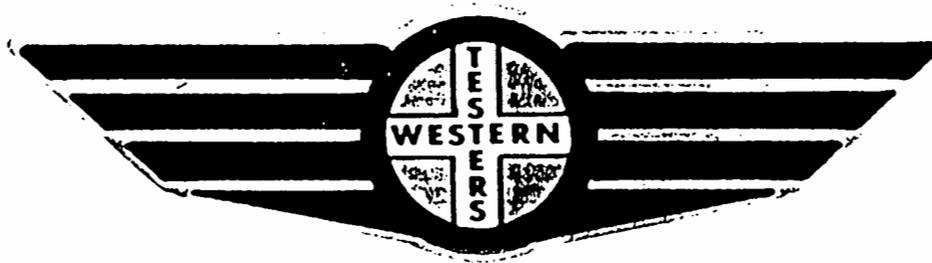


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY _____ TXO PRODUCTION CORP. _____ LEASE & WELL NO. _____ PIESTER #2 _____ SEC. 24 _____ TWP. 29S RGE. 16W TEST NO. 1 _____ DATE 8/17/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 8-17-87 TICKET : 11772
CUSTOMER : TXO PRODUCTION CORP. LEASE : PIESTER
WELL : #2 TEST: 1 GEOLOGIST : R. CRAVENS
ELEVATION : NA FORMATION : VIOLA
SECTION : 24 TOWNSHIP : 29S
RANGE : 16W COUNTY : KIOWA STATE : KANSAS
GAUGE SN# : 13549 RANGE : 4100 CLOCK : 12

INTERVAL FROM : 4850 TO : 4886 TOTAL DEPTH : 4950
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4855 SIZE : 6.63
PACKER DEPTH : 4850 SIZE : 6.63
PACKER DEPTH : 4886 SIZE : 6.63
PACKER DEPTH : SIZE :

DRILLING CON. : H-30 RIG #7
MUD TYPE : CHEMICAL VISCOSITY : 45
WEIGHT : 9.5 WATER LOSS (CC) : 20.4
CHLORIDES (PPM) : 16000
JARS-MAKE : WTC SERIAL NUMBER : 411
DID WELL FLOW ? : REVERSED OUT ? :

DRILL COLLAR LENGTH : 60 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 0 FT I.D. inch : 0.00
DRILL PIPE LENGTH : 4762 FT I.D. inch : 3.80
TEST TOOL LENGTH : 28 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 36 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 : INITIAL FLOW-STRONG BLOW-OFF BOTTOM IN 1 MINUTE.
BLOW COMMENT #2 : FINAL FLOW-STRONG BLOW-OFF BOTTOM IN 2 MINUTES.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 3100 FT OF: SALT WATER

CHLORIDES: 98000 PPM

Total Barrels Fluid = 42.94
Total Fluid Prod Rate = 824.35 BFPD
Indicated Wtr Rate = 824.35 BWPD

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

SET PACKER(S) : 3:15 PM

TIME STARTED OFF BOTTOM : 7:00 PM

WELL TEMPERATURE : 137

INITIAL HYDROSTATIC PRESSURE

(A) 2469

INITIAL FLOW PERIOD MIN: 30

(B) 410 PSI TO (C) : 1076

INITIAL CLOSED IN PERIOD MIN: 60

(D) 1527

FINAL FLOW PERIOD MIN: 45

(E) 1189 PSI TO (F) : 1492

FINAL CLOSED IN PERIOD MIN: 96

(G) 1549

FINAL HYDROSTATIC PRESSURE

(H) 2436

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : TXO PRODUCTION CORP.
RIG : KIOWA-KANSAS
FIELD : PIESTER
WELL : #2
DATE : 8-17-87
GAUGE NO : 13549

OPERATIONAL COMMENTS

COMPANY : TXO PRODUCTION CORP.
WELL : #2
GAUGE # : 13549
DATE : 17/ 8/87

FIELD : PIESTER
JOB # : 11772
DEPTH : 4950
TEST :

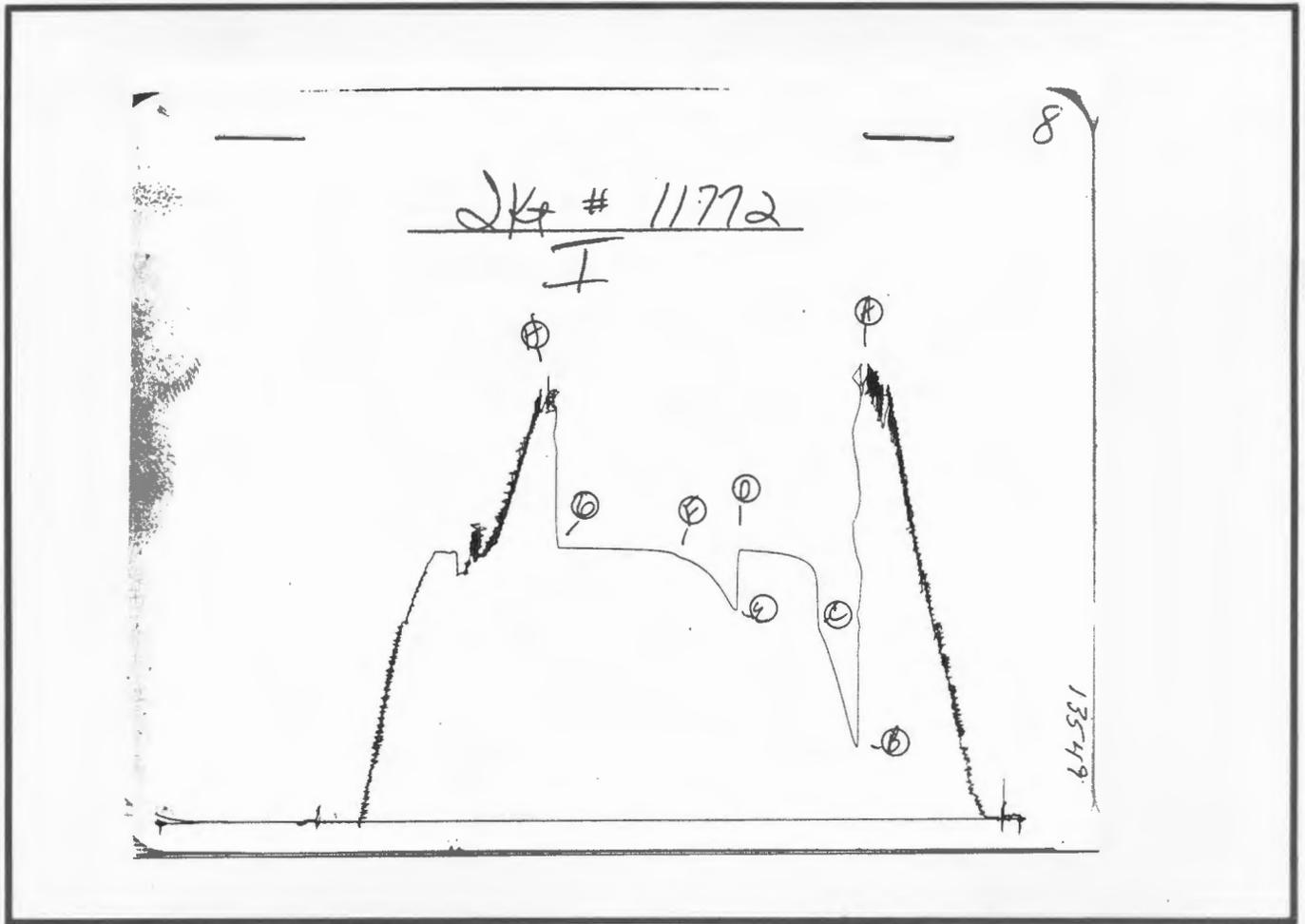
DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
1	3:15: 0	0.000	410.000	137.00	0.000
2	3:19:59	0.083	497.000	137.00	87.000
3	3:25: 0	0.167	633.000	137.00	136.000
4	3:30: 0	0.250	770.000	137.00	137.000
5	3:34:59	0.333	889.000	137.00	119.000
6	3:40: 0	0.417	998.000	137.00	109.000
7	3:45: 0	0.500	1076.000	137.00	78.000
8	3:48: 0	0.550	1391.000	137.00	315.000
9	3:51: 0	0.600	1432.000	137.00	41.000
10	3:54: 0	0.650	1453.000	137.00	21.000
11	3:57: 0	0.700	1465.000	137.00	12.000
12	4: 0: 0	0.750	1476.000	137.00	11.000
13	4: 3: 0	0.800	1484.000	137.00	8.000
14	4: 6: 0	0.850	1492.000	137.00	8.000
15	4: 9: 0	0.900	1498.000	137.00	6.000
16	4:12: 0	0.950	1502.000	137.00	4.000
17	4:15: 0	1.000	1506.000	137.00	4.000
18	4:18: 0	1.050	1509.000	137.00	3.000
19	4:21: 0	1.100	1511.000	137.00	2.000
20	4:24: 0	1.150	1513.000	137.00	2.000
21	4:27: 0	1.200	1515.000	137.00	2.000
22	4:30: 0	1.250	1517.000	137.00	2.000
23	4:33: 0	1.300	1519.000	137.00	2.000
24	4:36: 0	1.350	1521.000	137.00	2.000
25	4:39: 0	1.400	1523.000	137.00	2.000
26	4:42: 0	1.450	1525.000	137.00	2.000
27	4:45: 0	1.500	1527.000	137.00	2.000
28	4:46: 0	1.517	1189.000	137.00	-338.000
29	4:49:59	1.583	1219.000	137.00	30.000
30	4:55: 0	1.667	1287.000	137.00	68.000
31	5: 0: 0	1.750	1338.000	137.00	51.000
32	5: 4:59	1.833	1381.000	137.00	43.000
33	5:10: 0	1.917	1416.000	137.00	35.000
34	5:15: 0	2.000	1443.000	137.00	27.000
35	5:19:59	2.083	1463.000	137.00	20.000
36	5:25: 0	2.167	1480.000	137.00	17.000
37	5:30: 0	2.250	1492.000	137.00	12.000
38	5:33: 0	2.300	1510.000	137.00	18.000
39	5:36: 0	2.350	1517.000	137.00	7.000
40	5:39: 0	2.400	1522.000	137.00	5.000
41	5:42: 0	2.450	1525.000	137.00	3.000
42	5:45: 0	2.500	1528.000	137.00	3.000
43	5:48: 0	2.550	1530.000	137.00	2.000
44	5:51: 0	2.600	1532.000	137.00	2.000
45	5:54: 0	2.650	1534.000	137.00	2.000
46	5:57: 0	2.700	1536.000	137.00	2.000
47	6: 0: 0	2.750	1538.000	137.00	2.000
48	6: 3: 0	2.800	1539.000	137.00	1.000
49	6: 6: 0	2.850	1540.000	137.00	1.000
50	6: 9: 0	2.900	1541.000	137.00	1.000
51	6:12: 0	2.950	1542.000	137.00	1.000
52	6:15: 0	3.000	1543.000	137.00	1.000

COMPANY : TXO PRODUCTION CORP.
WELL : #2
GAUGE # : 13549
DATE : 17/ 8/87

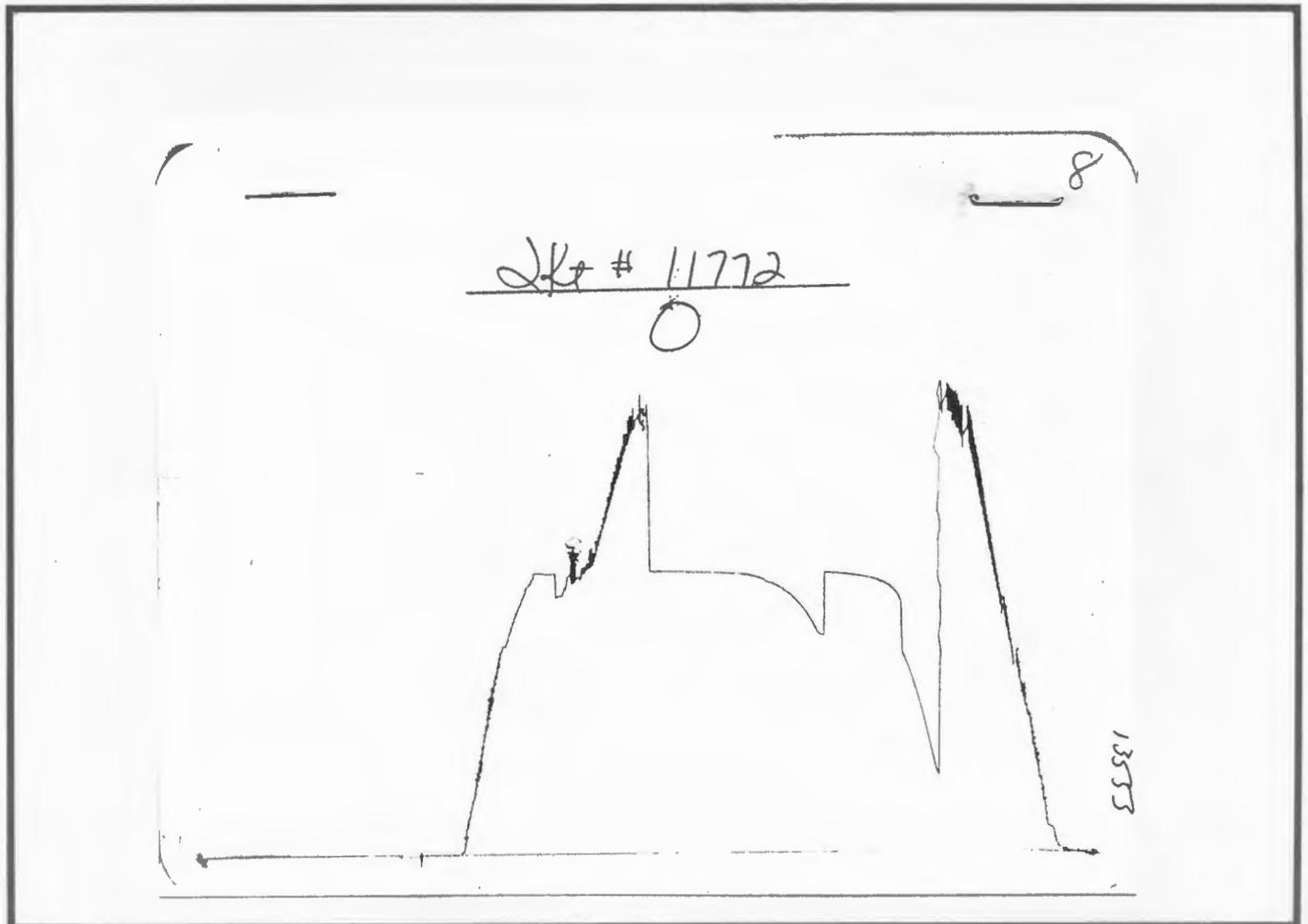
FIELD : PIESTER
JOB # : 11772
DEPTH : 4950
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
53	6:18:0	3.050	1544.000	137.00	1.000
54	6:21:0	3.100	1545.000	137.00	1.000
55	6:24:0	3.150	1546.000	137.00	1.000
56	6:27:0	3.200	1547.000	137.00	1.000
57	6:30:0	3.250	1548.000	137.00	1.000
58	6:33:0	3.300	1549.000	137.00	1.000
59	6:36:0	3.350	1549.000	137.00	0.000
60	6:39:0	3.400	1549.000	137.00	0.000
61	6:42:0	3.450	1549.000	137.00	0.000
62	6:45:0	3.500	1549.000	137.00	0.000
63	6:48:0	3.550	1549.000	137.00	0.000
64	6:51:0	3.600	1549.000	137.00	0.000
65	6:54:0	3.650	1549.000	137.00	0.000
66	6:57:0	3.700	1549.000	137.00	0.000
67	7:0:0	3.750	1549.000	137.00	0.000
68	7:3:0	3.800	1549.000	137.00	0.000
69	7:6:0	3.850	1549.000	137.00	0.000

WESTERN TESTING CO. INC.



Inside Recorder



Outside Recorder