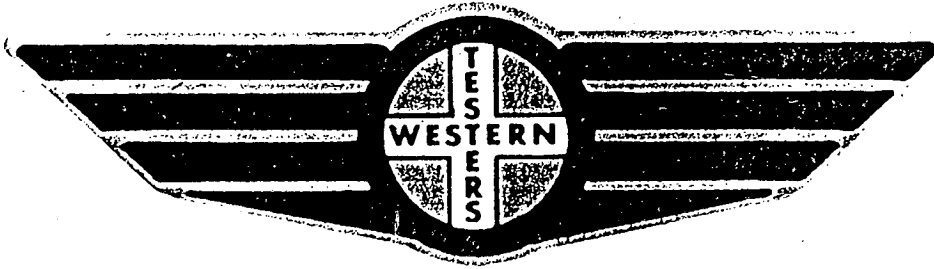


15-065 22569-00-00

FORMATION TEST REPORT



Home Office:
P.O. Box 1599

Wichita, Kansas 67201
Phone (316) 262-5861

COMPANY IMPERIAL OIL PROPERTIES INC LEASE & WELL NO. SANGER #1 SEC. 7 TWP. 8S RGE. 24W TEST NO. 1 DATE 5/22/90

15-065-22569-00-00

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 5-27-90 TICKET : 15778
CUSTOMER : IMPERIAL OIL PROPERTIES INC. LEASE : SANGER
WELL : #1 TEST: 1 GEOLOGIST : CAULK
ELEVATION : 2358 K.B. FORMATION : LOWER K.C.
SECTION : 7 TOWNSHIP : 8S
RANGE : 24W COUNTY : GRAHAM STATE : KANSAS
GAUGE SN# : 6233 RANGE : 4000 CLOCK : 12

INTERVAL FROM : 3700 TO : 3724 TOTAL DEPTH : 3724
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 3695 SIZE : 6.75
PACKER DEPTH : 3700 SIZE : 6.75
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : ABERCROMBIE RIG #4
MUD TYPE : MONPAC VISCOSITY : 46
WEIGHT : 9.4 WATER LOSS (CC) : 9.6
CHLORIDES (PPM) : 1000
JARS-MAKE : NO SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 498 FT I.D. inch : 3.20
DRILL PIPE LENGTH : 3182 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 24 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5XH

BLOW COMMENT #1 : INITIAL FLOW PERIOD WEAK BLOW.
BLOW COMMENT #2 : 1/4 INCH IN WATER
BLOW COMMENT #3 : FINAL FLOW PERIOD WEAK BLOW.
BLOW COMMENT #4 : TOP OF BUCKET.

15-065-22569-00-00

COMPANY : IMPERIAL OIL PROPERTIES INC. FIELD : SANGER
 WELL : #1 JOB # : 15778
 GAUGE # : 6233 DEPTH : 3724
 DATE : 27/ 5/90 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
INITIAL FLOW PERIOD					
2	6:25: 0	0.000	30.000	116.00	0.000
3	6:29:59	0.083	30.000	116.00	0.000
4	6:35: 0	0.167	30.000	116.00	0.000
5	6:40: 0	0.250	30.000	116.00	0.000
6	6:44:59	0.333	32.000	116.00	2.000
7	6:50: 0	0.417	34.000	116.00	2.000
8	6:55: 0	0.500	35.000	116.00	1.000
INITIAL SHUT-IN PERIOD					
9	6:58: 0	0.550	301.000	116.00	266.000
10	7: 1: 0	0.600	759.000	116.00	458.000
11	7: 4: 0	0.650	932.000	116.00	173.000
12	7: 7: 0	0.700	992.000	116.00	60.000
13	7:10: 0	0.750	1026.000	116.00	34.000
14	7:13: 0	0.800	1049.000	116.00	23.000
15	7:16: 0	0.850	1064.000	116.00	15.000
16	7:19: 0	0.900	1074.000	116.00	10.000
17	7:22: 0	0.950	1084.000	116.00	10.000
18	7:25: 0	1.000	1095.000	116.00	11.000
FINAL FLOW PERIOD					
19	7:26: 0	1.017	45.000	116.00	-1050.000
20	7:29:59	1.083	45.000	116.00	0.000
21	7:35: 0	1.167	45.000	116.00	0.000
22	7:40: 0	1.250	45.000	116.00	0.000
23	7:44:59	1.333	46.000	116.00	1.000
24	7:50: 0	1.417	47.000	116.00	1.000
25	7:55: 0	1.500	48.000	116.00	1.000
26	7:59:59	1.583	49.000	116.00	1.000
27	8: 5: 0	1.667	50.000	116.00	1.000
28	8:10: 0	1.750	52.000	116.00	2.000
FINAL SHUT-IN PERIOD					
29	8:13: 0	1.800	342.000	116.00	290.000
30	8:16: 0	1.850	747.000	116.00	405.000
31	8:19: 0	1.900	900.000	116.00	153.000
32	8:22: 0	1.950	960.000	116.00	60.000
33	8:25: 0	2.000	997.000	116.00	37.000
34	8:28: 0	2.050	1019.000	116.00	22.000
35	8:31: 0	2.100	1035.000	116.00	16.000
36	8:34: 0	2.150	1048.000	116.00	13.000
37	8:37: 0	2.200	1059.000	116.00	11.000
38	8:40: 0	2.250	1066.000	116.00	7.000
39	8:43: 0	2.300	1075.000	116.00	9.000
40	8:46: 0	2.350	1079.000	116.00	4.000
41	8:49: 0	2.400	1085.000	116.00	6.000
42	8:52: 0	2.450	1090.000	116.00	5.000
43	8:55: 0	2.500	1093.000	116.00	3.000
44	8:58: 0	2.550	1097.000	116.00	4.000
45	9: 1: 0	2.600	1101.000	116.00	4.000
46	9: 4: 0	2.650	1103.000	116.00	2.000
47	9: 7: 0	2.700	1104.000	116.00	1.000
48	9:10: 0	2.750	1104.000	116.00	0.000

15-065-22569-00-00

RECOVERED : 65 FT OF: MUD
RECOVERED : 0 FT OF: CHLORIDES 1000 P.P.M.

Total Barrels Fluid = 0.65
Total Fluid Prod Rate = 12.41 BFPD
Indicated Wtr Rate = 1.24 BWPD

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

SET PACKER(S) : 6:25 P.M.

TIME STARTED OFF BOTTOM : 9:10 P.M.

WELL TEMPERATURE : 116

INITIAL HYDROSTATIC PRESSURE

(A) 1934

INITIAL FLOW PERIOD MIN: 30

(B) 30 PSI TO (C) : 35

INITIAL CLOSED IN PERIOD MIN: 30

(D) 1095

FINAL FLOW PERIOD MIN: 45

(E) 45 PSI TO (F) : 52

FINAL CLOSED IN PERIOD MIN: 63

(G) 1104

FINAL HYDROSTATIC PRESSURE

(H) 1886

15-005-22569-00-00

COMPANY : IMPERIAL OIL PROPERTIES INC. FIELD : SANGER
WELL : #1 JOB # : 15778
GAUGE # : 6233 DEPTH : 3724
DATE : 27/ 5/90 TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	9:13: 0	2.800	1104.000	116.00	0.000

WESTERN TESTING CO. INC.

15-005-22569-00-00

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : IMPERIAL OIL PROPERTIES INC.
RIG : GRAHAM-KANSAS
FIELD : SANGER
WELL : #1
DATE : 5-27-90
GAUGE NO : 6233

OPERATIONAL COMMENTS