

15-065-22569

7-8-24W

COPY

COMPANY : IMPERIAL OIL PROPERTIES INC.
 WELL : #1
 GAUGE # : 6233
 DATE : 29/ 5/90

FIELD : SANGER
 JOB # : 15780
 DEPTH : 3886
 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	7:35: 0	0.000	30.000	117.00	0.000
3	7:39:59	0.083	30.000	117.00	0.000
4	7:45: 0	0.167	30.000	117.00	0.000
5	7:50: 0	0.250	30.000	117.00	0.000
6	7:54:59	0.333	30.000	117.00	0.000
7	8: 0: 0	0.417	30.000	117.00	0.000
INITIAL SHUT-IN PERIOD					
8	8: 3: 0	0.467	36.000	117.00	6.000
9	8: 6: 0	0.517	52.000	117.00	16.000
10	8: 9: 0	0.567	90.000	117.00	38.000
11	8:12: 0	0.617	153.000	117.00	63.000
12	8:15: 0	0.667	232.000	117.00	79.000
13	8:18: 0	0.717	311.000	117.00	79.000
14	8:21: 0	0.767	389.000	117.00	78.000
15	8:24: 0	0.817	465.000	117.00	76.000
16	8:27: 0	0.867	513.000	117.00	48.000
FINAL FLOW PERIOD					
17	8:28: 0	0.883	30.000	117.00	-483.000
18	8:32: 0	0.950	30.000	117.00	0.000
19	8:37: 0	1.033	30.000	117.00	0.000
20	8:42: 0	1.117	30.000	117.00	0.000
21	8:47: 0	1.200	30.000	117.00	0.000
22	8:52: 0	1.283	30.000	117.00	0.000
23	8:57: 0	1.367	30.000	117.00	0.000
24	9: 2: 0	1.450	30.000	117.00	0.000
25	9: 7: 0	1.533	30.000	117.00	0.000
26	9:12: 0	1.617	30.000	117.00	0.000
27	9:17: 0	1.700	30.000	117.00	0.000
28	9:22: 0	1.783	30.000	117.00	0.000
FINAL SHUT-IN PERIOD					
29	9:25: 0	1.833	32.000	117.00	2.000
30	9:28: 0	1.883	36.000	117.00	4.000
31	9:31: 0	1.933	47.000	117.00	11.000
32	9:34: 0	1.983	54.000	117.00	17.000
33	9:37: 0	2.033	92.000	117.00	28.000
34	9:40: 0	2.083	134.000	117.00	42.000
35	9:43: 0	2.133	190.000	117.00	56.000
36	9:46: 0	2.183	247.000	117.00	57.000
37	9:49: 0	2.233	309.000	117.00	62.000
38	9:52: 0	2.283	378.000	117.00	69.000
39	9:55: 0	2.333	437.000	117.00	59.000
40	9:58: 0	2.383	505.000	117.00	68.000
41	10: 1: 0	2.433	563.000	117.00	58.000
42	10: 4: 0	2.483	611.000	117.00	48.000
43	10: 7: 0	2.533	662.000	117.00	51.000
44	10:10: 0	2.583	714.000	117.00	52.000
45	10:13: 0	2.633	760.000	117.00	46.000
46	10:16: 0	2.683	799.000	117.00	39.000
47	10:19: 0	2.733	844.000	117.00	45.000
48	10:22: 0	2.783	888.000	117.00	44.000

7-8-24W
COPY

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : IMPERIAL OIL PROPERTIES INC.
RIG : GRAHAM-KANSAS
FIELD : SANGER
WELL : #1
DATE : 5-29-90
GAUGE NO : 6233

OPERATIONAL COMMENTS

7-8-24W
COPY

RECOVERED : 10 FT OF: MUD

Total Barrels Fluid = 0.10
Total Fluid Prod Rate = 1.79 BFPD
Indicated Wtr Rate = 0.18 BWPD

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

SET PACKER(S) : 7:35 A.M.

TIME STARTED OFF BOTTOM : 10:20 A.M.

WELL TEMPERATURE : 117

INITIAL HYDROSTATIC PRESSURE

(A) 2015

INITIAL FLOW PERIOD MIN: 25

(B) 30

PSI TO (C) : 30

INITIAL CLOSED IN PERIOD MIN: 27

(D) 513

FINAL FLOW PERIOD MIN: 55

(E) 30

PSI TO (F) : 30

FINAL CLOSED IN PERIOD MIN: 60

(G) 888

FINAL HYDROSTATIC PRESSURE

(H) 1968

7-8-24W
COPY

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 5 MAR 1993 TICKET : 15780
CUSTOMER : IMPERIAL OIL PROPERTIES INC. LEASE : SANGER
WELL : #1 TEST: 3 GEOLOGIST : CAULK
ELEVATION : 2355 K.F. FORMATION : LOWER K.C.
SECTION : 7 TOWNSHIP : 3S
RANGE : 24W COUNTY : GRAHAM STATE : KANSAS
GAUGE SN# : 6233 RANGE : 4000 CLOCK : 12

INTERVAL FROM : 3827 TO : 3886 TOTAL DEPTH : 3886
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 3822 SIZE : 6.75
PACKER DEPTH : 3827 SIZE : 6.75
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : ABERCROMBIE RIG #4
MUD TYPE : MONPAC VISCOSITY : 41
WEIGHT : 9.7 WATER LOSS (CC) : 11.2
CHLORIDES (PPM) : 2000
JARG-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 : 3309 FT I.D. inch : 3.30
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 59 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 TOP OF WATER-
BLOW COMMENT #2 : DIED IN 20 MINUTES.
BLOW COMMENT #3 : FINAL FLOW PERIOD NO BLOW.
BLOW COMMENT #4 :

COMPANY : IMPERIAL OIL PROPERTIES INC.
WELL : #1
GAUGE # : 6233
DATE : 28/ 5/90

FIELD : SANGER
JOB # : 15779
DEPTH : 3828
TEST :

7-8-24W
COPY

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	6:18: 0	2.800	1132.000	0.00	12.000

WESTERN TESTING CO. INC.

COMPANY : IMPERIAL OIL PROPERTIES INC.
WELL : #1
GAUGE # : 6233
DATE : 28/ 5/90

FIELD : SANGER
JOB # : 15779
DEPTH : 3828
TEST :

7-8-24W
COPY

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P PI-P(1-1)
INITIAL FLOW PERIOD					
2	3:30: 0	0.000	25.000	0.00	0.000
3	3:34:59	0.083	25.000	0.00	0.000
4	3:40: 0	0.167	25.000	0.00	0.000
5	3:45: 0	0.250	25.000	0.00	0.000
6	3:49:59	0.333	25.000	0.00	0.000
7	3:55: 0	0.417	25.000	0.00	0.000
8	4: 0: 0	0.500	25.000	0.00	0.000
INITIAL SHUT-IN PERIOD					
9	4: 3: 0	0.550	91.000	0.00	66.000
10	4: 6: 0	0.600	335.000	0.00	244.000
11	4: 9: 0	0.650	534.000	0.00	199.000
12	4:12: 0	0.700	686.000	0.00	152.000
13	4:15: 0	0.750	799.000	0.00	113.000
14	4:18: 0	0.800	889.000	0.00	90.000
15	4:21: 0	0.850	952.000	0.00	63.000
16	4:24: 0	0.900	1008.000	0.00	56.000
17	4:27: 0	0.950	1050.000	0.00	42.000
18	4:30: 0	1.000	1081.000	0.00	31.000
19	4:33: 0	1.050	1108.000	0.00	27.000
FINAL FLOW PERIOD					
20	4:34: 0	1.067	30.000	0.00	-1078.000
21	4:37:59	1.133	30.000	0.00	0.000
22	4:43: 0	1.217	30.000	0.00	0.000
23	4:48: 0	1.300	30.000	0.00	0.000
24	4:52:59	1.383	30.000	0.00	0.000
25	4:58: 0	1.467	30.000	0.00	0.000
26	5: 3: 0	1.550	30.000	0.00	0.000
27	5: 7:59	1.633	30.000	0.00	0.000
28	5:13: 0	1.717	30.000	0.00	0.000
29	5:18: 0	1.800	30.000	0.00	0.000
FINAL SHUT-IN PERIOD					
30	5:21: 0	1.850	42.000	0.00	12.000
31	5:24: 0	1.900	156.000	0.00	114.000
32	5:27: 0	1.950	309.000	0.00	153.000
33	5:30: 0	2.000	479.000	0.00	170.000
34	5:33: 0	2.050	592.000	0.00	113.000
35	5:36: 0	2.100	700.000	0.00	108.000
36	5:38:59	2.150	775.000	0.00	75.000
37	5:42: 0	2.200	838.000	0.00	63.000
38	5:45: 0	2.250	891.000	0.00	53.000
39	5:48: 0	2.300	932.000	0.00	41.000
40	5:51: 0	2.350	968.000	0.00	36.000
41	5:54: 0	2.400	996.000	0.00	28.000
42	5:56:59	2.450	1023.000	0.00	27.000
43	6: 0: 0	2.500	1043.000	0.00	20.000
44	6: 3: 0	2.550	1060.000	0.00	17.000
45	6: 6: 0	2.600	1078.000	0.00	13.000
46	6: 9: 0	2.650	1095.000	0.00	17.000
47	6:11:59	2.700	1108.000	0.00	13.000
48	6:15: 0	2.750	1120.000	0.00	12.000

7-8-24W
COPY

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : IMPERIAL OIL PROPERTIES INC.
RIG : GRAHAM-KANSAS
FIELD : SANGER
WELL : #1
DATE : 5-28-90
GAUGE NO : 6233

OPERATIONAL COMMENTS

7-8-24W
COPY

RECOVERED : 10 FT OF: MUD W/ FEW SPOTS OIL
RECOVERED : 0 FT OF: ON TOP OF TOOL

Total Barrels Fluid = 0.10
Total Fluid Prod Rate = 1.91 BFPD
Indicated Wtr Rate = 0.19 BWPD

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

SET PACKER(S) : 3:30 P.M.

TIME STARTED OFF BOTTOM : 6:15 P.M.

WELL TEMPERATURE : 0

INITIAL HYDROSTATIC PRESSURE

(A) 1978

INITIAL FLOW PERIOD MIN: 30

(B) 25 PSI TO (C) : 25

INITIAL CLOSED IN PERIOD MIN: 33

(D) 1108

FINAL FLOW PERIOD MIN: 45

(E) 30 PSI TO (F) : 30

FINAL CLOSED IN PERIOD MIN: 60

(G) 1132

FINAL HYDROSTATIC PRESSURE

(H) 1948

7-8-24W
COPY

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	5-28-90	TICKET	:	15779
CUSTOMER	:	IMPERIAL OIL PROPERTIES INC.	LEASE	:	SANGER
WELL	:	#1 TEST: 2	GEOLOGIST	:	CAULK
ELEVATION	:	2358 K.B.	FORMATION	:	LOWER K.C.
SECTION	:	7	TOWNSHIP	:	8S
RANGE	:	24W	STATE	:	KANSAS
GAUGE SN#	:	6233	CLOCK	:	12
		COUNTY : GRAHAM			
		RANGE : 4000			

INTERVAL FROM	:	3790	TO	:	3828	TOTAL DEPTH	:	3828
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	3785	SIZE	:	6.75			
PACKER DEPTH	:	3790	SIZE	:	6.75			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	ABERCROMBIE RIG #4			
MUD TYPE	:	MONPAC	VISCOSITY	:	42
WEIGHT	:	9.5	WATER LOSS (CC)	:	10.4
CHLORIDES (PPM)	:	2000			
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	:	3272	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	20	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	38	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 : DIED IN 10 MINUTES.
 BLOW COMMENT #3 : FINAL FLOW PERIOD NO BLOW.
 BLOW COMMENT #4 :

7-8-24W
COPY

COMPANY : IMPERIAL OIL PROPERTIES INC.
WELL : #1
GAUGE # : 6233
DATE : 27/ 5/90

FIELD : SANGER
JOB # : 15778
DEPTH : 3724
TEST :

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

WESTERN TESTING CO. INC.

7-8-24W
COPY

COMPANY : IMPERIAL OIL PROPERTIES INC.
WELL : #1
GAUGE # : 6233
DATE : 27/ 5/90

FIELD : SANGER
JOB # : 15778
DEPTH : 3724
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

7-8-24w
COPY

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

7-8-24W

COPY

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

7-8-24W
COPY

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	STATE	:	KANSAS
GAUGE SN#	:	6233	CLOCK	:	12
		COUNTY : GRAHAM			
		RANGE : 4000			

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.