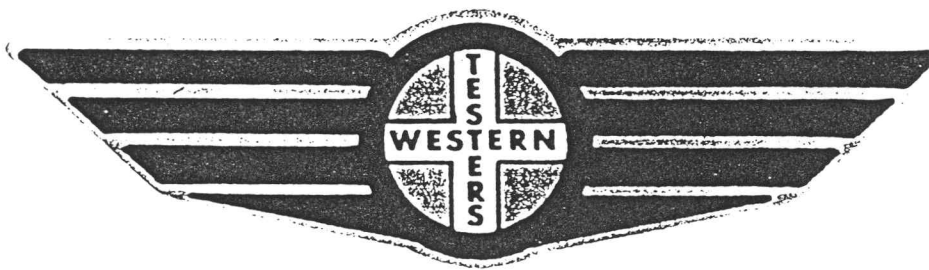


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	04-09-90	TICKET	:	16032
CUSTOMER	:	SOUTH LAKE EXPLORATION	LEASE	:	KERKHOFF
WELL	:	#1	TEST:	:	2
ELEVATION	:	2692 KB	GEOLOGIST	:	MCLEOD
SECTION	:	16	FORMATION	:	
RANGE	:	29W	COUNTY	:	LANE
GAUGE SN#	:	13629	RANGE	:	4425
			STATE	:	KANSAS
			CLOCK	:	12

INTERVAL FROM	:	4311	TO	:	4345	TOTAL DEPTH	:	4345
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4306	SIZE	:	6.75			
PACKER DEPTH	:	4311	SIZE	:	6.75			
PACKER DEPTH	:		SIZE	:				
PACKER DEPTH	:		SIZE	:				

DRILLING CON.	:	ABERCROMBIE RIG #4			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	42
WEIGHT	:	9.6	WATER LOSS (CC)	:	8.8
CHLORIDES (PPM)	:	2000			
JARS-MAKE	:		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	:	2.70
DRILL PIPE LENGTH	:	3791	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	22	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	34	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 PERIOD STRONG BOTTOM OF BUCKET
BLOW COMMENT #2	:	10 MINUTES
BLOW COMMENT #3	:	FINAL FLOW PERIOD STRONG BOTTOM OF BUCKET
BLOW COMMENT #4	:	20 MINUTES

RECOVERED : 840 FT OF: SALT WATER W/FEW SPOTS OIL
RECOVERED : 0 FT OF: CHLORIDES 31000 PPM

Total Barrels Fluid = 8.32
Total Fluid Prod Rate = 159.81 BFPD
Indicated Wtr Rate = 159.81 BWPD

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

SET PACKER(S) : 7:00 PM

TIME STARTED OFF BOTTOM : 10:00 PM

WELL TEMPERATURE : 120

INITIAL HYDROSTATIC PRESSURE

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 45

FINAL FLOW PERIOD MIN: 45

FINAL CLOSED IN PERIOD MIN: 60

FINAL HYDROSTATIC PRESSURE

(A) 2235

(B) 109

(D) 1056

(E) 329

(G) 1013

(H) 2197

PSI TO (C) : 249

PSI TO (F) : 412

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : SOUTH LAKE EXPLORATION
RIG : LANE-KANSAS
FIELD : KERKHOFF
WELL : #1
DATE : 04-09-90
GAUGE NO : 13629

OPERATIONAL COMMENTS

COMPANY : SOUTH LAKE EXPLORATION
WELL : #1
GAUGE # : 13629
DATE : 9/ 4/90

FIELD : KERKHOFF
JOB # : 16032
DEPTH : 4345
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: 0: 0	0.000	109.000	120.00	0.000
3	7: 4:59	0.083	109.000	120.00	0.000
4	7:10: 0	0.167	117.000	120.00	8.000
5	7:15: 0	0.250	153.000	120.00	36.000
6	7:19:59	0.333	188.000	120.00	35.000
7	7:25: 0	0.417	223.000	120.00	35.000
8	7:30: 0	0.500	249.000	120.00	26.000
INITIAL SHUT-IN PERIOD					
9	7:33: 0	0.550	553.000	120.00	304.000
10	7:36: 0	0.600	858.000	120.00	305.000
11	7:39: 0	0.650	923.000	120.00	65.000
12	7:42: 0	0.700	955.000	120.00	32.000
13	7:45: 0	0.750	975.000	120.00	20.000
14	7:48: 0	0.800	989.000	120.00	14.000
15	7:51: 0	0.850	1001.000	120.00	12.000
16	7:54: 0	0.900	1011.000	120.00	10.000
17	7:57: 0	0.950	1020.000	120.00	9.000
18	8: 0: 0	1.000	1023.000	120.00	3.000
19	8: 2:59	1.050	1036.000	120.00	13.000
20	8: 6: 0	1.100	1042.000	120.00	6.000
21	8: 9: 0	1.150	1046.000	120.00	4.000
22	8:12: 0	1.200	1049.000	120.00	3.000
23	8:15: 0	1.250	1056.000	120.00	7.000
FINAL FLOW PERIOD					
24	8:16: 0	1.267	329.000	120.00	-727.000
25	8:19:59	1.333	329.000	120.00	0.000
26	8:25: 0	1.417	329.000	120.00	0.000
27	8:30: 0	1.500	332.000	120.00	3.000
28	8:34:59	1.583	342.000	120.00	10.000
29	8:40: 0	1.667	355.000	120.00	13.000
30	8:45: 0	1.750	371.000	120.00	16.000
31	8:49:59	1.833	383.000	120.00	12.000
32	8:55: 0	1.917	399.000	120.00	16.000
33	9: 0: 0	2.000	412.000	120.00	13.000
FINAL SHUT-IN PERIOD					
34	9: 3: 0	2.050	730.000	120.00	318.000
35	9: 5:59	2.100	848.000	120.00	118.000
36	9: 9: 0	2.150	887.000	120.00	39.000
37	9:12: 0	2.200	912.000	120.00	25.000
38	9:15: 0	2.250	924.000	120.00	12.000
39	9:18: 0	2.300	937.000	120.00	13.000
40	9:21: 0	2.350	947.000	120.00	10.000
41	9:24: 0	2.400	957.000	120.00	10.000
42	9:27: 0	2.450	963.000	120.00	6.000
43	9:30: 0	2.500	973.000	120.00	10.000
44	9:33: 0	2.550	978.000	120.00	5.000
45	9:36: 0	2.600	983.000	120.00	5.000
46	9:39: 0	2.650	990.000	120.00	7.000
47	9:42: 0	2.700	993.000	120.00	3.000
48	9:45: 0	2.750	997.000	120.00	4.000

COMPANY : SOUTH LAKE EXPLORATION
WELL : #1
GAUGE # : 13629
DATE : 9/ 4/90

FIELD : KERKHOFF
JOB # : 16032
DEPTH : 4345
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	9:48: 0	2.800	1003.000	120.00	6.000
50	9:51: 0	2.850	1006.000	120.00	3.000
51	9:54: 0	2.900	1009.000	120.00	3.000
52	9:57: 0	2.950	1011.000	120.00	2.000
53	10: 0: 0	3.000	1013.000	120.00	2.000

WESTERN TESTING CO. INC.

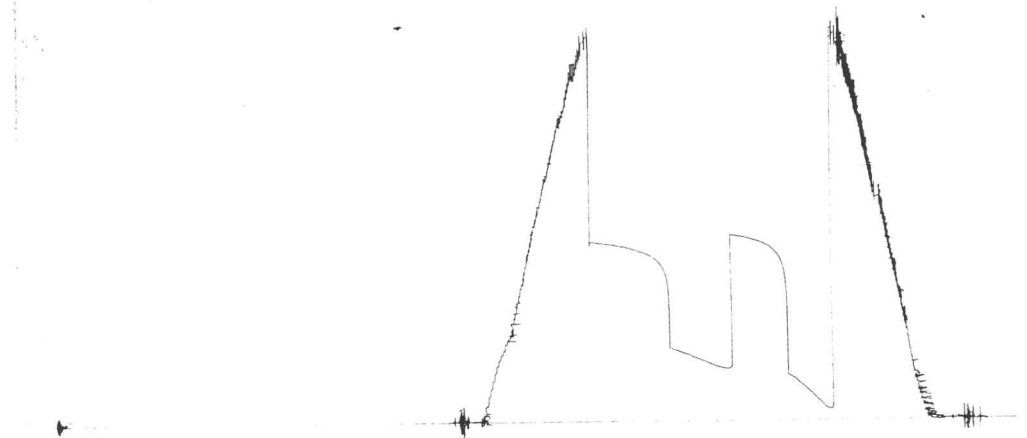
13629 KT 11032
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South Lake
DST2

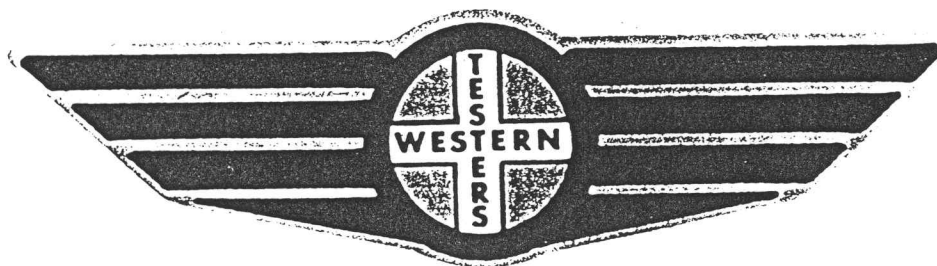


11018 KT 11032
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South Lake
DST2



FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY SOUTH LAKE EXPLORATION

LEASE & WELL NO.

KERKHOFF #1

SEC. 16 TWP. 16S RGE. 29W TEST NO. 3

DATE 4/10/90

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE	:	4-10-90	TICKET	:	16033
CUSTOMER	:	SOUTH LAKE EXPLORATION	LEASE	:	KERKHOFF
WELL	:	#1	TEST:	:	3
ELEVATION	:	2692 KB	GEOLOGIST	:	T.B.
SECTION	:	16	FORMATION	:	LANSING
RANGE	:	29W	COUNTY	:	LANE
GAUGE SN#	:	13629	RANGE	:	4425
			STATE	:	KANSAS
			CLOCK	:	12

INTERVAL FROM	:	4028	TO	:	4088	TOTAL DEPTH	:	4500
DEPTH OF SELECTIVE ZONE	:							
PACKER DEPTH	:	4023	SIZE	:	6.75			
PACKER DEPTH	:	4028	SIZE	:	6.75			
PACKER DEPTH	:	4088	SIZE	:	6.75			
PACKER DEPTH	:	4093	SIZE	:	6.75			

DRILLING CON.	:	ABERCROMBIE #4			
MUD TYPE	:	CHEMICAL	VISCOSITY	:	50
WEIGHT	:	9.6	WATER LOSS (CC)	:	12.0
CHLORIDES (PPM)	:	3000			
JARS-MAKE	:		SERIAL NUMBER	:	
DID WELL FLOW ?	:	NO	REVERSED OUT ?	:	NO

DRILL COLLAR LENGTH	:	0	FT	I.D. inch	:	0.00
WEIGHT PIPE LENGTH	:	60	FT	I.D. inch	:	2.70
DRILL PIPE LENGTH	:	3946	FT	I.D. inch	:	3.80
TEST TOOL LENGTH	:	22	FT	TOOL SIZE	:	5.50
ANCHOR LENGTH	:	60	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 STRONG BLOW
BLOW COMMENT #2 : BOTTOM OF BUCKET IN 15 MIN.
BLOW COMMENT #3 : FINAL FLOW PERIOD STRONG BLOW
BLOW COMMENT #4 : BOTTOM OF BUCKET IN 25 MIN.

RECOVERED	:	10	FT	OF: OIL-CUT MUD
RECOVERED	:	0	FT	OF: 65%MUD 35%OIL
RECOVERED	:	120	FT	OF: OIL-CUT MUD
RECOVERED	:	0	FT	OF: 40%M 35%O 25%G
RECOVERED	:	120	FT	OF: OIL-CUT MUD
RECOVERED	:	0	FT	OF: 70%M 15%O 15%G
RECOVERED	:	120	FT	OF: OIL-CUT MUD
RECOVERED	:	0	FT	OF: 80%M 15%O 5%G

Total Barrels Fluid	=	4.77
Total Fluid Prod Rate	=	91.64 BFPD
Indicated Oil Rate	=	20.19 BOPD
Indicated Wtr Rate	=	0.58 BWPD

REMARK 1 :
 REMARK 2 : CHLORIDES 5000 P.P.M.
 REMARK 3 :
 REMARK 4 :

SET PACKER(S)	:	3:15 A.M.	TIME STARTED OFF BOTTOM	:	6:15 A.M.
WELL TEMPERATURE	:	116			
INITIAL HYDROSTATIC PRESSURE			(A)	2121	
INITIAL FLOW PERIOD	MIN:	30	(B)	98	PSI TO (C) : 121
INITIAL CLOSED IN PERIOD	MIN:	45	(D)	352	
FINAL FLOW PERIOD	MIN:	45	(E)	173	PSI TO (F) : 188
FINAL CLOSED IN PERIOD	MIN:	60	(G)	339	
FINAL HYDROSTATIC PRESSURE			(H)	2056	

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : SOUTH LAKE EXPLORATION
RIG : LANE-KANSAS
FIELD : KERKHOFF
WELL : #1
DATE : 4-10-90
GAUGE NO : 13629

OPERATIONAL COMMENTS

CHLORIDES 5000 P.P.M.

COMPANY : SOUTH LAKE EXPLORATION
WELL : #1
GAUGE # : 13629
DATE : 10/ 4/90

FIELD : KERKHOFF
JOB # : 16033
DEPTH : 4500
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	3:15: 0	0.000	98.000	116.00	0.000
3	3:19:59	0.083	98.000	116.00	0.000
4	3:25: 0	0.167	98.000	116.00	0.000
5	3:30: 0	0.250	98.000	116.00	0.000
6	3:34:59	0.333	103.000	116.00	5.000
7	3:40: 0	0.417	112.000	116.00	9.000
8	3:45: 0	0.500	121.000	116.00	9.000
INITIAL SHUT-IN PERIOD					
9	3:48: 0	0.550	256.000	116.00	135.000
10	3:51: 0	0.600	298.000	116.00	42.000
11	3:54: 0	0.650	312.000	116.00	14.000
12	3:57: 0	0.700	317.000	116.00	5.000
13	4: 0: 0	0.750	323.000	116.00	6.000
14	4: 3: 0	0.800	326.000	116.00	3.000
15	4: 6: 0	0.850	329.000	116.00	3.000
16	4: 9: 0	0.900	332.000	116.00	3.000
17	4:12: 0	0.950	334.000	116.00	2.000
18	4:15: 0	1.000	336.000	116.00	2.000
19	4:18: 0	1.050	338.000	116.00	2.000
20	4:21: 0	1.100	340.000	116.00	2.000
21	4:24: 0	1.150	342.000	116.00	2.000
22	4:27: 0	1.200	345.000	116.00	3.000
23	4:30: 0	1.250	352.000	116.00	7.000
FINAL FLOW PERIOD					
24	4:31: 0	1.267	173.000	116.00	-179.000
25	4:34:59	1.333	173.000	116.00	0.000
26	4:40: 0	1.417	173.000	116.00	0.000
27	4:45: 0	1.500	173.000	116.00	0.000
28	4:49:59	1.583	173.000	116.00	0.000
29	4:55: 0	1.667	173.000	116.00	0.000
30	5: 0: 0	1.750	175.000	116.00	2.000
31	5: 4:59	1.833	180.000	116.00	5.000
32	5:10: 0	1.917	184.000	116.00	4.000
33	5:15: 0	2.000	188.000	116.00	4.000
FINAL SHUT-IN PERIOD					
34	5:18: 0	2.050	268.000	116.00	80.000
35	5:21: 0	2.100	301.000	116.00	33.000
36	5:24: 0	2.150	313.000	116.00	12.000
37	5:27: 0	2.200	319.000	116.00	6.000
38	5:30: 0	2.250	323.000	116.00	4.000
39	5:33: 0	2.300	327.000	116.00	4.000
40	5:36: 0	2.350	329.000	116.00	2.000
41	5:39: 0	2.400	331.000	116.00	2.000
42	5:42: 0	2.450	332.000	116.00	1.000
43	5:45: 0	2.500	333.000	116.00	1.000
44	5:48: 0	2.550	333.000	116.00	0.000
45	5:51: 0	2.600	334.000	116.00	1.000
46	5:54: 0	2.650	334.000	116.00	0.000
47	5:57: 0	2.700	335.000	116.00	1.000
48	6: 0: 0	2.750	335.000	116.00	0.000

COMPANY : SOUTH LAKE EXPLORATION
WELL : #1
GAUGE # : 13629
DATE : 10/ 4/90

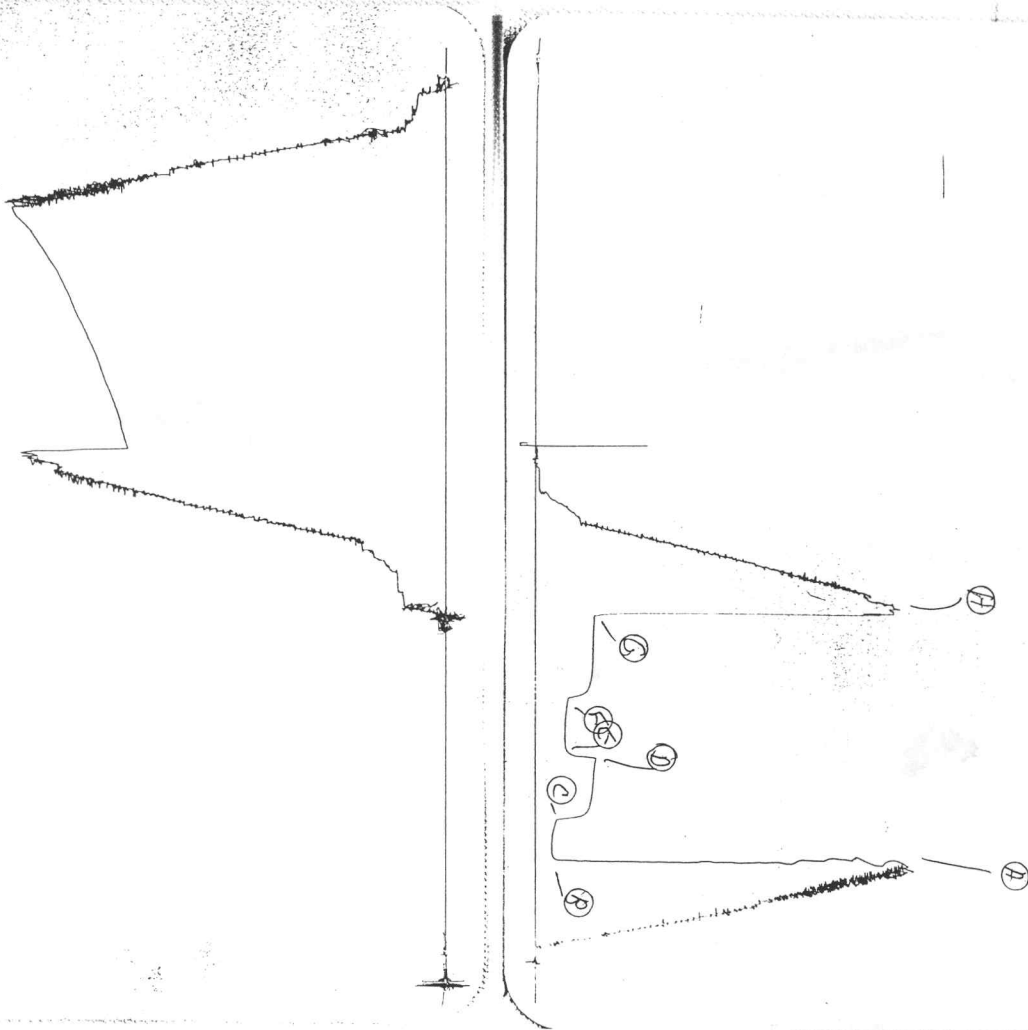
FIELD : KERKHOFF
JOB # : 16033
DEPTH : 4500
TEST :

DATA No.	REAL TIME HR:MN:SS	ELAPSE TIME DELTA HOURS	PRESSURE PSIG	TEMP DEG F	DELTA P Pi-P(i-1)
49	6: 3: 0	2.800	336.000	116.00	1.000
50	6: 6: 0	2.850	336.000	116.00	0.000
51	6: 9: 0	2.900	337.000	116.00	1.000
52	6:12: 0	2.950	338.000	116.00	1.000
53	6:15: 0	3.000	339.000	116.00	1.000

WESTERN TESTING CO. INC.

South Lake
DST 3

KT 16033
Below Seaddle



13623
KT 16033
South Lake
DST 3

11018
KT 16033
0

South Lake
DST 3

