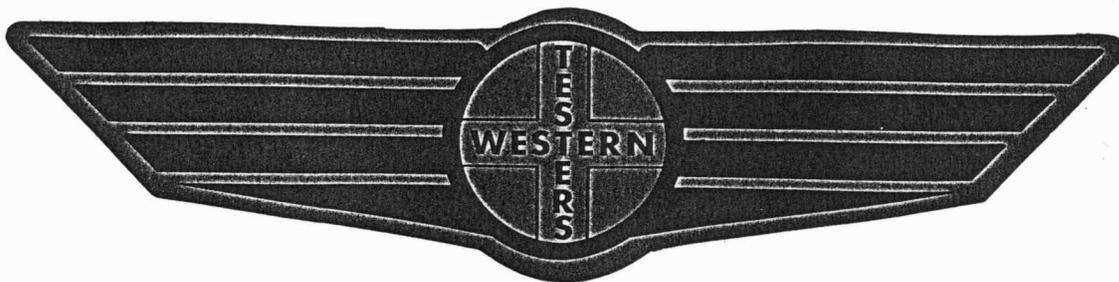


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 10-7-91 TICKET : 18283
CUSTOMER : RANGE OIL COMPANY INC. LEASE : CLARK C
WELL : 1 TEST: 1 GEOLOGIST : LAUER
ELEVATION : 1111 KB FORMATION : FORT SCOTT
SECTION : 22 TOWNSHIP : 31S
RANGE : 10E COUNTY : ELK STATE : KANSAS
GAUGE SN# : 10979 RANGE : 4100 CLOCK : 12

INTERVAL FROM : 1680 TO : 1735 TOTAL DEPTH : 1735
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 1675 SIZE : 6.63
PACKER DEPTH : 1680 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG 3
MUD TYPE : CHEMICAL VISCOSITY : 41
WEIGHT : 9.3 WATER LOSS (CC) : 10.4
CHLORIDES (PPM) : 1100
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 120 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 600 FT I.D. inch : 2.80
DRILL PIPE LENGTH : 940 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 55 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 VERY WEAK BLOW-DEAD IN 9 MIN.
BLOW COMMENT #2 : FINAL FLOW PERIOD NO BLOW.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 20 FT OF: DRILLING MUD

Total Barrels Fluid = 0.10
Total Fluid Prod Rate = 2.36 BFPD
Indicated Wtr Rate = 0.24 BWPD

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

SET PACKER(S) : 5:30

TIME STARTED OFF BOTTOM : 7:30

WELL TEMPERATURE : 96

INITIAL HYDROSTATIC PRESSURE	(A)	1002		
INITIAL FLOW PERIOD MIN:	30	(B)	42	PSI TO (C) : 42
INITIAL CLOSED IN PERIOD MIN:	30	(D)	477	
FINAL FLOW PERIOD MIN:	30	(E)	42	PSI TO (F) : 42
FINAL CLOSED IN PERIOD MIN:	30	(G)	440	
FINAL HYDROSTATIC PRESSURE	(H)	999		

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RANGE OIL COMPANY INC.
RIG : ELK-KANSAS
FIELD : CLARK C
WELL : 1
DATE : 10-7-91
GAUGE NO : 10979

OPERATIONAL COMMENTS

COMPANY : RANGE OIL COMPANY INC.
 WELL : 1
 GAUGE # : 10979
 DATE : 7/10/91

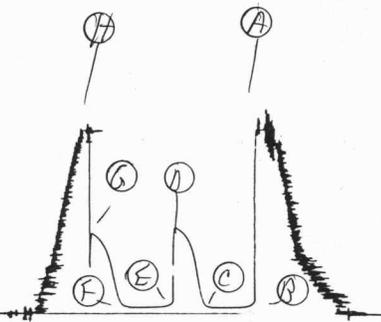
FIELD : CLARK C
 JOB # : 18283
 DEPTH : 1735
 TEST :

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	5:30: 0	0.000	42.000	96.00	0.000
3	5:34:59	0.083	42.000	96.00	0.000
4	5:40: 0	0.167	42.000	96.00	0.000
5	5:45: 0	0.250	42.000	96.00	0.000
6	5:49:59	0.333	42.000	96.00	0.000
7	5:55: 0	0.417	42.000	96.00	0.000
8	6: 0: 0	0.500	42.000	96.00	0.000
INITIAL SHUT-IN PERIOD					
9	6: 3: 0	0.550	43.000	96.00	1.000
10	6: 6: 0	0.600	47.000	96.00	4.000
11	6: 9: 0	0.650	81.000	96.00	34.000
12	6:12: 0	0.700	183.000	96.00	102.000
13	6:15: 0	0.750	287.000	96.00	104.000
14	6:18: 0	0.800	367.000	96.00	80.000
15	6:21: 0	0.850	414.000	96.00	47.000
16	6:24: 0	0.900	449.000	96.00	35.000
17	6:27: 0	0.950	462.000	96.00	13.000
18	6:30: 0	1.000	477.000	96.00	15.000
FINAL FLOW PERIOD					
19	6:31: 0	1.017	42.000	96.00	-435.000
20	6:34:59	1.083	42.000	96.00	0.000
21	6:40: 0	1.167	42.000	96.00	0.000
22	6:45: 0	1.250	42.000	96.00	0.000
23	6:49:59	1.333	42.000	96.00	0.000
24	6:55: 0	1.417	42.000	96.00	0.000
25	7: 0: 0	1.500	42.000	96.00	0.000
FINAL SHUT-IN PERIOD					
26	7: 3: 0	1.550	43.000	96.00	1.000
27	7: 6: 0	1.600	49.000	96.00	6.000
28	7: 9: 0	1.650	77.000	96.00	28.000
29	7:12: 0	1.700	157.000	96.00	80.000
30	7:15: 0	1.750	262.000	96.00	105.000
31	7:18: 0	1.800	327.000	96.00	65.000
32	7:21: 0	1.850	374.000	96.00	47.000
33	7:24: 0	1.900	406.000	96.00	32.000
34	7:27: 0	1.950	427.000	96.00	21.000
35	7:30: 0	2.000	440.000	96.00	13.000

WESTERN TESTING CO. INC.

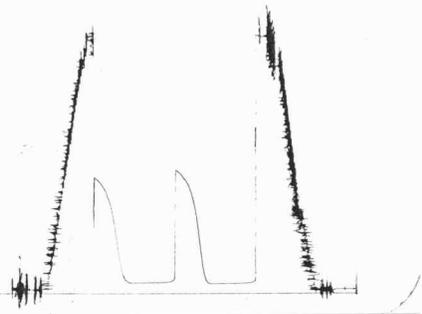
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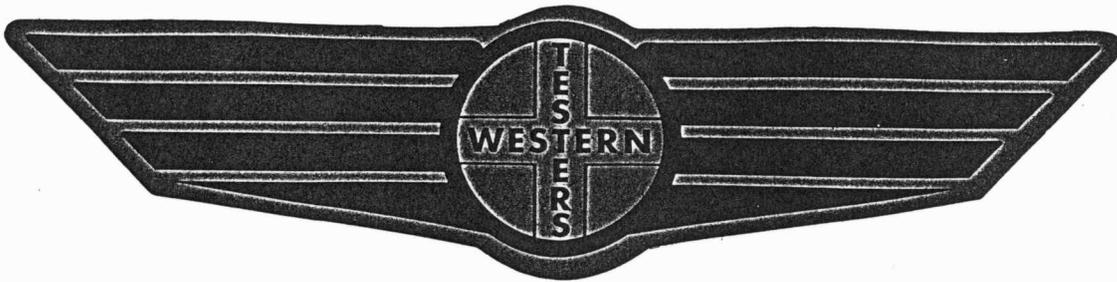


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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

COMPANY RANGE OIL COMPANY, INC. LEASE & WELL NO. CLARK C #1

SEC. 22 TWP. 31S RGE. 10E TEST NO. 2 DATE 10/8/91

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 10-8-91 TICKET : 18284
CUSTOMER : RANGE OIL COMPANY INC. LEASE : CLARK C
WELL : 1 TEST: 2 GEOLOGIST : LAUER
ELEVATION : 1111 KB FORMATION : MISSISSIPPI
SECTION : 22 TOWNSHIP : 31S
RANGE : 10E COUNTY : ELK STATE : KANSAS
GAUGE SN# : 10979 RANGE : 4100 CLOCK : 12

INTERVAL FROM : 2029 TO : 2055 TOTAL DEPTH : 2055
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 2024 SIZE : 6.63
PACKER DEPTH : 2029 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG 3
MUD TYPE : CHEMICAL VISCOSITY : 45
WEIGHT : 9.2 WATER LOSS (CC) : 9.6
CHLORIDES (PPM) : 1100
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 600 FT I.D. inch : 2.80
DRILL PIPE LENGTH : 1409 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 26 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 VERY WEAK BLOW-DEAD IN 17 MIN.
BLOW COMMENT #2 : FINAL FLOW PERIOD NO BLOW.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RANGE OIL COMPANY INC.
RIG : ELK-KANSAS
FIELD : CLARK C
WELL : 1
DATE : 10-8-91
GAUGE NO : 10979

OPERATIONAL COMMENTS

COMPANY : RANGE OIL COMPANY INC.
 WELL : 1
 GAUGE # : 10979
 DATE : 8/10/91

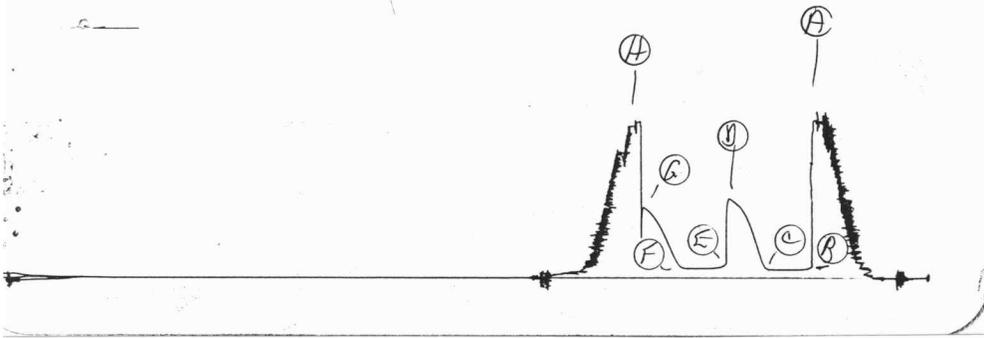
FIELD : CLARK C
 JOB # : 18284
 DEPTH : 2055
 TEST :

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	9: 0: 0	0.000	47.000	100.00	0.000
3	9: 4:59	0.083	47.000	100.00	0.000
4	9:10: 0	0.167	47.000	100.00	0.000
5	9:15: 0	0.250	47.000	100.00	0.000
6	9:19:59	0.333	47.000	100.00	0.000
7	9:25: 0	0.417	47.000	100.00	0.000
8	9:30: 0	0.500	47.000	100.00	0.000
INITIAL SHUT-IN PERIOD					
9	9:33: 0	0.550	52.000	100.00	5.000
10	9:36: 0	0.600	86.000	100.00	34.000
11	9:39: 0	0.650	144.000	100.00	58.000
12	9:42: 0	0.700	211.000	100.00	67.000
13	9:45: 0	0.750	278.000	100.00	67.000
14	9:48: 0	0.800	327.000	100.00	49.000
15	9:51: 0	0.850	365.000	100.00	38.000
16	9:54: 0	0.900	393.000	100.00	28.000
17	9:57: 0	0.950	412.000	100.00	19.000
18	10: 0: 0	1.000	433.000	100.00	21.000
FINAL FLOW PERIOD					
19	10: 1: 0	1.017	55.000	100.00	-378.000
20	10: 4:59	1.083	55.000	100.00	0.000
21	10:10: 0	1.167	55.000	100.00	0.000
22	10:15: 0	1.250	55.000	100.00	0.000
23	10:19:59	1.333	55.000	100.00	0.000
24	10:25: 0	1.417	55.000	100.00	0.000
25	10:30: 0	1.500	55.000	100.00	0.000
FINAL SHUT-IN PERIOD					
26	10:33: 0	1.550	62.000	100.00	7.000
27	10:36: 0	1.600	89.000	100.00	27.000
28	10:39: 0	1.650	131.000	100.00	42.000
29	10:42: 0	1.700	181.000	100.00	50.000
30	10:45: 0	1.750	227.000	100.00	46.000
31	10:48: 0	1.800	270.000	100.00	43.000
32	10:51: 0	1.850	309.000	100.00	39.000
33	10:54: 0	1.900	338.000	100.00	29.000
34	10:57: 0	1.950	363.000	100.00	25.000
35	11: 0: 0	2.000	387.000	100.00	24.000

WESTERN TESTING CO. INC.

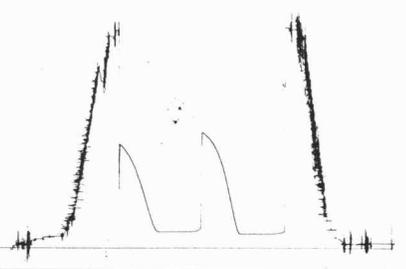
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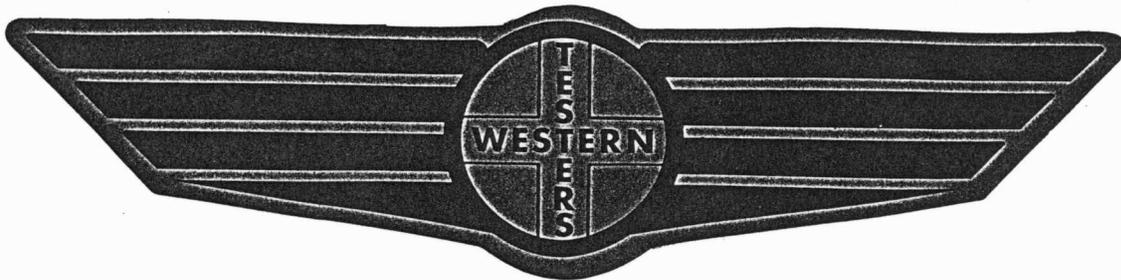


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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

COMPANY RANGE OIL COMPANY, INC. LEASE & WELL NO. CLARK C #1 SEC. 22 TWP. 31SRGE. 10E TEST NO. 3 DATE 10/10/91

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 10-10-91 TICKET : 18285
CUSTOMER : RANGE OIL COMPANY INC. LEASE : CLARK C
WELL : 1 TEST: 3 GEOLOGIST : LAUER
ELEVATION : 1111 KB FORMATION : ARBUCKLE
SECTION : 22 TOWNSHIP : 31S
RANGE : 10E COUNTY : ELK STATE : KANSAS
GAUGE SN# : 10979 RANGE : 4100 CLOCK : 12

INTERVAL FROM : 2295 TO : 2315 TOTAL DEPTH : 2315
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 2290 SIZE : 6.63
PACKER DEPTH : 2295 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG 3
MUD TYPE : CHEMICAL VISCOSITY : 42
WEIGHT : 9.4 WATER LOSS (CC) : 10.4
CHLORIDES (PPM) : 1200
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 600 FT I.D. inch : 2.80
DRILL PIPE LENGTH : 1675 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 20 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 VERY WEAK BLOW-DEAD IN 7 MINUTES.
BLOW COMMENT #2 : FINAL FLOW PERIOD NO BLOW.
BLOW COMMENT #3 :
BLOW COMMENT #4 :

RECOVERED : 0 FT OF: NO FLUID ON TOP OF TOOL
RECOVERED : 0 FT OF: FLUID INSIDE OF SHUT IN & HY TOOL

Total Barrels Fluid = 0.00
Total Fluid Prod Rate = 0.00 BFPD

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

SET PACKER(S) : 10:00 A.M. TIME STARTED OFF BOTTOM : 12:00 P.M.

WELL TEMPERATURE	:	102			
INITIAL HYDROSTATIC PRESSURE			(A)	1114	
INITIAL FLOW PERIOD	MIN:	30	(B)	21	PSI TO (C) : 21
INITIAL CLOSED IN PERIOD	MIN:	30	(D)	21	
FINAL FLOW PERIOD	MIN:	30	(E)	21	PSI TO (F) : 21
FINAL CLOSED IN PERIOD	MIN:	30	(G)	21	
FINAL HYDROSTATIC PRESSURE			(H)	1114	

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RANGE OIL COMPANY INC.
RIG : ELK-KANSAS
FIELD : CLARK C
WELL : 1
DATE : 10-10-91
GAUGE NO : 10979

OPERATIONAL COMMENTS

COMPANY : RANGE OIL COMPANY INC.
WELL : 1
GAUGE # : 10979
DATE : 10/10/91

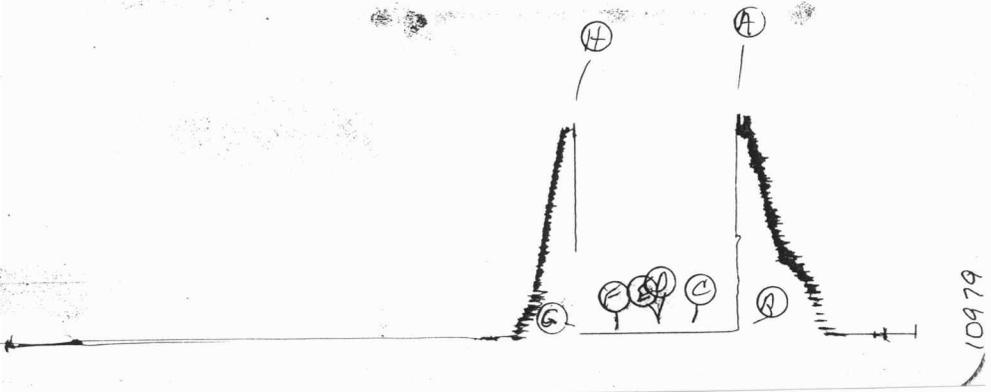
FIELD : CLARK C
JOB # : 18285
DEPTH : 2315
TEST :

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	10: 0: 0	0.000	21.000	102.00	0.000
3	10: 4:59	0.083	21.000	102.00	0.000
4	10:10: 0	0.167	21.000	102.00	0.000
5	10:15: 0	0.250	21.000	102.00	0.000
6	10:19:59	0.333	21.000	102.00	0.000
7	10:25: 0	0.417	21.000	102.00	0.000
8	10:30: 0	0.500	21.000	102.00	0.000
INITIAL SHUT-IN PERIOD					
9	10:33: 0	0.550	21.000	102.00	0.000
10	10:36: 0	0.600	21.000	102.00	0.000
11	10:39: 0	0.650	21.000	102.00	0.000
12	10:42: 0	0.700	21.000	102.00	0.000
13	10:45: 0	0.750	21.000	102.00	0.000
14	10:48: 0	0.800	21.000	102.00	0.000
15	10:51: 0	0.850	21.000	102.00	0.000
16	10:54: 0	0.900	21.000	102.00	0.000
17	10:57: 0	0.950	21.000	102.00	0.000
18	11: 0: 0	1.000	21.000	102.00	0.000
FINAL FLOW PERIOD					
19	11: 1: 0	1.017	21.000	102.00	0.000
20	11: 4:59	1.083	21.000	102.00	0.000
21	11:10: 0	1.167	21.000	102.00	0.000
22	11:15: 0	1.250	21.000	102.00	0.000
23	11:19:59	1.333	21.000	102.00	0.000
24	11:25: 0	1.417	21.000	102.00	0.000
25	11:30: 0	1.500	21.000	102.00	0.000
FINAL SHUT-IN PERIOD					
26	11:33: 0	1.550	21.000	102.00	0.000
27	11:36: 0	1.600	21.000	102.00	0.000
28	11:39: 0	1.650	21.000	102.00	0.000
29	11:42: 0	1.700	21.000	102.00	0.000
30	11:45: 0	1.750	21.000	102.00	0.000
31	11:48: 0	1.800	21.000	102.00	0.000
32	11:51: 0	1.850	21.000	102.00	0.000
33	11:54: 0	1.900	21.000	102.00	0.000
34	11:57: 0	1.950	21.000	102.00	0.000
35	12: 0: 0	2.000	21.000	102.00	0.000

WESTERN TESTING CO. INC.

JKH 18285

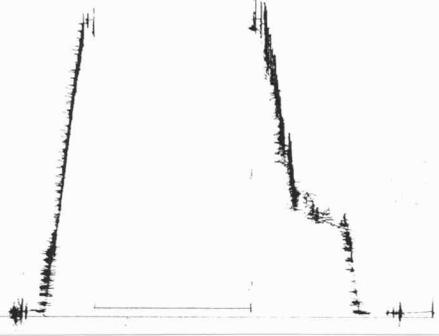
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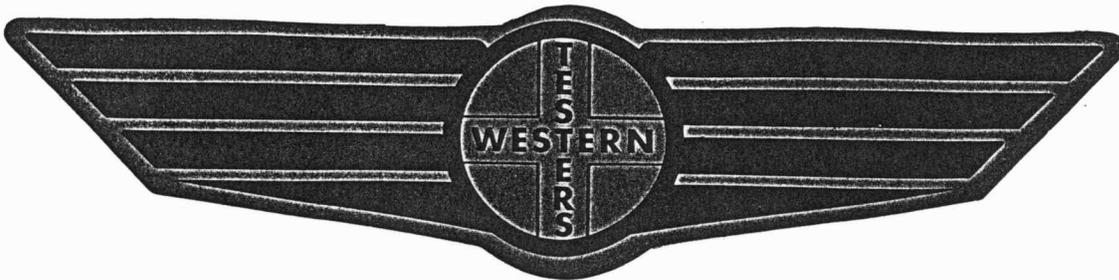
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3474 AST #3

FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800 - 688 - 7021

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 10-10-91
CUSTOMER : RANGE OIL COMPANY INC.
WELL : 1 TEST: 4
ELEVATION : 1111 KB
SECTION : 22
RANGE : 10E COUNTY : ELK
GAUGE SN# : 10979 RANGE : 4100
TICKET : 18286
LEASE : CLARK C
GEOLOGIST : LAUER
FORMATION : ARBUCKLE
TOWNSHIP : 31S
STATE : KANSAS
CLOCK : 12

INTERVAL FROM : 2313 TO : 2331 TOTAL DEPTH : 2331
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 2308 SIZE : 6.63
PACKER DEPTH : 2313 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : RED TIGER RIG 3
MUD TYPE : CHEMICAL VISCOSITY : 43
WEIGHT : 9.3 WATER LOSS (CC) : 10.4
CHLORIDES (PPM) : 1200
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : NO REVERSED OUT ? : YES

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 600 FT I.D. inch : 2.80
DRILL PIPE LENGTH : 1693 FT I.D. inch : 3.80
TEST TOOL LENGTH : 20 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 18 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 : I.F.P. VERY STRONG BLOW-BOTTOM OF BUCKET IN 1 MIN.
BLOW COMMENT #2 : RELEASED PRESSURE-DEAD IN 29 MINUTES.
BLOW COMMENT #3 : FINAL FLOW PERIOD NO BLOW.
BLOW COMMENT #4 :

WESTERN TESTING CO. INC.
WICHITA-KANSAS

Pressure Transient Report

COMPANY : RANGE OIL COMPANY INC.
RIG : ELK-KANSAS
FIELD : CLARK C
WELL : 1
DATE : 10-10-91
GAUGE NO : 10979

OPERATIONAL COMMENTS

COMPANY : RANGE OIL COMPANY INC.
 WELL : 1
 GAUGE # : 10979
 DATE : 10/10/91

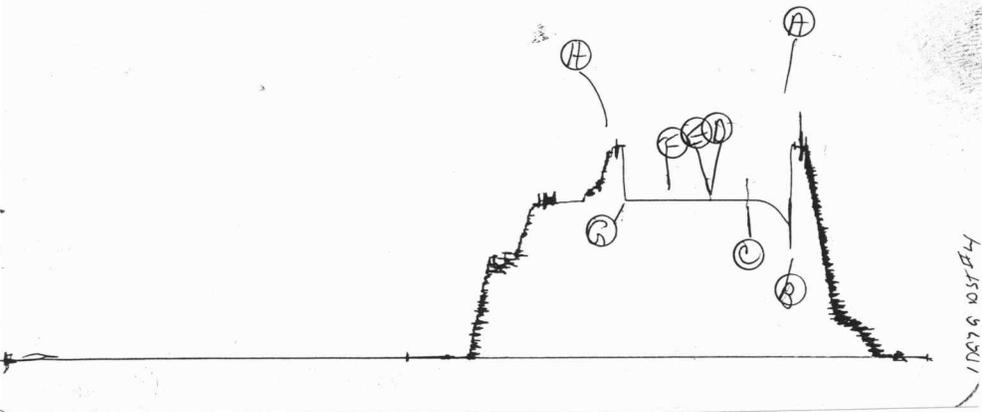
FIELD : CLARK C
 JOB # : 18286
 DEPTH : 2331
 TEST :

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	8: 0: 0	0.000	593.000	105.00	0.000
3	8: 4:59	0.083	753.000	105.00	160.000
4	8:10: 0	0.167	802.000	105.00	49.000
5	8:15: 0	0.250	822.000	105.00	20.000
6	8:19:59	0.333	851.000	105.00	29.000
7	8:25: 0	0.417	862.000	105.00	11.000
8	8:30: 0	0.500	863.000	105.00	1.000
INITIAL SHUT-IN PERIOD					
9	8:33: 0	0.550	863.000	105.00	0.000
10	8:36: 0	0.600	863.000	105.00	0.000
11	8:39: 0	0.650	863.000	105.00	0.000
12	8:42: 0	0.700	863.000	105.00	0.000
13	8:45: 0	0.750	863.000	105.00	0.000
14	8:48: 0	0.800	863.000	105.00	0.000
15	8:51: 0	0.850	863.000	105.00	0.000
16	8:54: 0	0.900	863.000	105.00	0.000
17	8:57: 0	0.950	863.000	105.00	0.000
18	9: 0: 0	1.000	863.000	105.00	0.000
FINAL FLOW PERIOD					
19	9: 1: 0	1.017	863.000	105.00	0.000
20	9: 4:59	1.083	863.000	105.00	0.000
21	9:10: 0	1.167	863.000	105.00	0.000
22	9:15: 0	1.250	863.000	105.00	0.000
23	9:19:59	1.333	863.000	105.00	0.000
24	9:25: 0	1.417	863.000	105.00	0.000
25	9:30: 0	1.500	863.000	105.00	0.000
FINAL SHUT-IN PERIOD					
26	9:33: 0	1.550	863.000	105.00	0.000
27	9:36: 0	1.600	863.000	105.00	0.000
28	9:39: 0	1.650	863.000	105.00	0.000
29	9:42: 0	1.700	863.000	105.00	0.000
30	9:45: 0	1.750	863.000	105.00	0.000
31	9:48: 0	1.800	863.000	105.00	0.000
32	9:51: 0	1.850	863.000	105.00	0.000
33	9:54: 0	1.900	863.000	105.00	0.000
34	9:57: 0	1.950	863.000	105.00	0.000
35	10: 0: 0	2.000	863.000	105.00	0.000

WESTERN TESTING CO. INC.

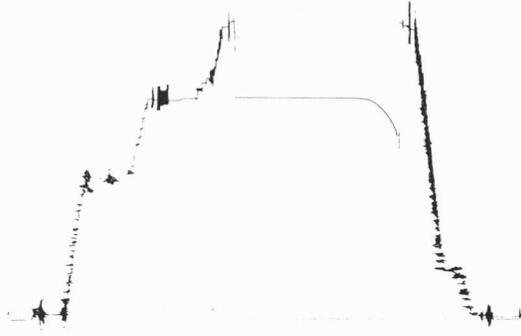
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