

WESTERN TESTING CO., INC.

Pressure Data

Date 7-17

Test Ticket No. 8188

Recorder No. 13268

Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1181</u> P.S.I.			
B. First Initial Flow Pressure	<u>74</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>84</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D. Initial Closed-in Pressure	<u>809</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E. Second Initial Flow Pressure	<u>95</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mins.
F. Second Final Flow Pressure	<u>117</u> P.S.I.			
G. Final Closed-in Pressure	<u>817</u> P.S.I.			
H. Final Hydrostatic Mud	<u>1140</u> P.S.I.			

Read Outside Chart!

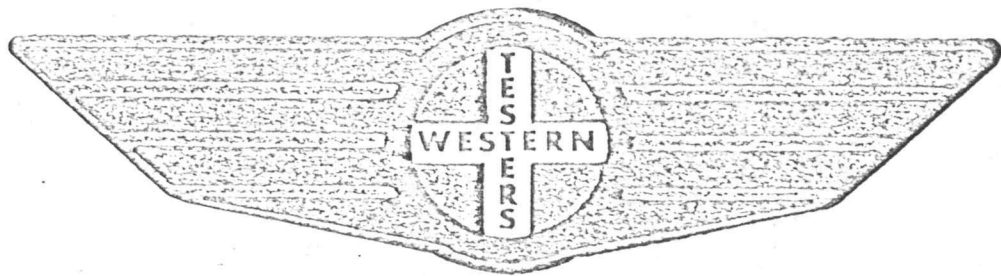
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>22</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>74</u>	0	<u>84</u>	0	<u>95</u>	0	<u>117</u>
P 2 5	<u>74</u>	3	<u>508</u>	5	<u>95</u>	3	<u>466</u>
P 3 10	<u>74</u>	6	<u>648</u>	10	<u>95</u>	6	<u>632</u>
P 4 15	<u>77</u>	9	<u>702</u>	15	<u>96</u>	9	<u>678</u>
P 5 20	<u>80</u>	12	<u>734</u>	20	<u>98</u>	12	<u>704</u>
P 6 25	<u>82</u>	15	<u>754</u>	25	<u>100</u>	15	<u>725</u>
P 7 30	<u>84</u>	18	<u>768</u>	30	<u>103</u>	18	<u>739</u>
P 8 35		21	<u>782</u>	35	<u>106</u>	21	<u>753</u>
P 9 40		24	<u>796</u>	40	<u>108</u>	24	<u>766</u>
P10 45		27	<u>803</u>	45	<u>110</u>	27	<u>776</u>
P11 50		30	<u>809</u>	50	<u>112</u>	30	<u>783</u>
P12 55		33		55	<u>114</u>	33	<u>790</u>
P13 60		36		60	<u>117</u>	36	<u>796</u>
P14 65		39		65		39	<u>801</u>
P15 70		42		70		42	<u>805</u>
P16 75		45		75		45	<u>808</u>
P17 80		48		80		48	<u>811</u>
P18 85		51		85		51	<u>814</u>
P19 90		54		90		54	<u>816</u>
P20 95		57		95		57	<u>816</u>
100		60		100		60	<u>817</u>
						63	<u>817</u>

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RANGE OIL COMPANY, INC. Lease & Well No. #1 "E" STEWARD Sec. 6 Twp. 32S Rge. 9E Test No. 3 Date 7-17-85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 7-17-85	TICKET #8188
CUSTOMER: RANGE OIL COMPANY INC.	LEASE: "E" STEWARD
WELL: 1 TEST: 3	GEOLOGIST: J. HONAS
ELEVATION (KB): 1045	FORMATION: MISSISSIPPI
SECTION: 6	TOWNSHIP: 32S
RANGE: 9E	COUNTY: CHAUTAUQUA STATE: KANSAS
GAUGE SN #13268	RANGE: 4200 CLOCK: 12

INTERVAL TEST FROM: 2240	FT	TO: 2258	FT	TOTAL DEPTH: 2258	FT
DEPTH OF SELECTIVE ZONE:			FT		
PACKER DEPTH: 2240	FT	SIZE: 6 3/4	IN	PACKER DEPTH: 2235	FT
PACKER DEPTH:	FT	SIZE:	IN	PACKER DEPTH:	FT
				SIZE: 6 3/4	IN
				SIZE:	IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2	
MUD TYPE: CHEMICAL	VISCOSITY: 42
WEIGHT: 9.6	WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 1200	
JARS - MAKE:	SERIAL NUMBER:
DID WELL FLOW?	REVERSED OUT?
DRILL COLLAR LENGTH: 180	FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH:	FT I.D.:
DRILL PIPE LENGTH: 2040	FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20	FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 18	FT SIZE: 5 1/2 OD IN
SURFACE CHOKE SIZE: 3/4	IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8	IN TOOL JOINT SIZE: 4 1/2 XH IN

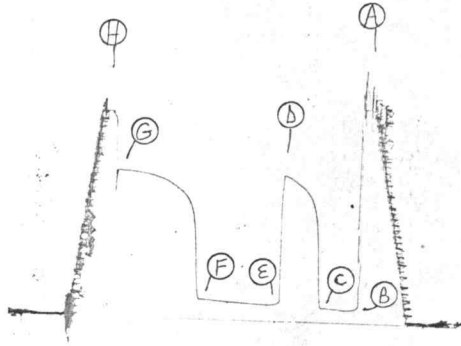
BLOW: WEAK BLOW THROUGHOUT TEST.

RECOVERED: 135	FT	OF: SLIGHTLY MUDDY SALT WATER
RECOVERED:	FT	OF: (RESISTIVITY 35% AT 85 DEGREES;
RECOVERED:	FT	OF: CHLORIDES 33000 PPM.).
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:

REMARKS: READ OUTSIDE CHART #13268

TIME SET PACKER(S): 10:30 PM	TIME STARTED OFF BOTTOM: 1:30 AM
WELL TEMPERATURE: 103 °F	
INITIAL HYDROSTATIC PRESSURE:	(A) 1181 PSI
INITIAL FLOW PERIOD MIN: 30	(B) 74 PSI TO (C) 84 PSI
INITIAL CLOSED IN PERIOD MIN: 30	(D) 809 PSI
FINAL FLOW PERIOD MIN: 60	(E) 95 PSI TO (F) 117 PSI
FINAL CLOSED IN PERIOD MIN: 63	(G) 817 PSI
FINAL HYDROSTATIC PRESSURE	(H) 1140 PSI

TKT # 8188



8188

DST #3

13268

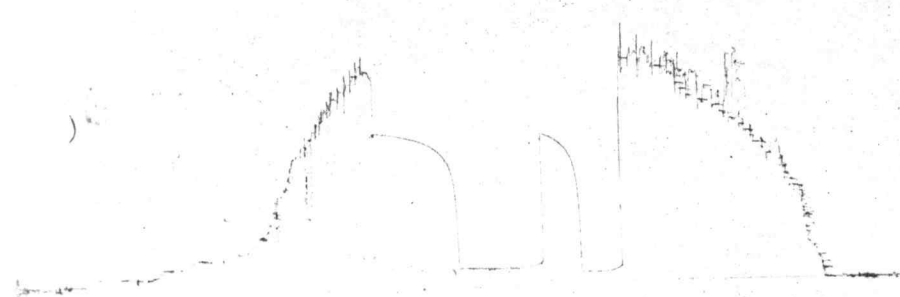
TKT # 8188

H

8188

DSO # 3

13.2.66





WESTERN TESTING CO., INC. FORMATION TESTING

Call - OK / TICKET N° 8188

P. O. BOX 1599 WICHITA, KANSAS 67201

Elevation 1045KB Formation Miss Eff. Pay Ft.

COMPANY NAME Range Oil Co Inc ADDRESS 240 Page Court 220th Douglas Wichita, KS 67202 LEASE AND WELL NO Steward E #1 COUNTY Chautauque STATE KS Sec 6 Twp 32 Rge 9E Mail Invoice To Same #1 "E" STEWARD Co. Name Address No. Copies Requested Mail Charts To Same Address No. Copies Requested

Formation Test No. 3 Interval Tested From 2240 ft. to 2258 ft. Total Depth 2258 ft. Packer Depth 2240 ft. Size 6 3/4 in. Packer Depth 2235 ft. Size 6 3/4 in. Packer Depth - ft. Size - in. Depth of Selective Zone Set

Top Recorder Depth (Inside) 2250 ft. Recorder Number 13266 Cap. 4000 Bottom Recorder Depth (Outside) 2253 ft. Recorder Number 13268 Cap. 4200 Below Saddle Recorder Depth - ft. Recorder Number - Cap. - Drilling Contractor Range Oil Co Inc #2 Drill Collar Length 180 I. D. 2 1/4 in. Mud Type Chem Viscosity 42 Weight Pipe Length - I. D. - in. Weight 9.6 Water Loss 12. - cc. Drill Pipe Length 2040 I. D. 3.8 in. Chlorides 1200 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in. Jars: Make - Serial Number - Anchor Length 18 ft. Size 5 1/2 OD in. Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in. Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 x H in.

Blow: 2 seal thruout test

Recovered 135 ft. of Slightly muddy salt water 33,000 PPM Chlorides .35 Res @ 85°F Recovered - ft. of Recovered - ft. of Recovered - ft. of Recovered - ft. of Chlorides 33,000 P.P.M. Sample Jars used 2 Remarks: Read outside chart!

Time On Location 12:30P 7-17 P.M. Time Pick Up Tool 9:40 A.M. Time Off Location Standby P.M. Time Set Packer(s) 10:30 A.M. Time Started Off Bottom 1:30 P.M. Maximum Temperature 103 Initial Hydrostatic Pressure (A) 1170 P.S.I. Initial Flow Period 30 Minutes (B) 85 P.S.I. to (C) 85 P.S.I. Initial Closed In Period 30 Minutes (D) 800 P.S.I. Final Flow Period 60 Minutes (E) 105 P.S.I. to (F) 130 P.S.I. Final Closed In Period 60 Minutes (G) 800 P.S.I. Final Hydrostatic Pressure (H) 1140 P.S.I. (13268)

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Jerry Honas Signature of Customer or his authorized representative

Western Representative Norman Allen 0150

FIELD INVOICE

Open Hole Test \$ 550.00 Misrun \$ Straddle Test \$ Jars \$ Selective Zone \$ Safety Joint \$ Standby \$ Evaluation \$ Extra Packer \$ Circ. Sub. \$ Mileage \$ Fluid Sampler \$