



WESTERN TESTING CO., INC.
FORMATION TESTING

Call - OK

TICKET No 8186

P. O. BOX 1599 WICHITA, KANSAS 67201
PHONE (316) 262-5861

Elevation 1045RB Formation Burnee & St Scott Hff. Pay - Ft.

R 070

District Augusta Date 7-16-85 Customer Order No. -

COMPANY NAME Range Oil Co Inc

ADDRESS 240 Page Court 22024 Douglas Wichita, Ks 67202

LEASE AND WELL NO Steward # E 1 COUNTY Chautauqua STATE Ks Sec 6 Twp 32S Rge 9E

Mail Invoice To Same #1 "E" STEWART Co. Name Address No. Copies Requested 1

Mail Charts To Same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested From 1880 ft. to 1950 ft. Total Depth 1950 ft.
Packer Depth 1880 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 1875 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -

Top Recorder Depth (Inside) 1942 ft. Recorder Number 13266 Cap 4000
Bottom Recorder Depth (Outside) 1945 ft. Recorder Number 13268 Cap 4200
Below Saddle Recorder Depth - Recorder Number - Cap -

Drilling Contractor Range Oil Co Inc #2
Mud Type Chem Viscosity 44
Weight 9.5 Water Loss 12.2 cc.
Chlorides 1400 P.P.M.
Jars: Make - Serial Number -
Did Well Flow? No Reversed Out No
Drill Collar Length 180 I. D. 2 1/4 in.
Weight Pipe Length - I. D. - in.
Drill Pipe Length 1680 I. D. 3 1/8 in.
Test Tool Length 20 ft. Tool Size 5 1/2 OD in.
Anchor Length 70 ft. Size 5 1/2 OD in.
Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 1/2 in. Tool Joint Size 4 1/2 x 7 in.

Flow: weak to very weak @ end of test

Recovered 80 ft. of Drilling mud
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -
Recovered - ft. of -
Chlorides 1300 P.P.M. Sample Jars used 1 Remarks:

Time On Location 4:30 7:16 P.M. Time Pick Up Tool 6:55 P.M. Time Off Location Staly A.M. P.M.
Time Set Packer(s) 7:30 P.M. Time Started Off Bottom 10:30 P.M. Maximum Temperature 101
Initial Hydrostatic Pressure (A) 950 P.S.I.
Initial Flow Period Minutes 30 (B) 50 P.S.I. to (C) 40 P.S.I.
Initial Closed In Period Minutes 30 (D) 730 P.S.I.
Final Flow Period Minutes 60 (E) 80 P.S.I. to (F) 60 P.S.I.
Final Closed In Period Minutes 60 (G) 740 P.S.I.
Final Hydrostatic Pressure (H) 940 P.S.I.

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 [Signature] Signature of Customer or his authorized representative

Western Representative Norman Allen 0150

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$250.00), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler.

WESTERN TESTING CO., INC.

Pressure Data

Date 7-16

Test Ticket No. 8186

Recorder No. 13266

Capacity _____ Location _____ F

Clock No. _____ Elevation _____ Well Temperature _____ °

Point	Pressure	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>957</u> P.S.I.		
B. First Initial Flow Pressure	<u>42</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Min
C. First Final Flow Pressure	<u>42</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Min
D. Initial Closed-in Pressure	<u>731</u> P.S.I.	<u>60</u> Mins.	<u>65</u> Min
E. Second Initial Flow Pressure	<u>59</u> P.S.I.	<u>60</u> Mins.	<u>66</u> Min
F. Second Final Flow Pressure	<u>64</u> P.S.I.		
G. Final Closed-in Pressure	<u>742</u> P.S.I.		
H. Final Hydrostatic Mud	<u>944</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 14 Inc.
of 5 mins. and a
final inc. of 0 Min.

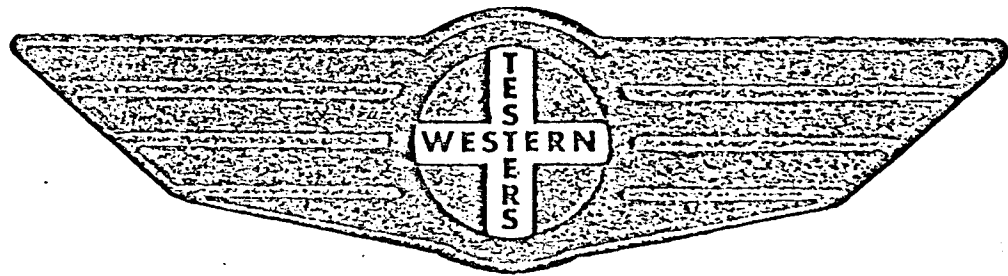
Final Shut-In
Breakdown: 23 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>42</u>	0	<u>42</u>	0	<u>59</u>	0	<u>64</u>
P 2 5		3	<u>234</u>	5		3	<u>237</u>
P 3 10		6	<u>417</u>	10		6	<u>382</u>
P 4 15		9	<u>542</u>	15	<u>59</u>	9	<u>486</u>
P 5 20		12	<u>611</u>	20	<u>60</u>	12	<u>550</u>
P 6 25		15	<u>649</u>	25	<u>60</u>	15	<u>592</u>
P 7 30	<u>42</u>	18	<u>680</u>	30	<u>60</u>	18	<u>623</u>
P 8 35		21	<u>698</u>	35	<u>61</u>	21	<u>643</u>
P 9 40		24	<u>711</u>	40	<u>61</u>	24	<u>660</u>
P10 45		27	<u>723</u>	45	<u>62</u>	27	<u>673</u>
P11 50		30	<u>731</u>	50	<u>62</u>	30	<u>683</u>
P12 55		33		55	<u>63</u>	33	<u>693</u>
P13 60		36		60	<u>63</u>	36	<u>700</u>
P14 65		39		65	<u>64</u>	39	<u>706</u>
P15 70		42		70		42	<u>712</u>
P16 75		45		75		45	<u>718</u>
P17 80		48		80		48	<u>724</u>
P18 85		51		85		51	<u>728</u>
P19 90		54		90		54	<u>732</u>
P20 95		57		95		57	<u>735</u>
100		60		100		60	<u>738</u>
						63	<u>740</u>

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 7-16-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1
ELEVATION (KB): 1045
SECTION: 6
RANGE: 9E
GAUGE SN #13266

TEST: 1
FORMATION: PAWNEE & FT. SCOTT
TOWNSHIP: 32S
COUNTY: CHAUTAUQUA
RANGE: 4000

TICKET #8186
LEASE: "E" STEWARD
GEOLOGIST: J. HONAS
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 1880 FT TO: 1950 FT TOTAL DEPTH: 1950 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 1880 FT SIZE: 6 3/4 IN PAKER DEPTH: 1875 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: CHEMICAL VISCOSITY: 44
WEIGHT: 9.5 WATER LOSS (CC): 12.2
CHLORIDES (P.P.M.): 1400
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 1680 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 70 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 TO VERY WEAK BLOW AT END OF TEST.

RECOVERED: 80 FT OF: DRILLING MUD.
RECOVERED: FT OF: CHLORIDES 1300 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 7:30 PM TIME STARTED OFF BOTTOM: 10:30 PM
WELL TEMPERATURE: 101 °F
INITIAL HYDROSTATIC PRESSURE: (A) 957 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 42 PSI TO (C) 42 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 731 PSI
FINAL FLOW PERIOD MIN: 65 (E) 59 PSI TO (F) 64 PSI
FINAL CLOSED IN PERIOD MIN: 66 (G) 742 PSI
FINAL HYDROSTATIC PRESSURE (H) 944 PSI

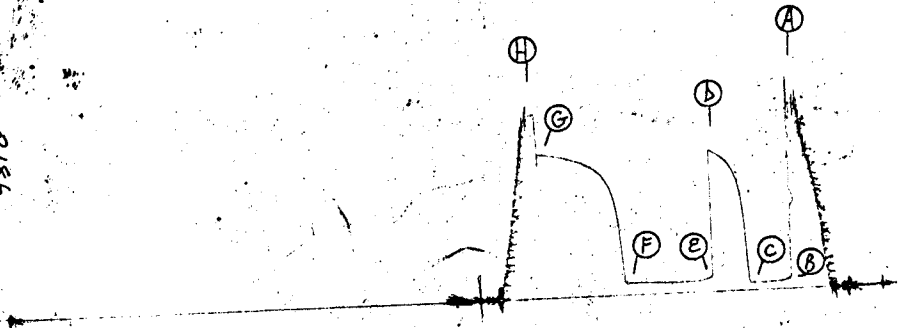
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