



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO. 9540

P. O. BOX 1599 PHONE (316) 262-5861

Elevation 1424 Kb Formation *Miss* Eff. Pay Ft.

WICHITA, KANSAS 67201

COMPANY NAME *Range Oil Co Inc* District *Amesbury* Date *8-16-85* Customer Order No. *240 Page Court*
ADDRESS *220 West Douglas*
LEASE AND WELL NO. *Dieck #1* COUNTY *Butler* STATE *Ka* Sec. *32* Twp. *23* Rge. *3E*
Mail Invoice To *Same* #1 DIECK No. Copies Requested *1*
Co. Name Address
Mail Charts To *Same* No. Copies Requested *5*
Address

Formation Test No. *1* Interval Tested From *2687* ft. to *2735* ft. Total Depth *2735* ft.
Packer Depth *2687* ft. Size *6 3/4* in. Packer Depth ft. Size in.
Packer Depth *2683* ft. Size *6 3/4* in. Packer Depth ft. Size in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) *2690* ft. Recorder Number *2605* Cap. *4150*
Bottom Recorder Depth (Outside) *2695* ft. Recorder Number *2608* Cap. *4175*
Below Straddle Recorder Depth ft. Recorder Number Cap.
Drilling Contractor *Range #1* Drill Collar Length *120* I. D. *2.25* in.
Mud Type *Chom* Viscosity *47* Weight Pipe Length I. D. in.
Weight *10.1* Water Loss *14* cc. Drill Pipe Length *2547* I. D. *3.8* in.
Chlorides *2300* P.P.M. Test Tool Length *20* ft. Tool Size *5 1/2* in.
Jars: Make *NO* Serial Number Anchor Length *48* ft. Size *5 1/2* in.
Did Well Flow? *NO* Reversed Out *NO* Surface Choke Size *3 1/4* in. Bottom Choke Size *3 1/4* in.
Main Hole Size *7 1/8* in. Tool Joint Size *4 1/2 in*

Blow: *Weak blow first floor Weak blow throughout second floor*

Recovered *1* ft. of *free oil*
Recovered *250* ft. of *muddy salt water*
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides *35600* P.P.M. Sample Jars used Remarks:

Time On Location *5:30* A.M. Time Pick Up Tool *8:30* A.M. Time Off Location A.M.
Time Set Packer(s) *10:35* A.M. Time Started Off Bottom *1:35* A.M. Maximum Temperature *108* P.M.
Initial Hydrostatic Pressure (A) *1418* P.S.I.
Initial Flow Period Minutes *30* (B) *97* P.S.I. to (C) *73* P.S.I.
Initial Closed In Period Minutes *30* (D) *653* P.S.I.
Final Flow Period Minutes *60* (E) *137* P.S.I. to (F) *116* P.S.I.
Final Closed In Period Minutes *60* (G) *663* P.S.I.
Final Hydrostatic Pressure (H) *1418* 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, or 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 *Robert Olsen*
Signature of Customer or his authorized representative

Western Representative *Kenny Kurlander*

FIELD INVOICE

Open Hole Test \$ *550*
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

WESTERN TESTING CO., INC.

Pressure Data

Date 8-16

Test Ticket No. 9540

Recorder No. 2605

Capacity

Location

Clock No. Elevation

Well Temperature

Point Pressure

Time Given

Time Computed

A Initial Hydrostatic Mud 1424 P.S.I.
 B First Initial Flow Pressure 68 P.S.I.
 C First Final Flow Pressure 71 P.S.I.
 D Initial Closed-in Pressure 653 P.S.I.
 E Second Initial Flow Pressure 108 P.S.I.
 F Second Final Flow Pressure 115 P.S.I.
 G Final Closed-in Pressure 658 P.S.I.
 H Final Hydrostatic Mud 1424 P.S.I.

Open Tool

M

First Flow Pressure

Initial Closed-in Pressure

Second Flow Pressure

Final Closed-in Pressure

30 Mins. 30 Mins.
30 Mins. 33 Mins.
60 Mins. 60 Mins.
60 Mins. 60 Mins.

PRESSURE BREAKDOWN

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

Initial Shut-In
 Breakdown: 12 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 13 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

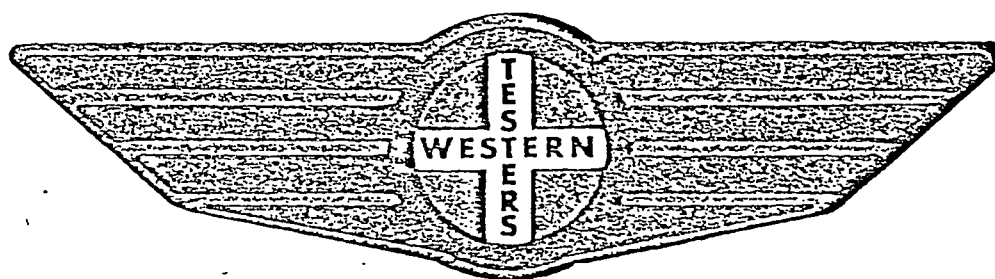
Final Shut-In
 Breakdown: 21 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>68</u>	0	<u>71</u>	0	<u>108</u>	0	<u>115</u>
P 2 5	<u>(</u>	3	<u>415</u>	5	<u>(</u>	3	<u>419</u>
P 3 10	<u>(</u>	6	<u>542</u>	10	<u>(</u>	6	<u>529</u>
P 4 15	<u>(</u>	9	<u>593</u>	15	<u>(</u>	9	<u>572</u>
P 5 20	<u>68</u>	12	<u>617</u>	20	<u>(</u>	12	<u>596</u>
P 6 25	<u>69</u>	15	<u>630</u>	25	<u>(</u>	15	<u>614</u>
P 7 30	<u>71</u>	18	<u>639</u>	30	<u>(</u>	18	<u>625</u>
P 8 35		21	<u>643</u>	35	<u>(</u>	21	<u>635</u>
P 9 40		24	<u>647</u>	40	<u>108</u>	24	<u>641</u>
P10 45		27	<u>649</u>	45	<u>109</u>	27	<u>646</u>
P11 50		30	<u>651</u>	50	<u>111</u>	30	<u>651</u>
P12 55		33	<u>653</u>	55	<u>114</u>	33	<u>655</u>
P13 60		36		60	<u>115</u>	36	<u>656</u>
P14 65		39		65		39	<u>657</u>
P15 70		42		70		42	<u>657</u>
P16 75		45		75		45	<u>658</u>
P17 80		48		80		48	<u>(</u>
P18 85		51		85		51	<u>(</u>
P19 90		54		90		54	<u>(</u>
P20 95		57		95		57	<u>(</u>
100		60		100		60	<u>658</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: 8-16-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 1
ELEVATION (KB): 1424 FORMATION: MISSISSIPPI
SECTION: 32 TOWNSHIP: 23S
RANGE: 3E COUNTY: BUTLER STATE: KANSAS
GAUGE SN #2605 RANGE: 4150 CLOCK: 12

TICKET #9540
LEASE: DIECK
GEOLOGIST: R. OLSEN

INTERVAL TEST FROM: 2687 FT TO: 2735 FT TOTAL DEPTH: 2735 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2687 FT SIZE: 6 3/4 IN PAKER DEPTH: 2683 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: CHEMICAL VISCOSITY: 47
WEIGHT: 10.1 WATER LOSS (CC): 14
CHLORIDES (P.P.M.): 2300
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2547 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 48 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: 1 FT OF: FREE OIL.
RECOVERED: 250 FT OF: MUDDY SALT WATER.
RECOVERED: FT OF: CHLORIDES 35000 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): 10:35 AM TIME STARTED OFF BOTTOM: 1:35 PM
WELL TEMPERATURE: 108 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1424 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 68 PSI TO (C) 71 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 653 PSI
FINAL FLOW PERIOD MIN: 60 (E) 108 PSI TO (F) 115 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 658 PSI
FINAL HYDROSTATIC PRESSURE (H) 1424 PSI

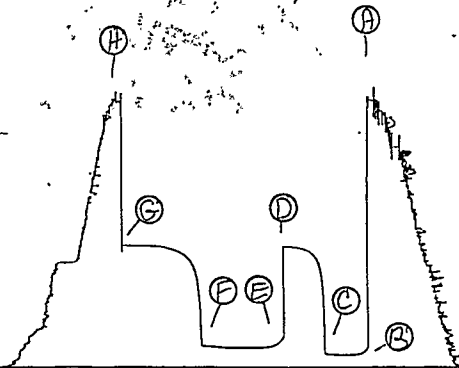
TKT #9540

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2608~ 057 #1 9540

TKT #9540.

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DST #1

9540