



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 10425

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

Elevation 1697 KB Formation Conglomerate Sd Eff. Pay Ft.

District Great Bend KS Date 8-31-85 Customer Order No. ✓

COMPANY NAME Range Oil Co Inc.

ADDRESS 240 Page Court 220 West Douglas Wichita Kansas 67202

LEASE AND WELL NO. Williams C-5 COUNTY Rice STATE KS Sec. 7 Twp. 18 Rge. 6 W

Mail Invoice To #5 "C" WILLIAMS same as above No. Copies Requested 5
Co. Name Address

Mail Charts To same as above No. Copies Requested 5
Address

Formation Test No. #1 Interval Tested From 3227 ft. to 3256 ft. Total Depth 3256 ft.

Packer Depth 3222 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Packer Depth 3227 ft. Size 6 5/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3231 ft. Recorder Number 13762 Cap. 3925

Bottom Recorder Depth (Outside) 3235 ft. Recorder Number 13759 Cap. 3900

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor ROCT DRIG Rig #1 Drill Collar Length 186 I. D. 2.25 in.

Mud Type SAGDAY STARCH Viscosity 8.42 Weight Pipe Length I. D. in.

Weight 10.0 Water Loss 8.0 cc. Drill Pipe Length 3020 I. D. 3.8 in.

Chlorides 78,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 00 in.

Jars: Make Serial Number Anchor Length 29 ft. Size 5 1/2 00 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 11 in.

Blow: 1st opening Weak Blow Hose 1/4" INTO Bucket, Blow Remain Thru out
2nd opening Weak Blow Building to a Fair Blow Hose 7" INTO Bucket, Blow Remain Thru out

Recovered ft. of

Recovered #60 ft. of Oil Cut Mud 15% GAS 20% OIL 65% MUD

Recovered 60 ft. of Oil Cut Mud 5% GAS 30% OIL 65% MUD

Recovered 120 ft. of Fluid Recovery

Recovered ft. of

Chlorides P.P.M. Sample Jars used 2 Remarks:

8-30-85 9:50 A.M. Time On Location Time Pick Up Tool 12:30 P.M. Time Off Location 7:30 P.M.

Time Set Packer(s) 2:10 P.M. Time Started Off Bottom 5:10 P.M. Maximum Temperature Broken Thermometer

Initial Hydrostatic Pressure (A) 1849 P.S.I.

Initial Flow Period Minutes 30 (B) 57 P.S.I. to (C) 57 P.S.I.

Initial Closed In Period Minutes 30 (D) 190 P.S.I.

Final Flow Period Minutes 60 (E) 85 P.S.I. to (F) 76 P.S.I.

Final Closed In Period Minutes 60 (G) 583 P.S.I.

Final Hydrostatic Pressure (H) 1829 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 Thomas A. Moten
Signature of Customer or his authorized representative

Western Representative Ronnie Mitchell 8-31-85

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. FORMATION TESTING

TICKET No 10425

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

Elevation _____ Formation _____ Eff. Pay _____ Ft.

District Grout Bank Date 8-31-85 Customer Order No. ✓

COMPANY NAME Ronne Oil Co. Inc.

ADDRESS 240 West Douglas Wichita Kansas 67202

LEASE AND WELL NO. William C-5 COUNTY Rice STATE Ks Sec. 7 Twp. 18 Rge. 6W

Mail Invoice To #5 "C" WILLIAMS same as above No. Copies Requested 5

Co. Name _____ Address _____

Mail Charts To same as above No. Copies Requested 5

Address _____

Formation Test No. #1 Interval Tested From 3227 ft. to 3256 ft. Total Depth 3256 ft.

Packer Depth 3227 ft. Size 2 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 3227 ft. Size 2 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3235 ft. Recorder Number 13162 Cap. 3700

Bottom Recorder Depth (Outside) 3235 ft. Recorder Number 13159 Cap. 3700

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor ROCK DRILLING Drill Collar Length 186 I. D. 2.625 in.

Mud Type Slick Viscosity 42 Weight Pipe Length _____ I. D. _____ in.

Weight 10.0 Water Loss 8.0 cc. Drill Pipe Length 3020 I. D. 3.8 in.

Chlorides 16,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.

Jars: Make _____ Serial Number _____ Anchor Length 24 ft. Size 5 1/2 in.

Did Well Flow? _____ Reversed Out _____ Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 1 1/4 in. Tool Joint Size 4 1/2 in.

Blow: 1st Wear down hole 1/4" into bucket, blow remaining out

2nd spinning, wear down bucket to a fair blow hole into bucket, blow remaining out

Recovered 150 ft. of Oil Cut Mud 15% GAS 40% OIL 65% MUD

Recovered 60 ft. of Oil Cut Mud 5% GAS 30% OIL 65% MUD

Recovered 120 ft. of FLUID Recovery

Recovered _____ ft. of _____

Chlorides _____ P.P.M. Sample Jars used 2 Remarks: _____

Time On Location 7:50 A.M. Time Pick Up Tool 12:30 A.M. Time Off Location 7:30 A.M.

Time Set Packer(s) 1:10 P.M. Time Started Off Bottom 5:10 P.M. Maximum Temperature Broken Thermometer

Initial Hydrostatic Pressure _____ (A) 1847 P.S.I.

Initial Flow Period _____ Minutes (B) 37 P.S.I. to (C) 57 P.S.I.

Initial Closed In Period _____ Minutes (D) 110 P.S.I.

Final Flow Period _____ Minutes (E) 85 P.S.I. to (F) 76 P.S.I.

Final Closed In Period _____ Minutes (G) 583 P.S.I.

Final Hydrostatic Pressure _____ (H) 1849 P.S.I.

COMPANY TERMS

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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 Ronne Mitchell 8-31-85

FIELD INVOICE

Open Hole Test	\$
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 8-31

Test Ticket No. 10425

Recorder No. 13762

Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1743</u> P.S.I.		
B First Initial Flow Pressure	<u>52</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>52</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>191</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>74</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>74</u> P.S.I.		
G Final Closed-in Pressure	<u>603</u> P.S.I.		
H Final Hydrostatic Mud	<u>1693</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: 13 Inc.
of 5 mins. and a
final inc. of 0 Min.

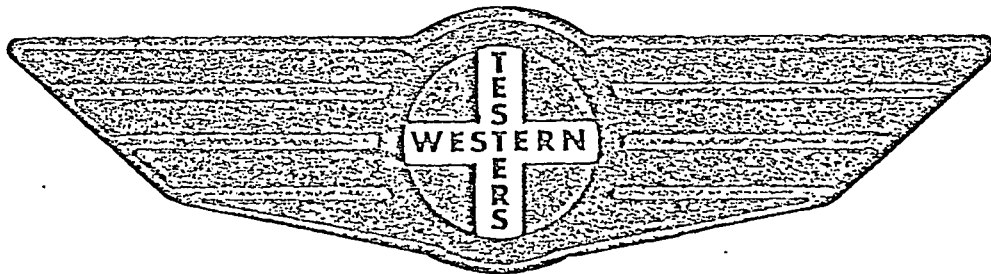
Final Shut-In
Breakdown: 21 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>52</u>	0	<u>52</u>	0	<u>74</u>	0	<u>74</u>
P 2 5		3	<u>52</u>	5		3	<u>76</u>
P 3 10		6	<u>55</u>	10		6	<u>79</u>
P 4 15		9	<u>64</u>	15		9	<u>85</u>
P 5 20		12	<u>73</u>	20		12	<u>91</u>
P 6 25		15	<u>82</u>	25		15	<u>100</u>
P 7 30	<u>52</u>	18	<u>94</u>	30		18	<u>111</u>
P 8 35		21	<u>106</u>	35		21	<u>118</u>
P 9 40		24	<u>122</u>	40		24	<u>126</u>
P10 45		27	<u>152</u>	45		27	<u>135</u>
P11 50		30	<u>191</u>	50		30	<u>148</u>
P12 55		33		55		33	<u>168</u>
P13 60		36		60	<u>74</u>	36	<u>195</u>
P14 65		39		65		39	<u>227</u>
P15 70		42		70		42	<u>263</u>
P16 75		45		75		45	<u>309</u>
P17 80		48		80		48	<u>373</u>
P18 85		51		85		51	<u>444</u>
P19 90		54		90		54	<u>514</u>
P20 95		57		95		57	<u>577</u>
100		60		100		60	<u>603</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: 8-31-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 5
ELEVATION (KB): 1697
SECTION: 7
RANGE: 6W
GAUGE SN #13762

TEST: 1
FORMATION: CONGLOMERATE SD.
TOWNSHIP: 18S
COUNTY: RICE
RANGE: 3925

TICKET #10425
LEASE: "C" WILLIAMS
GEOLOGIST: T.A. MATZEN
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 3227 FT TO: 3256 FT TOTAL DEPTH: 3256 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3222 FT SIZE: 6 5/8 IN Packer DEPTH: 3227 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN Packer DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: SALCLASTAR VISCOSITY: 42
WEIGHT: 10.0 WATER LOSS (CC): 8.0
CHLORIDES (P.P.M.): 78000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 186 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3020 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 29 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: I.F.P. WEAK BLOW; HOSE 1/4 INCH INTO BUCKET.
BLOW REMAINED THROUGHOUT. F.F.P. WEAK BLOW;
BUILDING TO A FAIR BLOW; HOSE 7 INCHES
INTO BUCKET; BLOW REMAINED THROUGHOUT.

RECOVERED: 60	FT	OF: OIL CUT MUD (15% GAS; 20% OIL; 65% MUD).
RECOVERED: 60	FT	OF: OIL CUT MUD (5% GAS; 30% OIL; 65% MUD).
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): 2:10 AM	TIME STARTED OFF BOTTOM: 5:10 AM
WELL TEMPERATURE: 0 °F	
INITIAL HYDROSTATIC PRESSURE:	(A) 1743 PSI
INITIAL FLOW PERIOD MIN: 30	(B) 52 PSI TO (C) 52 PSI
INITIAL CLOSED IN PERIOD MIN: 30	(D) 191 PSI
FINAL FLOW PERIOD MIN: 60	(E) 74 PSI TO (F) 74 PSI
FINAL CLOSED IN PERIOD MIN: 60	(G) 603 PSI
FINAL HYDROSTATIC PRESSURE	(H) 1693 PSI

TKT # 10425

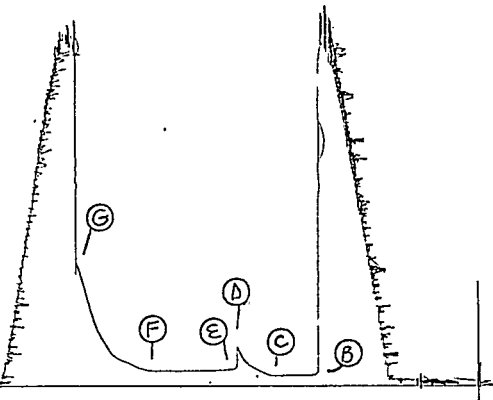
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13759
OST#

TKT # 10425

I

(H) (A)



13762
DST#7



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO. 10426

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

Elevation 1697 KB Formation Conglomerate Sl Eff. Pay Ft.

District 11 Great Bend Kansas Date 8-31-85 Customer Order No. 1
COMPANY NAME Range Oil Co Inc
ADDRESS 240 Page Court 220 West Douglas Wichita Kansas 67202
LEASE AND WELL NO. Williams C-#5 COUNTY Rice STATE Kans Sec. 7 Twp. 18 Rge. 6W
Mail Invoice To #5 "C" WILLIAMS Same No. Copies Requested 5
Co. Name Address
Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. #2 Interval Tested From 3257 ft. to 3276 ft. Total Depth 3276 ft.
Packer Depth 3252 ft. Size 65/8 in. Packer Depth - ft. Size - in.
Packer Depth 3257 ft. Size 69/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3261 ft. Recorder Number 13762 Cap. 3925
Bottom Recorder Depth (Outside) 3265 ft. Recorder Number 13759 Cap. 3901
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor ROCT DRILLING #1 Drill Collar Length 186 I. D. 2.25 in.
Mud Type SCA4 STARCH Viscosity 42 Weight Pipe Length - I. D. - in.
Weight 10.0 Water Loss 8.0 cc. Drill Pipe Length 3050 I. D. 3.8 in.
Chlorides 750.00 P.P.M. Test Tool Length - ft. Tool Size 5400 in.
Jars: Make - Serial Number - Anchor Length 21 ft. Size 5400 in.
Did Well Flow? - Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 77/8 in. Tool Joint Size 4 1/2 in.

Blow: 1st open STRONG Blow Off Bottom of Bucket Blow REMAIN THRU-OUT
2nd open STRONG Blow Off Bottom of Bucket Blow REMAIN THRU-OUT

Recovered ft. of
Recovered 1084 ft. of GS4 Frothy OIL CUT WATER 20% GAS 20% WTR 60% OIL
Recovered 120 ft. of GAS IN PIPE (Packet)
Recovered 370 ft. of SALT WATER
Recovered ft. of 1524 Total Recovery
Chlorides 55,000 P.P.M. Sample Jars used 7 Remarks: 38 Gravity

Time On Location 8/30/85 10:00 A.M. 8-31-85 11:30 P.M. Time Off Location 7:30 P.M.
Time Set Packer(s) 1:05 P.M. Time Started Off Bottom 4:05 A.M. Maximum Temperature N/AVAILABLE
Initial Hydrostatic Pressure (A) 1839 P.S.I.
Initial Flow Period Minutes 30 (B) 200 P.S.I. to (C) 314 P.S.I.
Initial Closed In Period Minutes 30 (D) 160 P.S.I.
Final Flow Period Minutes 60 (E) 391 P.S.I. to (F) 515 P.S.I.
Final Closed In Period Minutes 60 (G) 757 P.S.I.
Final Hydrostatic Pressure (H) 1790 P.S.I.

COMPANY TERMS SEP 03 1985

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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 Thomas A. Matton
Signature of Customer or his authorized representative

Western Representative Ronnie Mitchell 8-31-85

FIELD INVOICE

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

1285

Pressure Data

Test Ticket No. 10426

Capacity _____ Location _____ Ft. _____

Point	Pressure	Time Given	Time Computed
1	17113		

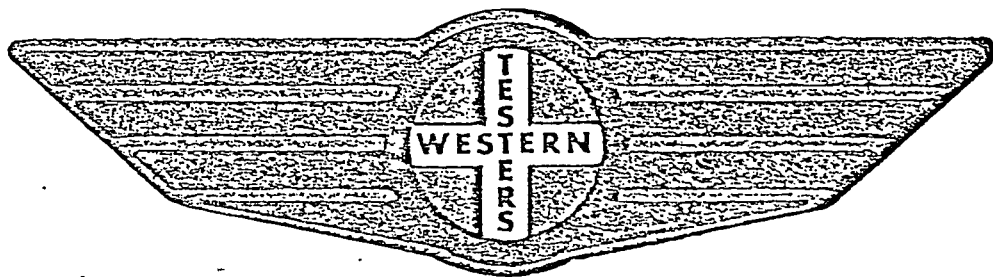
Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	1743 P.S.I.		
B First Initial Flow Pressure	195 P.S.I.	30 Mins.	30 Mins.
C First Final Flow Pressure	310 P.S.I.	30 Mins.	30 Mins.
D Initial Closed-in Pressure	672 P.S.I.	60 Mins.	60 Mins.
E Second Initial Flow Pressure	393 P.S.I.	60 Mins.	66 Mins.
F Second Final Flow Pressure	522 P.S.I.		
G Final Closed-in Pressure	711 P.S.I.		
H Final Hydrostatic Mud	1720 P.S.I.		

[illegible]

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

company RANGE OIL COMPANY, INC. Lease & Well No. #5 "C" WILLIAMS Sec. 7 Twp. 18S Rge. 0W Test No. Date

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 8-31-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 5
ELEVATION (KB): 1697
SECTION: 7
RANGE: 6W
GAUGE SN #13762

TEST: 2
FORMATION: CONGLOMERATE SD.
TOWNSHIP: 18S
COUNTY: RICE
RANGE: 3925

TICKET #10426
LEASE: "C" WILLIAMS
GEOLOGIST: T.A. MATZEN
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 3257 FT TO: 3276 FT TOTAL DEPTH: 3276 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3252 FT SIZE: 6 5/8 IN PACKER DEPTH: 3257 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: CLAYSTAR VISCOSITY: 42
WEIGHT: 10.0 WATER LOSS (CC): 8.0
CHLORIDES (P.P.M.): 78000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 186 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3050 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 19 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: STRONG BLOW OFF BOTTOM OF BUCKET
THROUGHOUT BOTH FLOW PERIODS

RECOVERED: 1084 FT OF: GASSY FROTHY OIL CUT WATER
RECOVERED: FT OF: (20% GAS; 20% WATER; 60% OIL).
RECOVERED: 120 FT OF: GAS ABOVE FLUID (POCKET).
RECOVERED: 310 FT OF: SALT WATER.
RECOVERED: FT OF: CHLORIDES 55000 PPM.
RECOVERED: FT OF: 38 GRAVITY.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 1:05 PM

TIME STARTED OFF BOTTOM: 4:05 PM

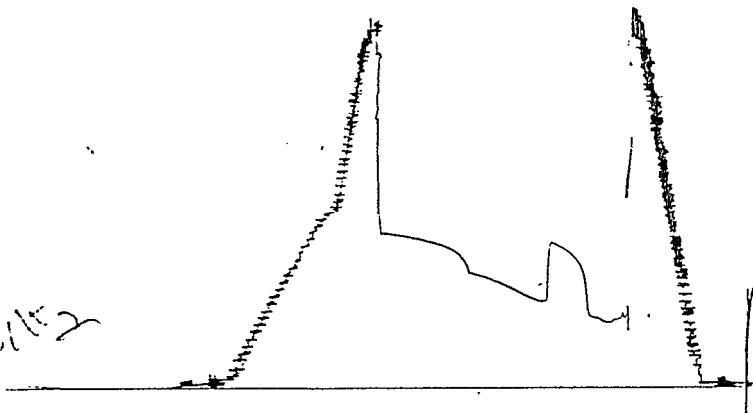
WELL TEMPERATURE: 0 °F

INITIAL HYDROSTATIC PRESSURE:		(A) 1743	PSI	
INITIAL FLOW PERIOD	MIN: 30	(B) 195	PSI TO (C) 310	PSI
INITIAL CLOSED IN PERIOD	MIN: 30	(D) 672	PSI	
FINAL FLOW PERIOD	MIN: 60	(E) 393	PSI TO (F) 522	PSI
FINAL CLOSED IN PERIOD	MIN: 66	(G) 711	PSI	
FINAL HYDROSTATIC PRESSURE		(H) 1720	PSI	

TKT # 10426



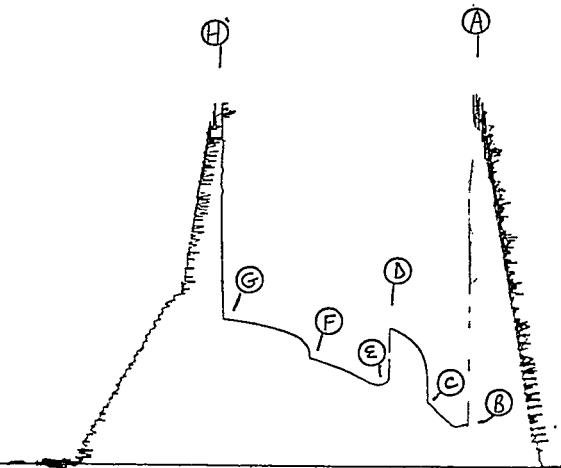
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TKT # 10426

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DSY #2
13762





WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 10427

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

Elevation 1697 KB Formation Mississippi Chert Eff. Pay 1 Ft.

R040 District Great Bend Ks Date 9-1-85 Customer Order No. ✓
COMPANY NAME Range Oil Co., Inc.
ADDRESS 240 Page Court 220 West Douglas Wichita Kansas 67202
LEASE AND WELL NO. Williams C #5 COUNTY Rice STATE Kansas Sec. 7 Twp. 18 Rge. 2 W
Mail Invoice To #5 "C" WILLIAMS Same No. Copies Requested 5
Co. Name Address
Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. #3 Interval Tested From 3277 ft. to 3296 ft. Total Depth 3296 ft.
Packer Depth 3272 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Packer Depth 3271 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set

Top Recorder Depth (Inside) 3281 ft. Recorder Number 13762 Cap. #3925
Bottom Recorder Depth (Outside) 3285 ft. Recorder Number 13759 Cap. #3900
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor ROCL DRILLING #1 Drill Collar Length 186 I. D. 2.25 in.
Mud Type Salt Clay Starch Viscosity 42 Weight Pipe Length - I. D. - in.
Weight 9.9 Water Loss 9.6 cc. Drill Pipe Length 3062 I. D. - in.
Chlorides 71,000 P.P.M. Test Tool Length 29 ft. Tool Size 5 1/2 in.
Jars: Make WTC Serial Number 417 Anchor Length 19 ft. Size 5 1/2 in.
Did Well Flow? GAS Reversed Out Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 in.

Blow: 1st opening, STRONG Blow off Bottom of Bucket, Blow Remain Thru-out
2nd opening, STRONG Blow off Bottom of Bucket, Blow Remain Thru-out

Recovered - ft. of -
Recovered 150 ft. of Gassy Frothy Oil 80% Oil 10% Gas 10% Water 36 Gravity
Recovered 60 ft. of Gassy Oil Cut WTR 20% OIL 80% WATER
Recovered - ft. of -
Recovered - ft. of -
Chlorides 57,000 P.P.M. Sample Jars used 6 Remarks: Had GAS to Surface in 4.5 min See Gas Report

8-31-85 11:00 A.M. 9-1-85 2:00 A.M.
Time On Location Time Pick Up Tool Time Off Location
Time Set Packer(s) 4:00 P.M. Time Started Off Bottom 7:00 P.M. Maximum Temperature NOT AVAILABLE
Initial Hydrostatic Pressure (A) 1790 P.S.I.
Initial Flow Period Minutes 30 (B) 162 P.S.I. to (C) 314 P.S.I.
Initial Closed In Period Minutes 30 (D) 825 P.S.I.
Final Flow Period Minutes 60 (E) 400 P.S.I. to (F) 593 P.S.I.
Final Closed In Period SEP. 01. 1985 Minutes 60 (G) 815 P.S.I.
Final Hydrostatic Pressure (H) 1780 P.S.I.

COMPANY TERMS

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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 Thomas A. Meyer
Signature of Customer or his authorized representative

Western Representative Ronnie Mitchell 9-1-85
1325

FIELD INVOICE

Open Hole Test \$ 550.00
Misrun \$
Straddle Test \$
Jars \$ 300.00
Selective Zone \$
Safety Joint \$ 65.00
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$ 915.00

WESTERN TESTING CO., INC.

Pressure Data

Date 9-1
 Recorder No. 13762
 Clock No. _____

Test Ticket No. 10427
 Capacity _____ Location _____ Ft. _____
 Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1782</u> P.S.I.		
B First Initial Flow Pressure	<u>159</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>316</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>818</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>403</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>584</u> P.S.I.		
G Final Closed-in Pressure	<u>814</u> P.S.I.		
H Final Hydrostatic Mud	<u>1771</u> P.S.I.		

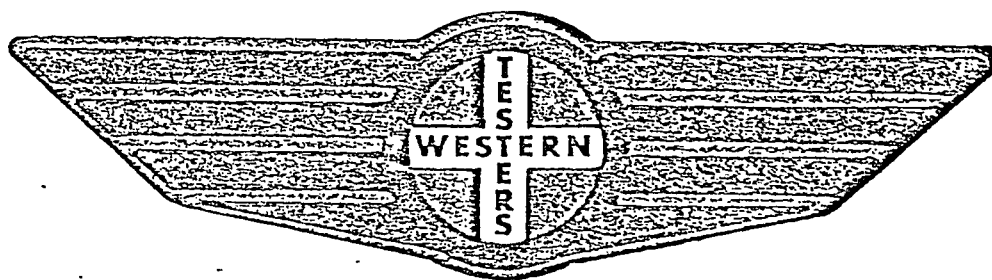
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>159</u>	0	<u>316</u>	0	<u>403</u>	0	<u>584</u>
P 2 5	<u>165</u>	3	<u>680</u>	5	<u>403</u>	3	<u>716</u>
P 3 10	<u>184</u>	6	<u>731</u>	10	<u>407</u>	6	<u>738</u>
P 4 15	<u>201</u>	9	<u>757</u>	15	<u>417</u>	9	<u>755</u>
P 5 20	<u>239</u>	12	<u>775</u>	20	<u>431</u>	12	<u>763</u>
P 6 25	<u>274</u>	15	<u>787</u>	25	<u>448</u>	15	<u>770</u>
P 7 30	<u>316</u>	18	<u>795</u>	30	<u>471</u>	18	<u>777</u>
P 8 35		21	<u>801</u>	35	<u>496</u>	21	<u>784</u>
P 9 40		24	<u>807</u>	40	<u>518</u>	24	<u>790</u>
P10 45		27	<u>813</u>	45	<u>538</u>	27	<u>795</u>
P11 50		30	<u>818</u>	50	<u>560</u>	30	<u>799</u>
P12 55		33		55	<u>576</u>	33	<u>803</u>
P13 60		36		60	<u>584</u>	36	<u>807</u>
P14 65		39		65		39	<u>808</u>
P15 70		42		70		42	<u>809</u>
P16 75		45		75		45	<u>810</u>
P17 80		48		80		48	<u>811</u>
P18 85		51		85		51	<u>812</u>
P19 90		54		90		54	<u>813</u>
P20 95		57		95		57	<u>814</u>
100		60		100		60	<u>814</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. #5 "C" WILLIAMS Sec. 7 Twp. 18S Rge. 6W Test No. 3 Date 9/1/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9-1-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 5
ELEVATION (KB): 1697
SECTION: 7
RANGE: 6W
GAUGE SN #13762
TICKET #10427
LEASE: "C" WILLIAMS
GEOLOGIST: T.A. MATZEN
FORMATION: MISSISSIPPI CHERT
TOWNSHIP: 18S
COUNTY: RICE
STATE: KANSAS
RANGE: 3925
CLOCK: 12

INTERVAL TEST FROM: 3277 FT TO: 3296 FT TOTAL DEPTH: 3296 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3272 FT SIZE: 6 5/8 IN PACKER DEPTH: 3277 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: SALCLASTAR VISCOSITY: 42
WEIGHT: 9.9 WATER LOSS (CC): 9.6
CHLORIDES (P.P.M.): 71000
JARS - MAKE: WTC SERIAL NUMBER: 417
DID WELL FLOW? GAS REVERSED OUT?
DRILL COLLAR LENGTH: 186 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3062 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 29 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 19 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: INITIAL FLOW PERIOD STRONG BLOW, OFF BOTTOM
OF BUCKET; BLOW REMAINED THROUGHOUT.
FINAL FLOW PERIOD STRONG BLOW, OFF BOTTOM
OF BUCKET; BLOW REMAINED THROUGHOUT.

RECOVERED: 1506 FT OF: GASSY FROTHY OIL
RECOVERED: FT OF: (80% OIL; 10% GAS; 10% WATER; GRAVITY 36).
RECOVERED: 60 FT OF: GASSY OIL CUT WATER
RECOVERED: FT OF: (20% OIL; 80% WATER).
RECOVERED: FT OF: CHLORIDES 57000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: HAD GAS TO SURFACE IN 45 MINUTES.
SEE ATTACHED GAS FLOW REPORT.

TIME SET PACKER(S): 4:00 AM TIME STARTED OFF BOTTOM: 7:00 AM
WELL TEMPERATURE: 0 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1782 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 159 PSI TO (C) 316 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 818 PSI
FINAL FLOW PERIOD MIN: 60 (E) 403 PSI TO (F) 584 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 814 PSI
FINAL HYDROSTATIC PRESSURE (H) 1771 PSI

WESTERN TESTING CO., INC.
GAS FLOW REPORT

DATE: 9-1-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 5
ELEVATION (KB): 1697
SECTION: 7
RANGE: 6W
GAUGE SN #13762

TICKET #10427
LEASE: "C" WILLIAMS
GEOLOGIST: T.A. MATZEN
FORMATION: MISSISSIPPI CHERT
TOWNSHIP: 18S
COUNTY: RICE
STATE: KANSAS
CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

SECOND FLOW

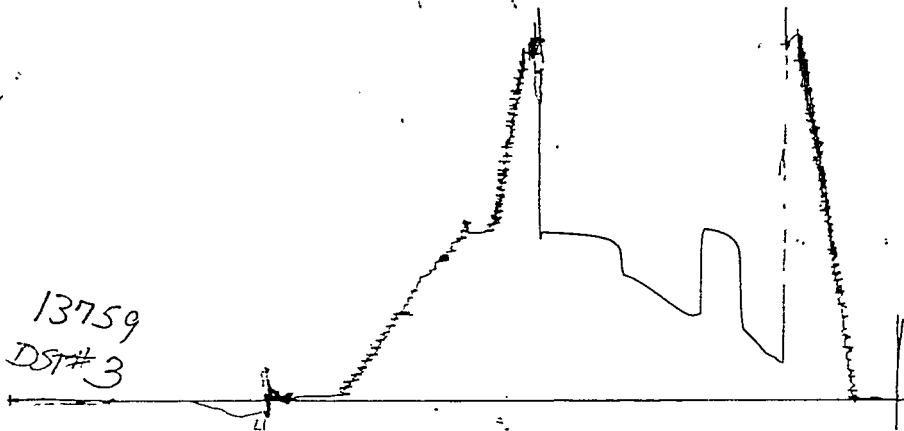
10	MERLA	1/4 IN.	12 PSIG	5860 CFPD
20			15	6550
30			22	7880
40			3.2	3010
50			2.0	2370
60			2.0	2370

GAS BOTTLE SN #:
DATE BOTTLE FILLED:
DATE TO BE INVOICED:

TKT # 10427

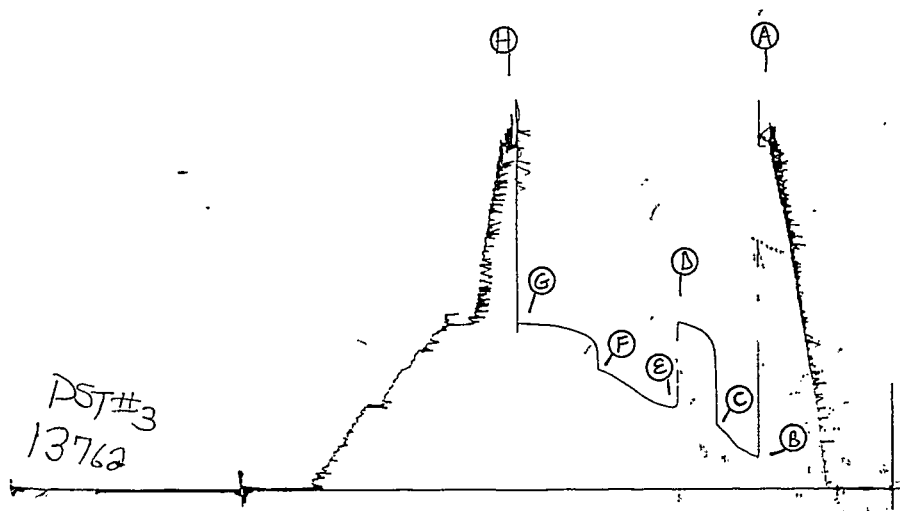
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13759
DST#3



TKT # 10427

I



PST #3
13762



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 10428

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

Elevation 1697 KB Formation Mississippi Chert Eff. Pay ☒ Ft.

RO40 District Great Bend, Kansas Date 9-1-85 Customer Order No. ☒
COMPANY NAME Range Oil Company Inc.
ADDRESS 240 Page Court 220 West Douglas Wichita Kansas 67202
LEASE AND WELL NO. Williams G-#5 COUNTY Rice STATE Kansas Sec. 7 Twp. 18 Rge. 6W
Mail Invoice To #5 "C" WILLIAMSSame No. Copies Requested 5
Co. Name Address
Mail Charts To Same No. Copies Requested 5
Address

Formation Test No. #4 Interval Tested From 3297 ft. to 3316 ft. Total Depth 3316 ft.
Packer Depth 3292 ft. Size 65/8 in. Packer Depth - ft. Size - in.
Packer Depth 3297 ft. Size 65/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 3302 ft. Recorder Number 13962 Cap. 3925
Bottom Recorder Depth (Outside) 3306 ft. Recorder Number 13959 Cap. 3908
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor ROCI DRG-RIG#1 Drill Collar Length 186 I. D. 2.25 in.
Mud Type Salt Clay Slush Viscosity 48 Weight Pipe Length - I. D. - in.
Weight 9.8 Water Loss 8.0 cc. Drill Pipe Length 3292 I. D. 3.8 in.
Chlorides 44,000 P.P.M. Test Tool Length 87 Tool Size 5 1/2 in.
Jars: Make WTC Serial Number 417 Anchor Length 19 Size 5 1/2 in.
Did Well Flow? - Reversed Out - Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7/8 in. Tool Joint Size 4 1/2 in.

Blow: 1st opening, Weak Blow, Hose 4 INTO Bucket Blow Remain Thru-out
2nd opening, Weak Blow, Hose 4 INTO Bucket Blow Remain Thru-out
Recovered 90 ft. of Very Slight Oil Cut Muddy Water
Recovered 90 ft. of 5% oil 25% water 70% mud
Recovered - ft. of
Recovered - ft. of
Recovered - ft. of
Chlorides 60,000 P.P.M. Sample Jars used 2 Remarks:

Time On Location 2:00 A.M. Time Pick Up Tool 3:30 A.M.
Time Set Packer(s) 5:25 P.M. Time Started Off Bottom 8:25 P.M.
Maximum Temperature N/A
Initial Hydrostatic Pressure (A) 1809 P.S.I.
Initial Flow Period (B) 30 P.S.I. to (C) 57 P.S.I.
Initial Closed In Period (D) 30 P.S.I.
Final Flow Period (E) 60 P.S.I. to (F) 95 P.S.I.
Final Closed In Period (G) 60 P.S.I.
Final Hydrostatic Pressure (H) 1770 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 Thomas A. Matson
Signature of Customer or his authorized representative

Western Representative Ronnie Mitchell 9/1/85
1325

FIELD INVOICE

Open Hole Test \$ 550.00
Misrun \$
Straddle Test \$
Jars \$ 300.00
Selective Zone \$ 65.00
Safety Joim \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$ 915.00

WESTERN TESTING CO., INC.

Pressure Data

Date 9-1

Test Ticket No. 10428

Recorder No. 13762

Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1806</u> P.S.I.	M		
B First Initial Flow Pressure	<u>40</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>49</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>795</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>64</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>83</u> P.S.I.			
G Final Closed-in Pressure	<u>825</u> P.S.I.			
H Final Hydrostatic Mud	<u>1784</u> P.S.I.			

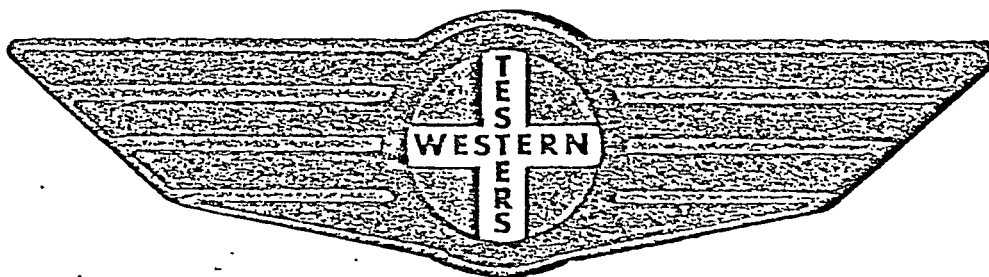
PRESSURE BREAKDOWN

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>20</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>40</u>	0	<u>49</u>	0	<u>64</u>	0	<u>83</u>
P 2 5	<u>5</u>	3	<u>202</u>	5	<u>64</u>	3	<u>134</u>
P 3 10	<u>5</u>	6	<u>481</u>	10	<u>64</u>	6	<u>290</u>
P 4 15	<u>40</u>	9	<u>601</u>	15	<u>64</u>	9	<u>469</u>
P 5 20	<u>43</u>	12	<u>671</u>	20	<u>66</u>	12	<u>575</u>
P 6 25	<u>46</u>	15	<u>705</u>	25	<u>68</u>	15	<u>634</u>
P 7 30	<u>49</u>	18	<u>734</u>	30	<u>71</u>	18	<u>674</u>
P 8 35		21	<u>759</u>	35	<u>73</u>	21	<u>701</u>
P 9 40		24	<u>777</u>	40	<u>75</u>	24	<u>723</u>
P10 45		27	<u>788</u>	45	<u>77</u>	27	<u>740</u>
P11 50		30	<u>795</u>	50	<u>79</u>	30	<u>756</u>
P12 55		33		55	<u>81</u>	33	<u>768</u>
P13 60		36		60	<u>83</u>	36	<u>778</u>
P14 65		39		65		39	<u>788</u>
P15 70		42		70		42	<u>795</u>
P16 75		45		75		45	<u>802</u>
P17 80		48		80		48	<u>809</u>
P18 85		51		85		51	<u>815</u>
P19 90		54		90		54	<u>820</u>
P20 95		57		95		57	<u>825</u>
100		60		100		<u>60</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. #5 "C" WILLIAMS Sec. 7 Twp. 18S Rge. 6W Test No. 4 Date 9/1/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 9-1-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 5
ELEVATION (KB): 1697
SECTION: 7
RANGE: 6W
GAUGE SN #13762

TEST: 4
FORMATION: MISSISSIPPI CHERT
TOWNSHIP: 18S
COUNTY: RICE
RANGE: 3925

TICKET #10428
LEASE: "C" WILLIAMS
GEOLOGIST: T.A. MATZEN
STATE: KANSAS
CLOCK: 12

INTERVAL TEST FROM: 3297 FT TO: 3316 FT TOTAL DEPTH: 3316 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3292 FT SIZE: 6 5/8 IN Packer DEPTH: 3297 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN Packer DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: SALCLASTAR VISCOSITY: 48
WEIGHT: 9.8 WATER LOSS (CC): 8.0
CHLORIDES (P.P.M.): 44000
JARS - MAKE: WTC SERIAL NUMBER: 417
DID WELL FLOW? REVERSED OUT?
DRILL COLLAR LENGTH: 186 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3082 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 29 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 19 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: INITIAL FLOW PERIOD WEAK BLOW; HOSE 1/4
INCH INTO BUCKET; BLOW REMAINED THROUGHOUT.
FINAL FLOW PERIOD WEAK BLOW; HOSE 1/4
INCH INTO BUCKET; BLOW REMAINED THROUGHOUT.

RECOVERED: 90	FT	OF: VERY SLIGHTLY OIL CUT MUDDY WATER
RECOVERED:	FT	OF: (5% OIL; 25% WATER; 70% MUD).
RECOVERED:	FT	OF: CHLORIDES 60000 PPM.
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:
RECOVERED:	FT	OF:

REMARKS:

TIME SET PACKER(S): 5:25 PM	TIME STARTED OFF BOTTOM: 8:25 PM
WELL TEMPERATURE: 0 °F	
INITIAL HYDROSTATIC PRESSURE:	(A) 1806 PSI
INITIAL FLOW PERIOD MIN: 30	(B) 40 PSI TO (C) 49 PSI
INITIAL CLOSED IN PERIOD MIN: 30	(D) 795 PSI
FINAL FLOW PERIOD MIN: 60	(E) 64 PSI TO (F) 83 PSI
FINAL CLOSED IN PERIOD MIN: 57	(G) 825 PSI
FINAL HYDROSTATIC PRESSURE	(H) 1784 PSI

TKT # 10428



DST #4
13759



TKT # 10428

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DST #4
13762

