



WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET No 10753

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

Elevation _____ Formation Lansing Eff. Pay _____ Ft.

WICHITA, KANSAS 67201

COMPANY NAME Range Oil Co Inc District Pratt Date 6/1/85 Customer Order No. _____

ADDRESS _____

LEASE AND WELL NO. Vernon #1 COUNTY Pratt STATE KS Sec. 27 Twp. 26 Rge. 11W

Mail Invoice To Same #1 VERNON No. Copies Requested 5

Mail Charts To Same No. Copies Requested 5

Formation Test No. 1 Interval Tested From 3732 ft. to 3750 ft. Total Depth 3750 ft.

Packer Depth 3727 ft. Size 6 7/8 in. Packer Depth - ft. Size - in.

Packer Depth 3732 ft. Size 6 7/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3740 ft. Recorder Number 13552 Cap. 4050

Bottom Recorder Depth (Outside) 3743 ft. Recorder Number 3086 Cap. 4500

Below Straddle Recorder Depth _____ Recorder Number _____ Cap. _____

Drilling Contractor Range Rig #2 Drill Collar Length 150 I. D. 2 1/4 in.

Mud Type Starch Viscosity 34 Weight Pipe Length _____ I. D. _____ in.

Weight 10.2 Water Loss 100.0 cc. Drill Pipe Length 3561 I. D. 3.8 in.

Chlorides 100,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.

Jars: Make No Serial Number No Anchor Length 18 ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out No 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 FH in.

Blow: Weak, increased to strong blow on first flow period

Strong blow throughout second flow period

Recovered 510 ft. of Salt Water

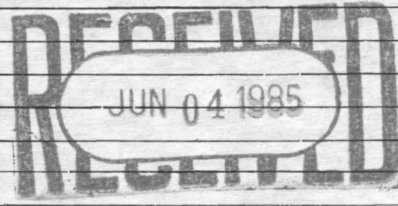
Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Chlorides 116,000 P.P.M. Sample Jars used _____ Remarks: _____



Time On Location 12:00 A.M. Time Pick Up Tool 3:00 P.M. Time Off Location 10:00 A.M.

Time Set Packer(s) 4:15 P.M. Time Started Off Bottom 7:15 P.M. Maximum Temperature 122.2

Initial Hydrostatic Pressure (A) 2024 P.S.I.

Initial Flow Period Minutes 30 (B) 60 P.S.I. to (C) 132 P.S.I.

Initial Closed In Period Minutes 30 (D) 1317 P.S.I.

Final Flow Period Minutes 40 (E) 203 P.S.I. to (F) 264 P.S.I.

Final Closed In Period Minutes 60 (G) 1317 P.S.I.

Final Hydrostatic Pressure (H) 2004 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: [Signature] Jim Worden Thank You

2376

FIELD INVOICE

Table with 2 columns: Item Name and Price. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTING CO., INC.

Pressure Data

Date: 6-1

Test Ticket No. 10753

Recorder No. 13552

Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2029</u> P.S.I.	Open Tool		M
B. First Initial Flow Pressure	<u>43</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>25</u> Mins.
C. First Final Flow Pressure	<u>137</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D. Initial Closed-in Pressure	<u>1313</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>55</u> Mins.
E. Second Initial Flow Pressure	<u>201</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>60</u> Mins.
F. Second Final Flow Pressure	<u>264</u> P.S.I.			
G. Final Closed-in Pressure	<u>1325</u> P.S.I.			
H. Final Hydrostatic Mud	<u>1992</u> P.S.I.			

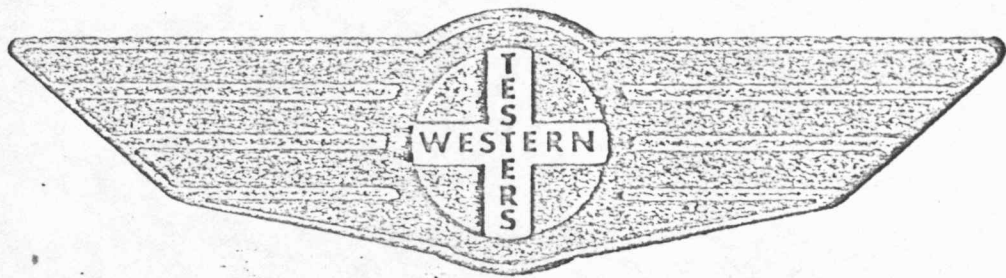
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>21</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>43</u>	0	<u>137</u>	0	<u>201</u>	0	<u>264</u>
P 2 5	<u>78</u>	3	<u>838</u>	5	<u>201</u>	3	<u>836</u>
P 3 10	<u>101</u>	6	<u>1151</u>	10	<u>201</u>	6	<u>1155</u>
P 4 15	<u>115</u>	9	<u>1214</u>	15	<u>203</u>	9	<u>1203</u>
P 5 20	<u>127</u>	12	<u>1243</u>	20	<u>208</u>	12	<u>1228</u>
P 6 25	<u>137</u>	15	<u>1263</u>	25	<u>217</u>	15	<u>1245</u>
P 7 30		18	<u>1279</u>	30	<u>225</u>	18	<u>1259</u>
P 8 35		21	<u>1291</u>	35	<u>234</u>	21	<u>1271</u>
P 9 40		24	<u>1301</u>	40	<u>242</u>	24	<u>1279</u>
P10 45		27	<u>1309</u>	45	<u>252</u>	27	<u>1286</u>
P11 50		30	<u>1313</u>	50	<u>256</u>	30	<u>1293</u>
P12 55		33		55	<u>264</u>	33	<u>1297</u>
P13 60		36		60		36	<u>1301</u>
P14 65		39		65		39	<u>1305</u>
P15 70		42		70		42	<u>1309</u>
P16 75		45		75		45	<u>1313</u>
P17 80		48		80		48	<u>1316</u>
P18 85		51		85		51	<u>1319</u>
P19 90		54		90		54	<u>1321</u>
P20 95		57		95		57	<u>1323</u>
100		60		100		60	<u>1325</u>

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company _____
Lease & Well No. _____ #1 VEKNUN
Sec. 27 Twp. 26S Rge. 11W Test No. 1 Date 6/1/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 6-1-85 TICKET #10753
CUSTOMER: RANGE OIL COMPANY INC. LEASE: VERNON
WELL: 1 TEST: 1 GEOLOGIST: S.M. KREIDLER
ELEVATION (KB): 0 FORMATION: LANSING
SECTION: 27 TOWNSHIP: 26S
RANGE: 11W COUNTY: PRATT STATE: KANSAS
GAUGE SN #13552 RANGE: 4050 CLOCK: 12

INTERVAL TEST FROM: 3732 FT TO: 3750 FT TOTAL DEPTH: 3750 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3727 FT SIZE: 6 5/8 IN PAKER DEPTH: 3732 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: STARCH VISCOSITY: 34
WEIGHT: 10.2 WATER LOSS (CC): 100.0
CHLORIDES (P.P.M.): 100000

JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO.
DRILL COLLAR LENGTH: 150 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3561 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW
INCREASED TO STRONG BLOW.
FINAL FLOW PERIOD STRONG BLOW
THROUGHOUT.

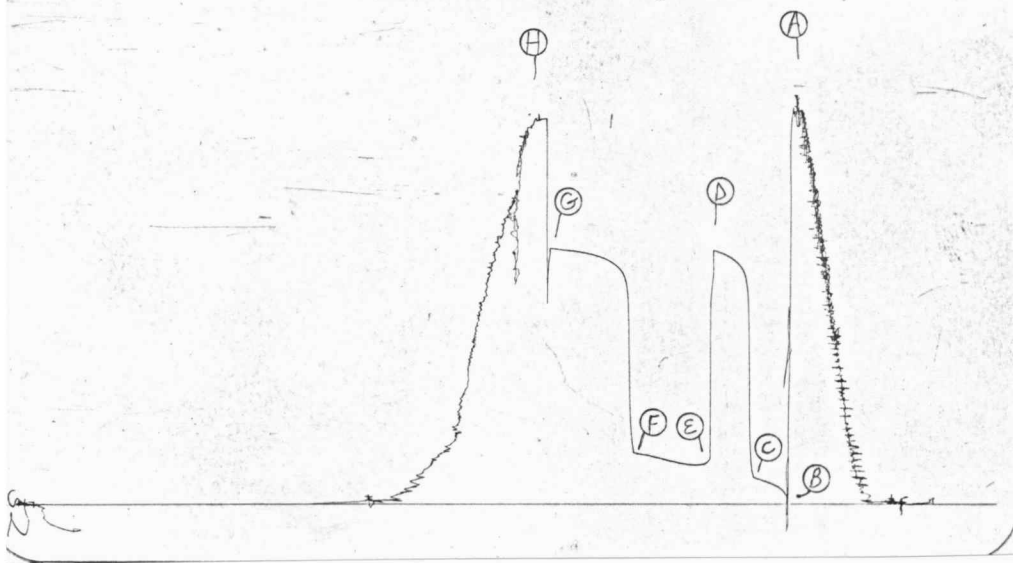
RECOVERED: 510 FT OF: SALT WATER.
RECOVERED: FT OF: CHLORIDES 116000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 4:15 AM TIME STARTED OFF BOTTOM: 7:15 AM
WELL TEMPERATURE: 122 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2029 PSI
INITIAL FLOW PERIOD MIN: 25 (B) 43 PSI TO (C) 137 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 1313 PSI
FINAL FLOW PERIOD MIN: 55 (E) 201 PSI TO (F) 264 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 1325 PSI
FINAL HYDROSTATIC PRESSURE (H) 1992 PSI

TKT # 10753

I



TKT # 10753

O





WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET N^o 10754

OK

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

Elevation _____ Formation K.C. Eff. Pay _____ Ft.

WICHITA, KANSAS 67201

District Pratt Date 6/2/85 Customer Order No. _____

COMPANY NAME Range Oil Co. Inc

ADDRESS _____

LEASE AND WELL NO. Vernon #1 COUNTY Pratt STATE Ks Sec. 27 Twp. 26 Rge. 11W

Mail Invoice To Same #1 VERNON No. Copies Requested 5

Co. Name _____ Address _____ No. Copies Requested 5

Mail Charts To Same Address _____

Formation Test No. 2 Interval Tested From 3885 ft. to 3938 ft. Total Depth 3938 ft.
Packer Depth 3880 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 3885 ft. Size 6 5/8 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set
Top Recorder Depth (Inside) 3900 ft. Recorder Number 13552 Cap. 4050
Bottom Recorder Depth (Outside) 3903 ft. Recorder Number 3086 Cap. 4500
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Range Rig #2 Drill Collar Length 180 I. D. 2 1/4 in.
Mud Type Starch Viscosity 42 Weight Pipe Length _____ I. D. _____ in.
Weight 9.8 Water Loss 8.8 cc. Drill Pipe Length 3684 I. D. 3.8 in.
Chlorides 68,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
Jars: Make _____ Serial Number _____ Anchor Length 53 ft. Size 5 1/2 OD 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 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak blow throughout, first flow period
No blow on second flow period

Recovered 40 ft. of Dry Mud
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Chlorides _____ P.P.M. Sample Jars used _____ Remarks: _____

RECEIVED
JUN 04 1985

Time On Location 6:00 A.M. Time Pick Up Tool 6:30 P.M. Time Off Location 12:30 P.M.
Time Set Packer(s) 8:00 A.M. Time Started Off Bottom 10:00 P.M. Maximum Temperature 123^e
Initial Hydrostatic Pressure (A) 2044 P.S.I.
Initial Flow Period Minutes 30 (B) 60 P.S.I. to (C) 60 P.S.I.
Initial Closed In Period Minutes 30 (D) 81 P.S.I.
Final Flow Period Minutes 30 (E) 71 P.S.I. to (F) 71 P.S.I.
Final Closed In Period Minutes 30 (G) 81 P.S.I.
Final Hydrostatic Pressure (H) 2024 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 Stephen M. Keidler
Signature of Customer or his authorized representative

Western Representative Jim Wondra
Thank you
2376

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 6-2-85

Test Ticket No. 10754

Recorder No. 13552

Capacity 4050

Location _____ Ft.

Clock No. _____ Elevation _____

Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2011</u>	P.S.I.		M
B. First Initial Flow Pressure	<u>50</u>	P.S.I.	<u>30</u> Mins.	<u>25</u> Mins.
C. First Final Flow Pressure	<u>50</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D. Initial Closed-in Pressure	<u>84</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E. Second Initial Flow Pressure	<u>53</u>	P.S.I.	<u>30</u> Mins.	<u>36</u> Mins.
F. Second Final Flow Pressure	<u>53</u>	P.S.I.		
G. Final Closed-in Pressure	<u>71</u>	P.S.I.		
H. Final Hydrostatic Mud	<u>2006</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 6 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: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

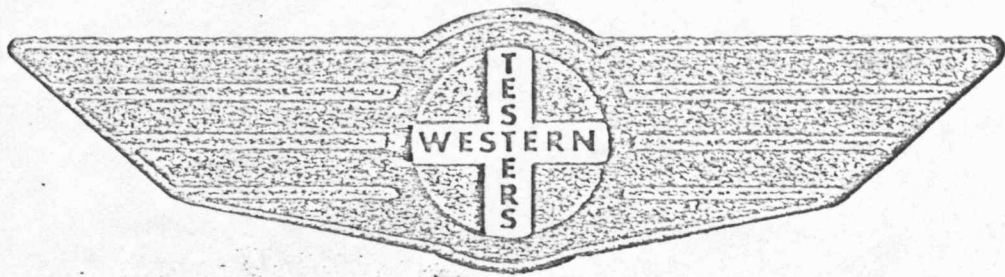
Final Shut-In
Breakdown: 13 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>50</u>	0	<u>50</u>	0	<u>53</u>	0	<u>53</u>
P 2 5		3	<u>51</u>	5		3	<u>54</u>
P 3 10		6	<u>52</u>	10		6	<u>55</u>
P 4 15		9	<u>55</u>	15		9	<u>56</u>
P 5 20		12	<u>58</u>	20		12	<u>57</u>
P 6 25	<u>50</u>	15	<u>62</u>	25		15	<u>58</u>
P 7 30		18	<u>65</u>	30	<u>53</u>	18	<u>59</u>
P 8 35		21	<u>69</u>	35		21	<u>61</u>
P 9 40		24	<u>76</u>	40		24	<u>63</u>
P10 45		27	<u>80</u>	45		27	<u>65</u>
P11 50		30	<u>84</u>	50		30	<u>67</u>
P12 55		33		55		33	<u>69</u>
P13 60		36		60		36	<u>71</u>
P14 65		39		65		39	
P15 70		42		70		42	
P16 75		45		75		45	
P17 80		48		80		48	
P18 85		51		85		51	
P19 90		54		90		54	
P20 95		57		95		57	
100		60		100		60	

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

pany RANGE OIL COMPANY, INC. Lease & Well No. #1 VERNON Sec. 7 / Twp. 20S Rge. 11W Test No. 2 Date 1/2/55

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 6-2-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 2
ELEVATION (KB): 0 FORMATION: KANSAS CITY
SECTION: 27 TOWNSHIP: 26S
RANGE: 11W COUNTY: PRATT STATE: KANSAS
GAUGE SN #13552 RANGE: 4050 CLOCK: 12

INTERVAL TEST FROM: 3885 FT TO: 3938 FT TOTAL DEPTH: 3938 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3880 FT SIZE: 6 5/8 IN PAKER DEPTH: 3885 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: STARCH VISCOSITY: 42
WEIGHT: 9.8 WATER LOSS (CC): 8.8
CHLORIDES (P.P.M.): 68000
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: 3684 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 53 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 FH IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW THROUGHOUT.
FINAL FLOW PERIOD NO BLOW.

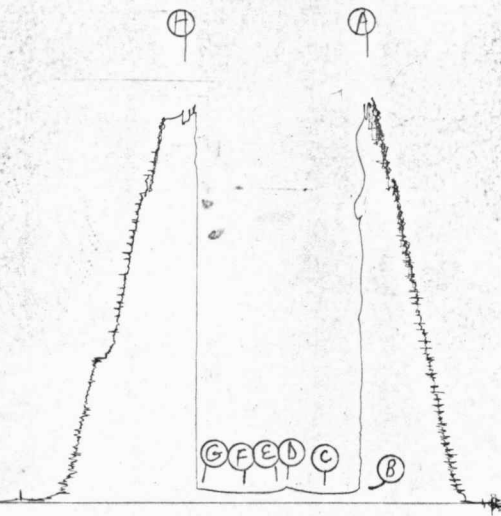
RECOVERED: 40 FT OF: DRILLING MUD.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 8:00 AM TIME STARTED OFF BOTTOM: 10:00 AM
WELL TEMPERATURE: 123 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2011 PSI
INITIAL FLOW PERIOD MIN: 25 (B) 50 PSI TO (C) 50 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 84 PSI
FINAL FLOW PERIOD MIN: 30 (E) 53 PSI TO (F) 53 PSI
FINAL CLOSED IN PERIOD MIN: 36 (G) 71 PSI
FINAL HYDROSTATIC PRESSURE (H) 2006 PSI

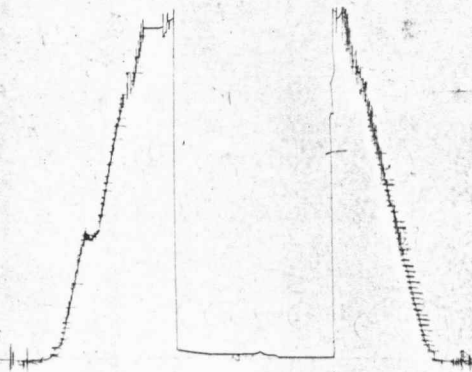
TKT # 10754

I



TKT # 10754

O





WESTERN TESTING CO., INC.
FORMATION TESTING

OK

TICKET No 10755

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

Elevation 1813 R.B Formation Miss Eff. Pay Ft.

WICHITA, KANSAS 67201

COMPANY NAME

Range Oil Co Inc

ADDRESS

LEASE AND WELL NO. Vernon #1 COUNTY Pratt STATE KS Sec. 27 Twp. 26 Rge. 11W

Mail Invoice To Same #1 VERNON No. Copies Requested 5

Mail Charts To Same Address No. Copies Requested 5

Formation Test No 3 Interval Tested From 4048 ft. to 4102 ft. Total Depth 4102 ft.

Packer Depth 4043 ft. Size 6 5/8 in. Packer Depth = ft. Size = in.

Packer Depth 4048 ft. Size 6 5/8 in. Packer Depth = ft. Size = in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4063 ft. Recorder Number 13552 Cap. 4050

Bottom Recorder Depth (Outside) 4066 ft. Recorder Number 3086 Cap. 4500

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Range Rig #2 Drill Collar Length 180 I. D. 2 1/4 in.

Mud Type Starch Viscosity 4.2 Weight Pipe Length I. D. in.

Weight 9.8 Water Loss 8.8 cc. Drill Pipe Length 3847 I. D. 3.8 in.

Chlorides 68,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 200 in.

Jars: Make No Serial Number No Anchor Length 54 ft. Size 5 1/2 200 in.

Did Well Flow? No Reversed Out No 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 FH in.

Blow: Weak blow throughout flow periods

Recovered 180 ft. of Dnlg Mud (Few specks of oil on top of tool)

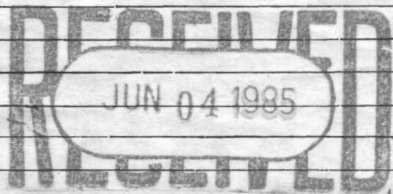
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

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



Time On Location 3:30 A.M. Time Pick Up Tool 4:00 P.M. Time Off Location 11:00 A.M.

Time Set Packer(s) 5:45 P.M. Time Started Off Bottom 8:45 P.M. Maximum Temperature 125.2

Initial Hydrostatic Pressure (A) 2095 P.S.I.

Initial Flow Period Minutes 30 (B) 81 P.S.I. to (C) 81 P.S.I.

Initial Closed In Period Minutes 30 (D) 56.8 P.S.I.

Final Flow Period Minutes 60 (E) 111 P.S.I. to (F) 132 P.S.I.

Final Closed In Period Minutes 60 (G) 99.3 P.S.I.

Final Hydrostatic Pressure (H) 2074 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 [Signature] Jim Wornathard You

2376

FIELD INVOICE

Table with 2 columns: Item Name and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL.

WESTERN TESTING CO., INC.

Pressure Data

Date 6-3-85 Test Ticket No. 10753
 Recorder No. 13552 Capacity 4050 Location _____ Ft
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2099</u>	P.S.I.		M
B First Initial Flow Pressure	<u>81</u>	P.S.I.	<u>30</u> Mins.	<u>25</u> Mins.
C First Final Flow Pressure	<u>85</u>	P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>568</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>121</u>	P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>140</u>	P.S.I.		
G Final Closed-in Pressure	<u>988</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2069</u>	P.S.I.		

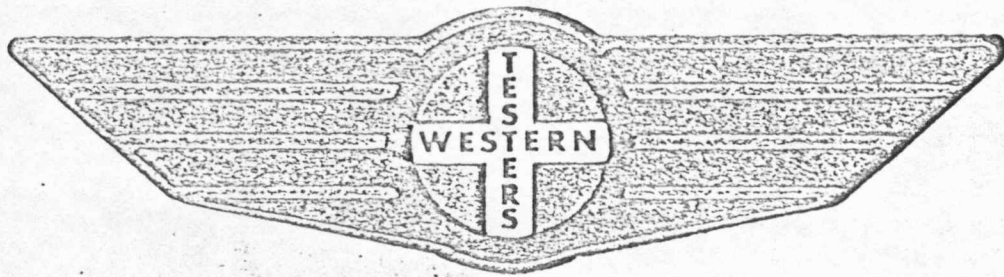
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>21</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>81</u>	0	<u>85</u>	0	<u>121</u>	0	<u>140</u>
P 2 5	↓	3	<u>89</u>	5	↓	3	<u>149</u>
P 3 10	↓	6	<u>98</u>	10	↓	6	<u>169</u>
P 4 15	↓	9	<u>107</u>	15	<u>121</u>	9	<u>201</u>
P 5 20	<u>81</u>	12	<u>125</u>	20	<u>124</u>	12	<u>242</u>
P 6 25	<u>85</u>	15	<u>154</u>	25	<u>127</u>	15	<u>297</u>
P 7 30		18	<u>206</u>	30	<u>130</u>	18	<u>362</u>
P 8 35		21	<u>278</u>	35	<u>132</u>	21	<u>440</u>
P 9 40		24	<u>369</u>	40	<u>134</u>	24	<u>508</u>
P10 45		27	<u>478</u>	45	<u>136</u>	27	<u>579</u>
P11 50		30	<u>568</u>	50	<u>138</u>	30	<u>644</u>
P12 55		33		55	<u>139</u>	33	<u>698</u>
P13 60		36		60	<u>140</u>	36	<u>748</u>
P14 65		39		65		39	<u>797</u>
P15 70		42		70		42	<u>834</u>
P16 75		45		75		45	<u>867</u>
P17 80		48		80		48	<u>902</u>
P18 85		51		85		51	<u>927</u>
P19 90		54		90		54	<u>955</u>
P20 95		57		95		57	<u>980</u>
100		60		100		60	<u>988</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 VERNON Sec. 2 / Twp. 26S Rge. 11W Test No. 3 Date 6/3/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 6-3-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 3
ELEVATION (KB): 1813 FORMATION: MISSISSIPPI
SECTION: 27 TOWNSHIP: 26S
RANGE: 11W COUNTY: PRATT STATE: KANSAS
GAUGE SN #13552 RANGE: 4050 CLOCK: 12

INTERVAL TEST FROM: 4048 FT TO: 4102 FT TOTAL DEPTH: 4102 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4043 FT SIZE: 6 5/8 IN PACKER DEPTH: 4048 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: STARCH VISCOSITY: 42
WEIGHT: 9.8 WATER LOSS (CC): 8.8
CHLORIDES (P.P.M.): 68000
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: 3847 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 54 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 FH IN

BLOW: WEAK BLOW THROUGHOUT TEST.

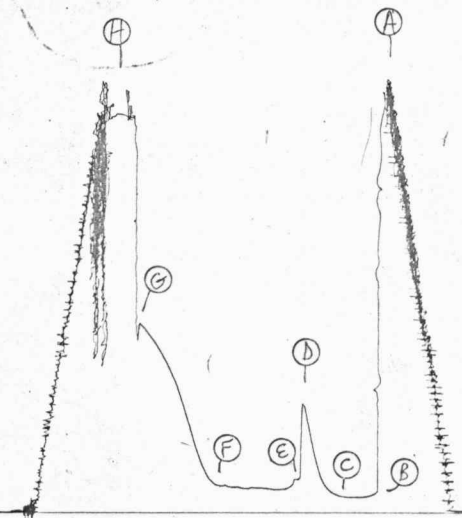
RECOVERED: 180 FT OF: DRILLING MUD
RECOVERED: FT OF: (FEW SPECKS OF OIL ON TOP OF TOOL).
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 5:45 AM TIME STARTED OFF BOTTOM: 8:45 AM
WELL TEMPERATURE: 125 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2099 PSI
INITIAL FLOW PERIOD MIN: 25 (B) 81 PSI TO (C) 85 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 568 PSI
FINAL FLOW PERIOD MIN: 60 (E) 121 PSI TO (F) 140 PSI
FINAL CLOSED IN PERIOD MIN: 60 (G) 988 PSI
FINAL HYDROSTATIC PRESSURE (H) 2069 PSI

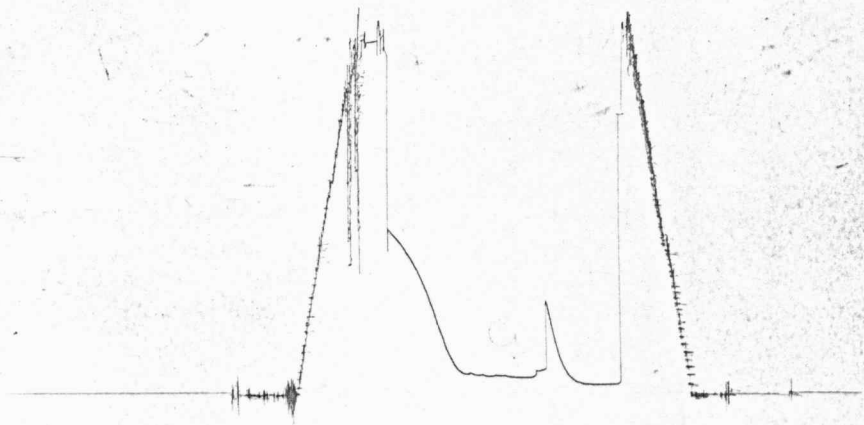
TKT # 10755

I



TKT # 10755

O





WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 10756

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

Elevation 1813 K.B Formation Viola Eff. Pay Ft.

District 12 Pratt Date 6/4/85 Customer Order No.
COMPANY NAME Range Oil Company
ADDRESS 240 Page Court 220 W Douglas, Wichita 67202
LEASE AND WELL NO. Vernon #1 COUNTY Pratt STATE Ks Sec. 27 Twp. 26S Rge. 11W
Mail Invoice To Same #1 Vernon No. Copies Requested 5
Mail Charts To Same No. Copies Requested 5

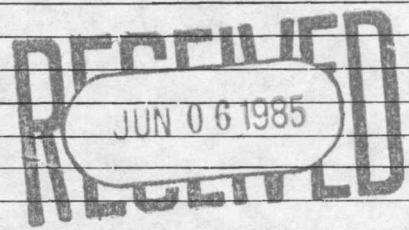
Formation Test No. 4 Interval Tested From 4293 ft. to 4312 ft. Total Depth 4312 ft.
Packer Depth 4288 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Packer Depth 4293 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4302 ft. Recorder Number 13552 Cap. 4050
Bottom Recorder Depth (Outside) 4305 ft. Recorder Number 3086 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Range Rig #2 Drill Collar Length 180 I. D. 2 1/4 in.
Mud Type Starch Viscosity 43 Weight Pipe Length - I. D. - in.
Weight 9.7 Water Loss 9.6 cc. Drill Pipe Length 4092 I. D. 3.8 in.
Chlorides 56,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 00 in.
Jars: Make - Serial Number - Anchor Length 19 ft. Size 5 1/2 00 in.
Did Well Flow? Yes Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Strong blow throughout flow periods
Gas to surface in 6 min on preflow

Recovered 120 ft. of Gas Cut Muddy Water
Recovered 450 ft. of Gassy Salt Water
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides 58,000 P.P.M. Sample Jars used - Remarks: -



Time On Location 6:30 A.M. Time Pick Up Tool 10:00 A.M. Time Off Location 4:30 P.M.
Time Set Packer(s) 11:40 P.M. Time Started Off Bottom 2:25 P.M. Maximum Temperature 127e
Initial Hydrostatic Pressure (A) 2125 P.S.I.
Initial Flow Period Minutes 30 (B) 152 P.S.I. to (C) 172 P.S.I.
Initial Closed In Period Minutes 30 (D) 115 P.S.I.
Final Flow Period Minutes 45 (E) 193 P.S.I. to (F) 233 P.S.I.
Final Closed In Period Minutes 60 (G) 1135 P.S.I.
Final Hydrostatic Pressure (H) 2105 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: [Signature]
2376

FIELD INVOICE
Open Hole Test \$ 1595
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$



No 4369

GAS FLOW REPORT

Date 6/4/85 Ticket 10756 Company Range Oil Co
 Well Name and No. Vernon #1 Dst No. 4 Interval Tested 4293-4312
 County Pratt State Ks Sec. 27 Twp. 26 Rg. 11

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
PRE FLOW					
<i>Gas to surface in 6 min</i>					
10	18 H ₂ O	1 1/2"			295,000 C.F.P.O
20	13 "	"			251,000 "
30	"	"			" "

SECOND FLOW					
5	17 H ₂ O	1 1/2"			287,000 C.F.P.O
10	"	"			" "
20	"	"			" "
30	"	"			" "
40	"	"			" "
45	"	"			" "

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____
 Authorized by _____

WESTERN TESTING CO., INC.

Pressure Data

Date 6-4-85 Test Ticket No. 10756
 Recorder No. 13552 Capacity 4050 Location _____
 Clock No. _____ Elevation _____ Well Temperature _____

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>2200</u> P.S.I.	Open Tool		M
B. First Initial Flow Pressure	<u>148</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>25</u> Mir
C. First Final Flow Pressure	<u>163</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mir
D. Initial Closed-in Pressure	<u>1126</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mir
E. Second Initial Flow Pressure	<u>193</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>63</u> Mir
F. Second Final Flow Pressure	<u>237</u> P.S.I.			
G. Final Closed-in Pressure	<u>1145</u> P.S.I.			
H. Final Hydrostatic Mud	<u>2150</u> P.S.I.			

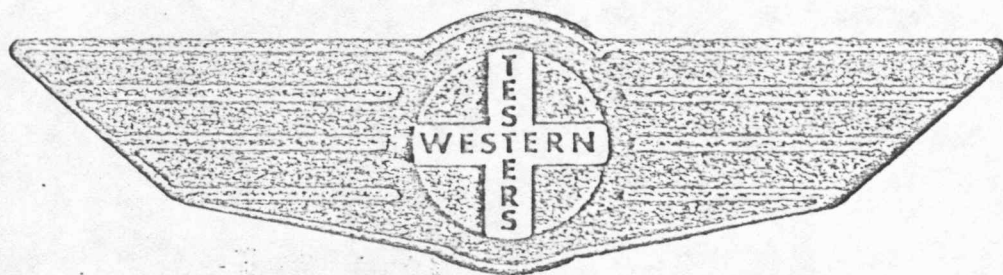
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>6</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>10</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>148</u>	0	<u>163</u>	0	<u>193</u>	0	<u>237</u>
P 2 5	<u>148</u>	3	<u>623</u>	5	<u>193</u>	3	<u>767</u>
P 3 10	<u>148</u>	6	<u>986</u>	10	<u>195</u>	6	<u>1025</u>
P 4 15	<u>149</u>	9	<u>1049</u>	15	<u>198</u>	9	<u>1068</u>
P 5 20	<u>155</u>	12	<u>1074</u>	20	<u>204</u>	12	<u>1089</u>
P 6 25	<u>163</u>	15	<u>1092</u>	25	<u>211</u>	15	<u>1104</u>
P 7 30		18	<u>1104</u>	30	<u>221</u>	18	<u>1115</u>
P 8 35		21	<u>1112</u>	35	<u>228</u>	21	<u>1122</u>
P 9 40		24	<u>1119</u>	40	<u>235</u>	24	<u>1128</u>
P10 45		27	<u>1124</u>	45	<u>237</u>	27	<u>1134</u>
P11 50		30	<u>1126</u>	50		30	<u>1138</u>
P12 55		33		55		33	<u>1140</u>
P13 60		36		60		36	<u>1141</u>
P14 65		39		65		39	<u>1142</u>
P15 70		42		70		42	<u>1143</u>
P16 75		45		75		45	<u>1144</u>
P17 80		48		80		48	<u>1144</u>
P18 85		51		85		51	<u>1144</u>
P19 90		54		90		54	<u>1145</u>
P20 95		57		95		57	<u>1145</u>
100		60		100		60	<u>1145</u>
						63	<u>1145</u>

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

pany RANGE OIL COMPANY, INC. Lease & Well No. #1 VERNON Sec. 27 Twp. 26S Rge. 11W Test No. 4 Date 6/4/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 6-4-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 4
ELEVATION (KB): 1813 FORMATION: VIOLA
SECTION: 27 TOWNSHIP: 26S
RANGE: 11W COUNTY: PRATT STATE: KANSAS
GAUGE SN #13552 RANGE: 4050 CLOCK: 12

TICKET #10756
LEASE: VERNON
GEOLOGIST: S.M. KREIDLER

INTERVAL TEST FROM: 4293 FT TO: 4312 FT TOTAL DEPTH: 4312 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4288 FT SIZE: 6 5/8 IN PACKER DEPTH: 4293 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #2
MUD TYPE: STARCH VISCOSITY: 43
WEIGHT: 9.7 WATER LOSS (CC): 9.6
CHLORIDES (P.P.M.): 56000
JARS - MAKE: SERIAL NUMBER:

DID WELL FLOW? YES REVERSED OUT? NO
DRILL COLLAR LENGTH: 180 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4092 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 FH IN

BLOW: STRONG BLOW THROUGHOUT TEST.
GAS TO SURFACE IN 6 MINUTES ON PREFLOW.

RECOVERED: 120 FT OF: GAS CUT MUDDY WATER.
RECOVERED: 450 FT OF: GASSY SALT WATER.
RECOVERED: FT OF: CHLORIDES 58000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: SEE ATTACHED GAS FLOW REPORT.

TIME SET PACKER(S): 11:40 AM TIME STARTED OFF BOTTOM: 2:25 PM
WELL TEMPERATURE: 127 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2200 PSI
INITIAL FLOW PERIOD MIN: 25 (B) 148 PSI TO (C) 163 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 1126 PSI
FINAL FLOW PERIOD MIN: 45 (E) 193 PSI TO (F) 237 PSI
FINAL CLOSED IN PERIOD MIN: 63 (G) 1145 PSI
FINAL HYDROSTATIC PRESSURE (H) 2150 PSI

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 6-4-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 4
ELEVATION (KB): 1813 FORMATION: VIOLA
SECTION: 27 TOWNSHIP: 26S
RANGE: 11W COUNTY: PRATT STATE: KANSAS
GAUGE SN #13552 RANGE: 4050 CLOCK: 12

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

PRE FLOW

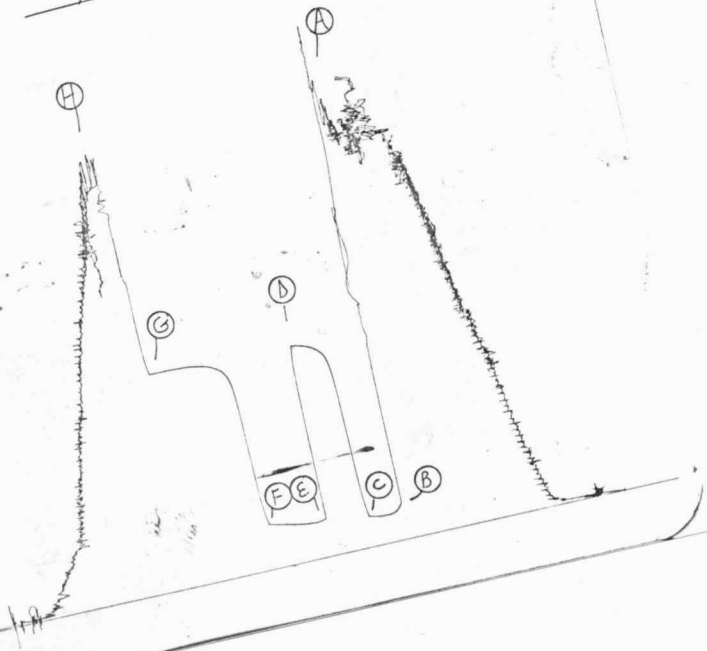
6				GAS TO SURFACE.
10	MERLA	1 1/2	18 PSIG	295000 CFPD
20			13	251000
30			13	251000

SECOND FLOW

5	MERLA	1 1/2	17 PSIG	287000 CFPD
10			17	287000
20			17	287000
30			17	287000
40			17	287000
45			17	287000

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

TKT # 10756
I



TKT # 10756
O

