



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 9838

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

Elevation 1818 C.L. Formation Topeka Eff. Pay — Ft.

District Great Bend Date 4-18-85 Customer Order No. —
COMPANY NAME Rains & Williamson Oil Co. Inc.
ADDRESS 435 Page Court Bldg. 220 W. Douglas, Wichita, KS. 67202
LEASE AND WELL NO. #1 Angel COUNTY Osborne STATE KS. Sec. 26 Twp. 10s Rge. 15w
Mail Invoice To 1 Same As Above No. Copies Requested 5
Co. Name " Address " No. Copies Requested 5
Mail Charts To " Address

Formation Test No. 1 Interval Tested From 2728 ft. to 2750 ft. Total Depth 2750 ft.
Packer Depth 2723 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.
Packer Depth 2728 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set —
Top Recorder Depth (Inside) 2740 ft. Recorder Number 1563 Cap. 4200
Bottom Recorder Depth (Outside) 2743 ft. Recorder Number 13520 Cap. 4200
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —
Drilling Contractor R & W Rig 9 Drill Collar Length 90 I. D. 2.7 in.
Mud Type Starch Viscosity 43 Weight Pipe Length — I. D. — in.
Weight 9.7 Water Loss 10.4 cc. Drill Pipe Length 2617 I. D. 3.8 in.
Chlorides 34,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.
Jars: Make — Serial Number — Anchor Length 22 ft. Size 5 1/2 in.
Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 3/8 in. Tool Joint Size 4 1/2 in.

Blow: Weak Steady Throughout Flow Periods.

Recovered 150 ft. of sli Oil & Gas Cut Mud (10% Oil 90% Mud)
Recovered — ft. of
Recovered — ft. of
Recovered — ft. of
Recovered — ft. of
Chlorides — P.P.M. Sample Jars used — Remarks: —

Time On Location 5:00 AM Time Pick Up Tool 6:15 AM Time Off Location 11:45 AM
Time Set Packer(s) 6:58 AM Time Started Off Bottom 10:00 AM Maximum Temperature 98
Initial Hydrostatic Pressure (A) 1491 P.S.I.
Initial Flow Period Minutes 30 (B) 53 P.S.I. to (C) 64 P.S.I.
Initial Closed In Period Minutes 30 (D) 772 P.S.I.
Final Flow Period Minutes 60 (E) 86 P.S.I. to (F) 86 P.S.I.
Final Closed In Period APR 24 1985 Minutes 60 (G) 825 P.S.I.
Final Hydrostatic Pressure (H) 1481 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 Denis W. Wanda I thank you
2375

FIELD INVOICE

Open Hole Test \$ 550
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$ 65
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

WESTERN TESTING CO., INC.

Pressure Data

Date 4-18

Test Ticket No. 9838

Recorder No. 1563

Capacity _____ Location _____ Ft.

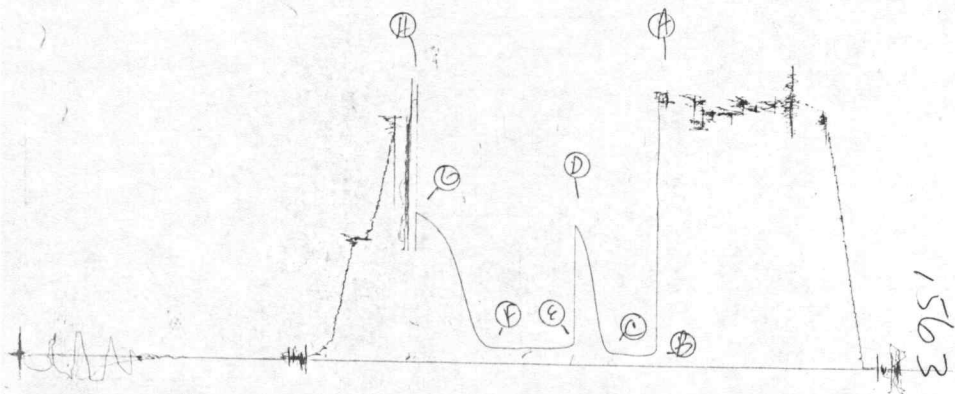
Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1494</u> P.S.I.		
B First Initial Flow Pressure	<u>57</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>67</u> P.S.I.	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>772</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>86</u> P.S.I.	<u>60</u> Mins.	<u>60</u> Mins.
F Second Final Flow Pressure	<u>88</u> P.S.I.		
G Final Closed-in Pressure	<u>827</u> P.S.I.		
H Final Hydrostatic Mud	<u>1437</u> P.S.I.		

PRESSURE BREAKDOWN

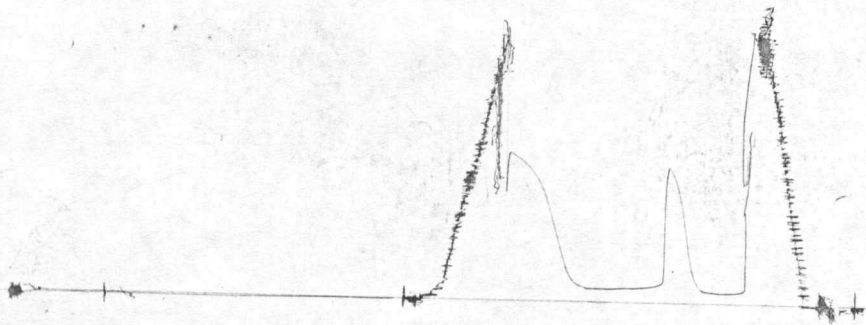
First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>21</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</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>57</u>	0	<u>67</u>	0	<u>86</u>	0	<u>88</u>
P 2 5	<u>57</u>	3	<u>70</u>	5		3	<u>95</u>
P 3 10	<u>57</u>	6	<u>85</u>	10		6	<u>110</u>
P 4 15	<u>58</u>	9	<u>127</u>	15		9	<u>131</u>
P 5 20	<u>61</u>	12	<u>211</u>	20		12	<u>170</u>
P 6 25	<u>65</u>	15	<u>337</u>	25		15	<u>226</u>
P 7 30	<u>67</u>	18	<u>474</u>	30		18	<u>296</u>
P 8 35		21	<u>577</u>	35		21	<u>373</u>
P 9 40		24	<u>663</u>	40		24	<u>444</u>
P10 45		27	<u>718</u>	45	<u>86</u>	27	<u>521</u>
P11 50		30	<u>760</u>	50	<u>87</u>	30	<u>585</u>
P12 55		33	<u>772</u>	55	<u>87</u>	33	<u>642</u>
P13 60		36		60	<u>88</u>	36	<u>683</u>
P14 65		39		65		39	<u>715</u>
P15 70		42		70		42	<u>740</u>
P16 75		45		75		45	<u>762</u>
P17 80		48		80		48	<u>782</u>
P18 85		51		85		51	<u>798</u>
P19 90		54		90		54	<u>812</u>
P20 95		57		95		57	<u>823</u>
100		60		100		60	<u>827</u>

JK #9838
I



1563

JK #9838
0

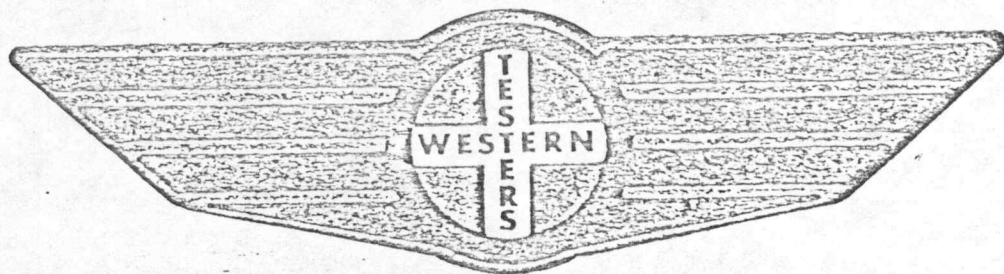


13520

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-18-85
CUSTOMER: RAINS & WILLIAMSON OIL CO. INC.
WELL: 1 TEST: 1
ELEVATION (KB): 1823 FORMATION: TOPEKA
SECTION: 26 TOWNSHIP: 10S
RANGE: 15W COUNTY: OSBORNE STATE: KANSAS
GAUGE SN #1563 RANGE: 4200 CLOCK: 12

TICKET #9838
LEASE: ANGEL
GEOLOGIST: L. MCLEOD

INTERVAL TEST FROM: 2728 FT TO: 2750 FT TOTAL DEPTH: 2750 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2723 FT SIZE: 6 5/8 IN PACKER DEPTH: 2728 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W RIG #9
MUD TYPE: STARCH VISCOSITY: 43
WEIGHT: 9.7 WATER LOSS (CC): 10.4

CHLORIDES (P.P.M.): 34000

JARS - MAKE: SERIAL NUMBER:

DID WELL FLOW? NO REVERSED OUT? NO

DRILL COLLAR LENGTH:	90	FT	I.D.:	2.7	IN
WEIGHT PIPE LENGTH:		FT	I.D.:		IN
DRILL PIPE LENGTH:	2617	FT	I.D.:	3.8	IN
TEST TOOL LENGTH:	21	FT	TOOL SIZE:	5 1/2 OD	IN
ANCHOR LENGTH:	22	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 STEADY BLOW THROUGHOUT TEST.

RECOVERED: 150	FT	OF: SLIGHTLY OIL & GAS CUT MUD
RECOVERED:	FT	OF: (10% OIL; 90% 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): 6:58 PM

TIME STARTED OFF BOTTOM: 10:00 PM

WELL TEMPERATURE: 98 °F

INITIAL HYDROSTATIC PRESSURE:

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 33

FINAL FLOW PERIOD MIN: 60

FINAL CLOSED IN PERIOD MIN: 60

FINAL HYDROSTATIC PRESSURE

(A) 1494	PSI	
(B) 57	PSI TO (C) 67	PSI
(D) 772	PSI	
(E) 86	PSI TO (F) 88	PSI
(G) 827	PSI	
(H) 1437	PSI	



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 9839

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

WICHITA, KANSAS 67201

Elevation 1818 G.L. Formation Lansing Eff. Pay Ft.

COMPANY NAME

ADDRESS

LEASE AND WELL NO.

Mail Invoice To

Co. Name

Mail Charts To

District

Date

Customer Order No.

Formation Test No.

Interval Tested From

ft. to

ft. Total Depth

Packer Depth

ft. Size

Packer Depth

ft. Size

Packer Depth

ft. Size

Packer Depth

ft. Size

Depth of Selective Zone Set

Top Recorder Depth (Inside)

ft.

Recorder Number

Cap.

Bottom Recorder Depth (Outside)

ft.

Recorder Number

Cap.

Below Straddle Recorder Depth

ft.

Recorder Number

Cap.

Drilling Contractor

R & W Rig 9

Drill Collar Length

I. D. in.

Mud Type

Starch Viscosity 40

Weight Pipe Length

I. D. in.

Weight

9.9 Water Loss 14.4 cc.

Drill Pipe Length

I. D. in.

Chlorides

45,000 P.P.M.

Test Tool Length

Tool Size in.

Jars: Make

Serial Number

Anchor Length

Size in.

Did Well Flow?

NO

Reversed Out NO

Surface Choke Size

3/4 in.

Bottom Choke Size

Tool Joint Size

Blow: Very Weak Throughout Flow Periods

Recovered 80 ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Chlorides

P.P.M. Sample Jars used

Remarks:

Time On Location

5:45

A.M. P.M.

Time Pick Up Tool

7:15

A.M. P.M.

Time Off Location

1:00

A.M. P.M.

Time Set Packer(s)

8:38

A.M. P.M.

Time Started Off Bottom

11:10

A.M. P.M.

Maximum Temperature

102

Initial Hydrostatic Pressure

(A) 1786 P.S.I.

Initial Flow Period

Minutes 30

(B) 53 P.S.I. to (C)

53 P.S.I.

Initial Closed In Period

Minutes 30

(D) 409 P.S.I.

Final Flow Period

Minutes 60

(E) 75 P.S.I. to (F)

75 P.S.I.

Final Closed In Period

Minutes 30

(G) 344 P.S.I.

Final Hydrostatic Pressure

(H) 1786 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 of Customer or his authorized representative

Western Representative

FIELD INVOICE

Open Hole Test

\$ 550

Misrun

\$

Straddle Test

\$

Jars

\$

Selective Zone

\$

Safety Joint

\$ 65

Standby

\$

Evaluation

\$

Extra Packer

\$

Circ. Sub.

\$

Mileage

\$

Fluid Sampler

\$

Extra Charts

\$

Insurance

\$

Telecopier

\$

TOTAL

\$

WESTERN TESTING CO., INC.

Pressure Data

Date 4-19Test Ticket No. 9839Recorder No. 1563

Capacity _____ Location _____ Ft

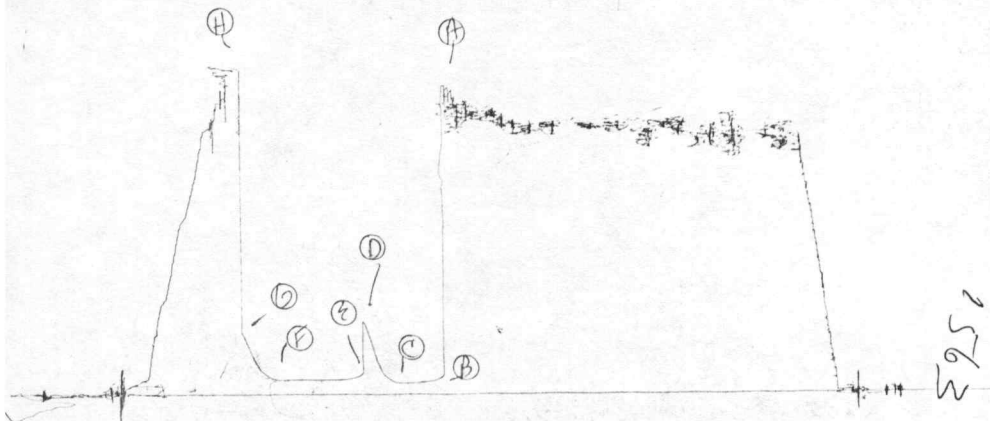
Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1696</u> P.S.I.			
B. First Initial Flow Pressure	<u>62</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>62</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D. Initial Closed-in Pressure	<u>407</u> P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E. Second Initial Flow Pressure	<u>81</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F. Second Final Flow Pressure	<u>81</u> P.S.I.			
G. Final Closed-in Pressure	<u>341</u> P.S.I.			
H. Final Hydrostatic Mud	<u>1630</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>11</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>62</u>	0	<u>62</u>	0	<u>81</u>	0	<u>81</u>
P 2 5		3	<u>64</u>	5		3	<u>83</u>
P 3 10		6	<u>69</u>	10		6	<u>90</u>
P 4 15		9	<u>82</u>	15		9	<u>101</u>
P 5 20		12	<u>101</u>	20		12	<u>120</u>
P 6 25		15	<u>125</u>	25		15	<u>138</u>
P 7 30	<u>62</u>	18	<u>171</u>	30	<u>81</u>	18	<u>174</u>
P 8 35		21	<u>235</u>	35		21	<u>219</u>
P 9 40		24	<u>304</u>	40		24	<u>273</u>
P10 45		27	<u>365</u>	45		27	<u>323</u>
P11 50		30	<u>407</u>	50		30	<u>341</u>
P12 55		33		55		33	
P13 60		36		60	<u>81</u>	36	
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	

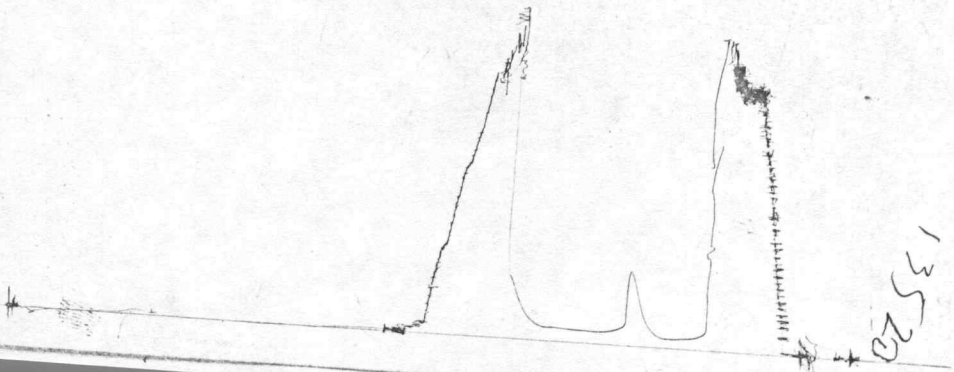
JK# 19839
I



1563

JK #9839

0

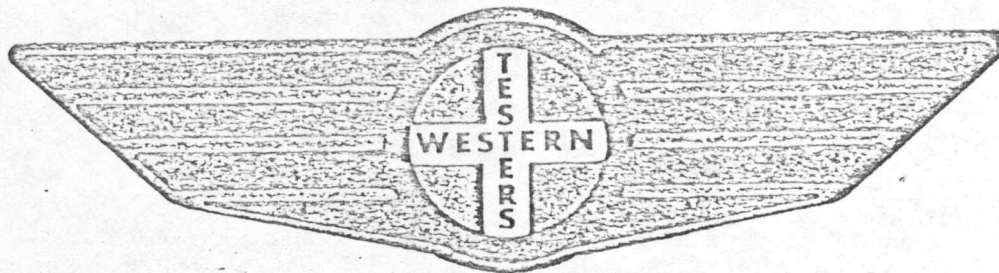


13520

FORMATION

TEST

REPORT



Home Office:

P.O. Box 1599

Wichita, Kansas 67201

Phone (316) 262-5861

RAINS & WILLIAMSON OIL CO INC Lease & Well No. #1 ANGEL
Sec. 26 Twp. 10S Rge. 15W Test No. 2 Date 4/19/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-19-85
CUSTOMER: RAINS & WILLIAMSON OIL CO. INC.
WELL: 1 TEST: 2
ELEVATION (KB): 1823 FORMATION: LANSING
SECTION: 26 TOWNSHIP: 10S
RANGE: 15W COUNTY: OSBORNE STATE: KANSAS
GAUGE SN #1563 RANGE: 4200 CLOCK: 12

TICKET #9839

LEASE: ANGEL

GEOLOGIST: T. MCLEOD

INTERVAL TEST FROM: 3006 FT TO: 3040 FT TOTAL DEPTH: 3040 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3001 FT SIZE: 6 5/8 IN PACKER DEPTH: 3006 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W RIG #9
MUD TYPE: STARCH VISCOSITY: 40
WEIGHT: 9.9 WATER LOSS (CC): 14.4
CHLORIDES (P.P.M.): 45000

JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO

DRILL COLLAR LENGTH: 90 FT I.D.: 2.7 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2895 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 34 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: VERY WEAK BLOW THROUGHOUT TEST.

RECOVERED: 80 FT OF: SLIGHTLY OIL & GAS CUT MUD
RECOVERED: FT OF: (10% OIL; 90% 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): 8:38 PM

TIME STARTED OFF BOTTOM: 11:10 PM

WELL TEMPERATURE: 102 °F

INITIAL HYDROSTATIC PRESSURE:

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 30

FINAL FLOW PERIOD MIN: 60

FINAL CLOSED IN PERIOD MIN: 30

FINAL HYDROSTATIC PRESSURE

(A) 1696 PSI
(B) 62 PSI TO (C) 62 PSI
(D) 407 PSI
(E) 81 PSI TO (F) 81 PSI
(G) 341 PSI
(H) 1630 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 9840

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

Elevation 1818 G.L. Formation K.C. Eff. Pay — Ft.

District Great Bend Date 4-20-85 Customer Order No. —

COMPANY NAME Rains & Williamson Oil Co. Inc.

ADDRESS 435 Page Court Bldg., Wichita, KS. 67202

WELL NO. #1 Angel COUNTY Osborne STATE KS. Sec. 26 Twp 10s Rge. 15w

Invoice To Same As Above No. Copies Requested 5

Co. Name " Address " No. Copies Requested 5

Charts To Address No. Copies Requested 5

Formation Test No. 3 Interval Tested From 3066 ft. to 3098 ft. Total Depth 3098 ft.

Packer Depth 3061 ft. Size 6 7/8 in. Packer Depth — ft. Size — in.

Packer Depth 3066 ft. Size 6 7/8 in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Recorder Depth (Inside) 3088 ft. Recorder Number 1563 Cap. 4200

Bottom Recorder Depth (Outside) 3091 ft. Recorder Number 13520 Cap. 4200

Low Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor R & W Rig 9 Drill Collar Length 90 I. D. 2.7 in.

Drill Type Starch Viscosity 43 Weight Pipe Length — I. D. — in.

Weight 10.0 Water Loss 13.6 cc. Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

Drill Pipe Length 2955 I. D. 3.8 in.

WESTERN TESTING CO., INC.

Pressure Data

Date 4-20

Test Ticket No. 9840

Recorder No. 1563

Capacity _____ Location _____ Ft

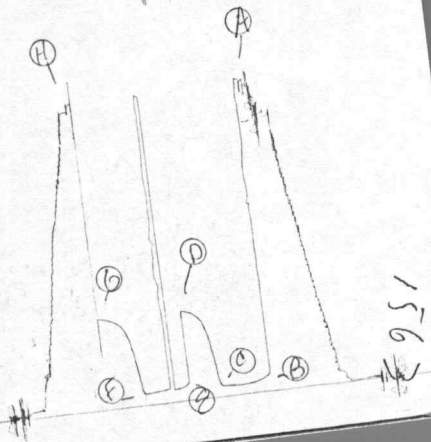
Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1686</u> P.S.I.			
B. First Initial Flow Pressure	<u>59</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
C. First Final Flow Pressure	<u>66</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
D. Initial Closed-in Pressure	<u>506</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>35</u> Mins.
E. Second Initial Flow Pressure	<u>75</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F. Second Final Flow Pressure	<u>69</u> P.S.I.			
G. Final Closed-in Pressure	<u>515</u> P.S.I.			
H. Final Hydrostatic Mud	<u>1686</u> P.S.I.			

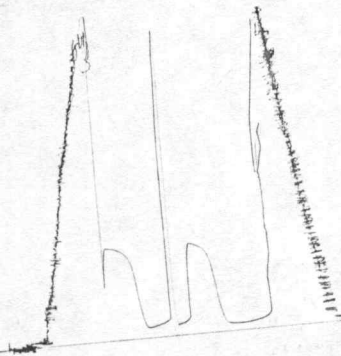
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>8</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>8</u> Inc.		Breakdown: <u>11</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 <u>0</u>	<u>59</u>	<u>0</u>	<u>66</u>	<u>0</u>	<u>75</u>	<u>0</u>	<u>69</u>
P 2 <u>5</u>	<u>(</u>	<u>3</u>	<u>159</u>	<u>5</u>	<u>75</u>	<u>3</u>	<u>216</u>
P 3 <u>10</u>	<u>(</u>	<u>6</u>	<u>304</u>	<u>10</u>	<u>75</u>	<u>6</u>	<u>345</u>
P 4 <u>15</u>	<u>(</u>	<u>9</u>	<u>398</u>	<u>15</u>	<u>83</u> FIT.	<u>9</u>	<u>418</u>
P 5 <u>20</u>	<u>59</u>	<u>12</u>	<u>449</u>	<u>20</u>	<u>75</u>	<u>12</u>	<u>457</u>
P 6 <u>25</u>	<u>61</u>	<u>15</u>	<u>473</u>	<u>25</u>	<u>73</u>	<u>15</u>	<u>481</u>
P 7 <u>30</u>	<u>63</u>	<u>18</u>	<u>489</u>	<u>30</u>	<u>69</u>	<u>18</u>	<u>493</u>
P 8 <u>35</u>	<u>66</u>	<u>21</u>	<u>499</u>	<u>35</u>	<u>69</u>	<u>21</u>	<u>502</u>
P 9 <u>40</u>		<u>24</u>	<u>505</u>	<u>40</u>		<u>24</u>	<u>510</u>
P10 <u>45</u>		<u>27</u>	<u>506</u>	<u>45</u>		<u>27</u>	<u>513</u>
P11 <u>50</u>		<u>30</u>		<u>50</u>		<u>30</u>	<u>515</u>
P12 <u>55</u>		<u>33</u>		<u>55</u>		<u>33</u>	
P13 <u>60</u>		<u>36</u>		<u>60</u>		<u>36</u>	
P14 <u>65</u>		<u>39</u>		<u>65</u>		<u>39</u>	
P15 <u>70</u>		<u>42</u>		<u>70</u>		<u>42</u>	
P16 <u>75</u>		<u>45</u>		<u>75</u>		<u>45</u>	
P17 <u>80</u>		<u>48</u>		<u>80</u>		<u>48</u>	
P18 <u>85</u>		<u>51</u>		<u>85</u>		<u>51</u>	
P19 <u>90</u>		<u>54</u>		<u>90</u>		<u>54</u>	
P20 <u>95</u>		<u>57</u>		<u>95</u>		<u>57</u>	
<u>100</u>		<u>60</u>		<u>100</u>		<u>60</u>	

JK # 9840
I



JK # 9840
O

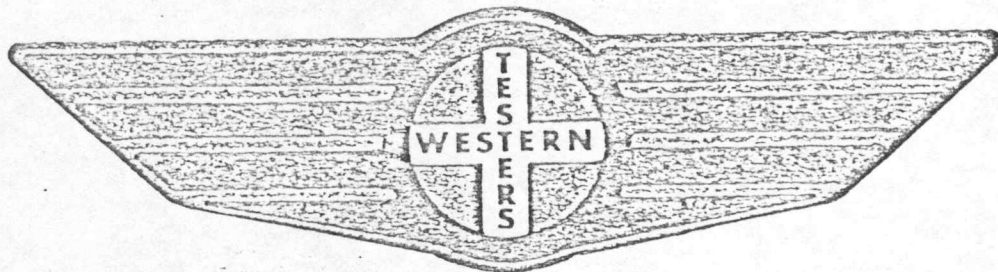


13520

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WATKINS & WILLIAMSON OIL CO INC Lease & Well No. #1 ANGEL Sec. 26 Twp. 10SRge. 15W Test No. 3 Date 4/20/85

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-20-85
CUSTOMER: RAINS & WILLIAMSON OIL CO INC
WELL: 1 TEST: 3
ELEVATION (KB): 1823 FORMATION: KANSAS CITY
SECTION: 26 TOWNSHIP: 10S
RANGE: 15W COUNTY: OSBORNE STATE: KANSAS
GAUGE SN #1563 RANGE: 4200 CLOCK: 12

INTERVAL TEST FROM: 3066 FT TO: 3098 FT TOTAL DEPTH: 3098 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3061 FT SIZE: 6 5/8 IN PACKER DEPTH: 3066 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W RIG #9
MUD TYPE: STARCH VISCOSITY: 43
WEIGHT: 10.0 WATER LOSS (CC): 13.6
CHLORIDES (P.P.M.): 40000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 90 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2955 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 32 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 VERY WEAK BLOW;
DIED IN 15 MINUTES; NO BLOW.
FINAL FLOW PERIOD FLUSHED TOOL;
STILL NO BLOW.

RECOVERED: 10	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): 1:33 PM

TIME STARTED OFF BOTTOM: 3:35 PM

WELL TEMPERATURE: 103 °F

INITIAL HYDROSTATIC PRESSURE:	(A) 1686	PSI
INITIAL FLOW PERIOD MIN: 35	(B) 59	PSI TO (C) 66 PSI
INITIAL CLOSED IN PERIOD MIN: 27	(D) 506	PSI
FINAL FLOW PERIOD MIN: 35	(E) 75	PSI TO (F) 69 PSI
FINAL CLOSED IN PERIOD MIN: 30	(G) 515	PSI
FINAL HYDROSTATIC PRESSURE	(H) 1686	PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 9841

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

WICHITA, KANSAS 67201

Elevation 1818 G.L. Formation K.C. Eff. Pay Ft.

COMPANY NAME R025 District Great Bend Date 4-21-85 Customer Order No. —
ADDRESS Rains & Williamson Oil Co. Inc.
435 Page Court Bldg. Wichita, KS 67202
LEASE AND WELL NO. #1 Angel COUNTY Osborne STATE KS Sec. 26 Twp. 10s Rge. 15w
Mail Invoice To Same As Above No. Copies Requested 5
Co. Name Address No. Copies Requested 5
Mail Charts To Address

Formation Test No. 4 Interval Tested From 3155 ft. to 3205 ft. Total Depth 3205 ft.
Packer Depth 3150 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.
Packer Depth 3155 ft. Size 6 5/8 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set —
Top Recorder Depth (Inside) 3195 ft. Recorder Number 1563 Cap. 4200
Bottom Recorder Depth (Outside) 3198 ft. Recorder Number 13520 Cap. 4200
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —
Drilling Contractor R & W Rig 9 Drill Collar Length 90 I. D. 2.7 in.
Mud Type Starch Viscosity 45 Weight Pipe Length — I. D. — in.
Weight 10.1 Water Loss 12.0 cc. Drill Pipe Length 3044 I. D. 3.8 in.
Chlorides 38,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.
Jars: Make — Serial Number — Anchor Length 50 ft. Size 5 1/2 in.
Did Well Flow? — Reversed Out NO Surface Choke Size 3/4 in.
Main Hole Size 7 3/8 in. Tool Joint Size 4 1/2 in.

Blow: Weak, Slightly Increasing During First F.P.
Weak Throughout 2nd Opening.

Recovered 30 ft. of Watery Mud Few Spts of Oil
Recovered 60 ft. of Watery Mud
Recovered 180 ft. of Muddy Water Chls 60,000 PPM
Recovered — ft. of
Recovered — ft. of
Chlorides — P.P.M. Sample Jars used 3 Remarks:

Time On Location 8:00 A.M. Time Pick Up Tool 8:15 P.M. Time Off Location 2:00 P.M.
Time Set Packer(s) 9:43 A.M. Time Started Off Bottom 12:15 P.M. Maximum Temperature 104
Initial Hydrostatic Pressure (A) 1808 P.S.I.
Initial Flow Period Minutes 30 (B) 75 P.S.I. to (C) 96 P.S.I.
Initial Closed In Period Minutes 30 (D) 591 P.S.I.
Final Flow Period Minutes 60 (E) 129 P.S.I. to (F) 161 P.S.I.
Final Closed In Period Minutes 30 (G) 591 P.S.I.
Final Hydrostatic Pressure (H) 1808 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 of Customer or his authorized representative

Western Representative

FIELD INVOICE

Open Hole Test \$ 550
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$ 65
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

WESTERN TESTING CO., INC.

Pressure Data

Date 4-21

Test Ticket No. 9841

Recorder No. 1563

Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point

Pressure

Time
Given

Time
Computed

A Initial Hydrostatic Mud 1821 P.S.I.
B First Initial Flow Pressure 93 P.S.I.
C First Final Flow Pressure 110 P.S.I.
D Initial Closed-in Pressure 612 P.S.I.
E Second Initial Flow Pressure 143 P.S.I.
F Second Final Flow Pressure 172 P.S.I.
G Final Closed-in Pressure 599 P.S.I.
H Final Hydrostatic Mud 1776 P.S.I.

Open Tool _____ M
First Flow Pressure _____ Mins.
Initial Closed-in Pressure _____ Mins.
Second Flow Pressure _____ Mins.
Final Closed-in Pressure _____ Mins.

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

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.

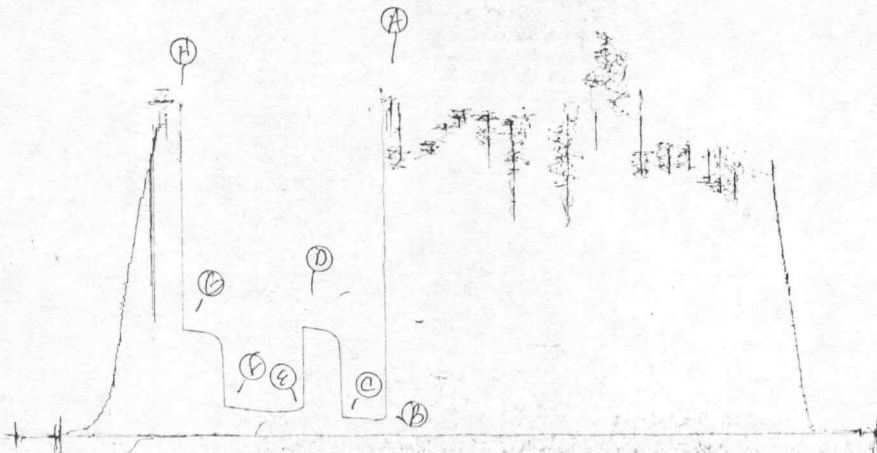
Final Shut-In
Breakdown: 11 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>93</u>	0	<u>110</u>	0	<u>143</u>	0	<u>172</u>
P 2 5	<u>93</u>	3	<u>521</u>	5	<u>(</u>	3	<u>516</u>
P 3 10	<u>95</u>	6	<u>564</u>	10	<u>(</u>	6	<u>554</u>
P 4 15	<u>101</u>	9	<u>580</u>	15	<u>(</u>	9	<u>569</u>
P 5 20	<u>103</u>	12	<u>590</u>	20	<u>143</u>	12	<u>580</u>
P 6 25	<u>107</u>	15	<u>596</u>	25	<u>145</u>	15	<u>584</u>
P 7 30	<u>110</u>	18	<u>600</u>	30	<u>147</u>	18	<u>587</u>
P 8 35		21	<u>603</u>	35	<u>151</u>	21	<u>590</u>
P 9 40		24	<u>606</u>	40	<u>156</u>	24	<u>593</u>
P10 45		27	<u>609</u>	45	<u>161</u>	27	<u>596</u>
P11 50		30	<u>612</u>	50	<u>165</u>	30	<u>599</u>
P12 55		33		55	<u>169</u>	33	
P13 60		36		60	<u>172</u>	36	
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	

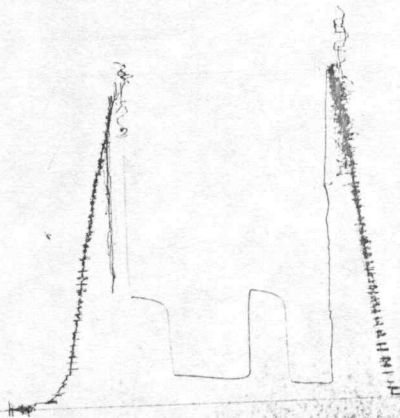
1563

JK #9841

I



JK # 9841
0

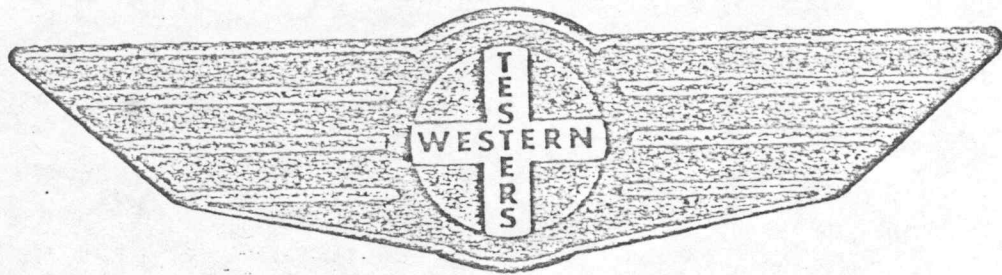


13520

FORMATION

TEST

REPORT



Home Office:

P.O. Box 1599

Wichita, Kansas 67201

Phone (316) 262-5861

RAINS & WILLIAMSON OIL CO INC Lease & Well No. #1 ANGEL Sec. 40 Twp. 10 Rge. 10 Test No. 1

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-21-85
CUSTOMER: RAINS & WILLIAMSON OIL CO.
WELL: 1 TEST: 4
ELEVATION (KB): 1823 FORMATION: KANSAS CITY
SECTION: 26 TOWNSHIP: 10S
RANGE: 15W COUNTY: OSBORNE STATE: KANSAS
GAUGE SN #1563 RANGE: 4200 CLOCK: 12

INTERVAL TEST FROM: 3155 FT TO: 3205 FT TOTAL DEPTH: 3205 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3150 FT SIZE: 6 5/8 IN PACKER DEPTH: 3155 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W RIG #9
MUD TYPE: STARCH VISCOSITY: 45
WEIGHT: 10.1 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 38000

JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? REVERSED OUT? NO

DRILL COLLAR LENGTH: 90 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3044 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 50 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;
SLIGHTLY INCREASING DURING F.P.
FINAL FLOW PERIOD WEAK BLOW.

RECOVERED: 30 FT OF: WATERY MUD WITH FEW SPOTS OF OIL.
RECOVERED: 60 FT OF: WATERY MUD.
RECOVERED: 180 FT OF: MUDDY WATER.
RECOVERED: FT OF: CHLORIDES 60000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 9:43 AM

TIME STARTED OFF BOTTOM: 12:15 PM

WELL TEMPERATURE: 104 °F

INITIAL HYDROSTATIC PRESSURE:

(A) 1821 PSI

INITIAL FLOW PERIOD MIN: 30

(B) 93 PSI TO (C) 110 PSI

INITIAL CLOSED IN PERIOD MIN: 30

(D) 612 PSI

FINAL FLOW PERIOD MIN: 60

(E) 143 PSI TO (F) 172 PSI

FINAL CLOSED IN PERIOD MIN: 30

(G) 599 PSI

FINAL HYDROSTATIC PRESSURE

(H) 1776 PSI



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N^o 9842

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

WICHITA, KANSAS 67201

Elevation 1818 G.L. Formation Conglomerate Eff. Pay — Ft.

District Great Bend Date 4-22-85 Customer Order No. —
COMPANY NAME Rains & Williamson Oil Co. Inc.
ADDRESS 435 Page Court Bldg, Wichita, KS 67202
LEASE AND WELL NO. #1 Angel COUNTY Osborne STATE KS Sec. 26 Twp. 10s Rge. 15w
Mail Invoice To Same As Above No. Copies Requested 5
Co. Name — Address — No. Copies Requested 5
Mail Charts To — Address — No. Copies Requested 5

Formation Test No. 5 Interval Tested From 3339 ft. to 3362 ft. Total Depth 3362 ft.
Packer Depth 3334 ft. Size 6 7/8 in. Packer Depth — ft. Size — in.
Packer Depth 3339 ft. Size 6 7/8 in. Packer Depth — ft. Size — in.
Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3352 ft. Recorder Number 1563 Cap. 4200
Bottom Recorder Depth (Outside) 3355 ft. Recorder Number 13520 Cap. 4200
Below Straddle Recorder Depth — ft. Recorder Number — Cap. —

Drilling Contractor R & W Rig 9 Drill Collar Length 90 I. D. 2.7 in.
Mud Type Starch Viscosity 50 Weight Pipe Length — I. D. — in.
Weight 10.2 Water Loss 12.8 cc. Drill Pipe Length 3228 I. D. 3.8 in.
Chlorides 38,000 P.P.M. Test Tool Length 21 ft. Tool Size 5500 in.
Jars: Make — Serial Number — Anchor Length 23 ft. Size 5500 in.
Did Well Flow? Yes Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 2 1/2 in. Tool Joint Size 4 1/2 in.

Blow: Fair. Increased To 6000 In 5 min. On First F.P.
Very Good Throughout 2nd Opening.

Recovered 660 ft. of Gassy Muddy Oil (80% Oil 15% Water 5% Mud)
Recovered 10 ft. of Oil & Gas Cut Watery Mud
Recovered 120 ft. of Muddy Water Trace of Oil
Recovered — ft. of —
Recovered — ft. of —
Chlorides — P.P.M. Sample Jars used — Remarks: Chlorides 56,000 PPM

Time On Location 7:00 A.M. Time Pick Up Tool 8:30 A.M. Time Off Location 3:00 P.M.
Time Set Packer(s) 9:53 A.M. Time Started Off Bottom 12:25 A.M. Maximum Temperature 110
Initial Hydrostatic Pressure (A) 1818 P.S.I.
Initial Flow Period Minutes 30 (B) 96 P.S.I. to (C) 183 P.S.I.
Initial Closed In Period Minutes 30 (D) 942 P.S.I.
Final Flow Period Minutes 60 (E) 237 P.S.I. to (F) 355 P.S.I.
Final Closed In Period Minutes 30 (G) 900 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

Signature of Customer or his authorized representative

Western Representative

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 4-22

Test Ticket No. 9842

Recorder No. 1563

Capacity _____ Location _____ Ft

Clock No. _____ Elevation _____ Well Temperature _____ °F

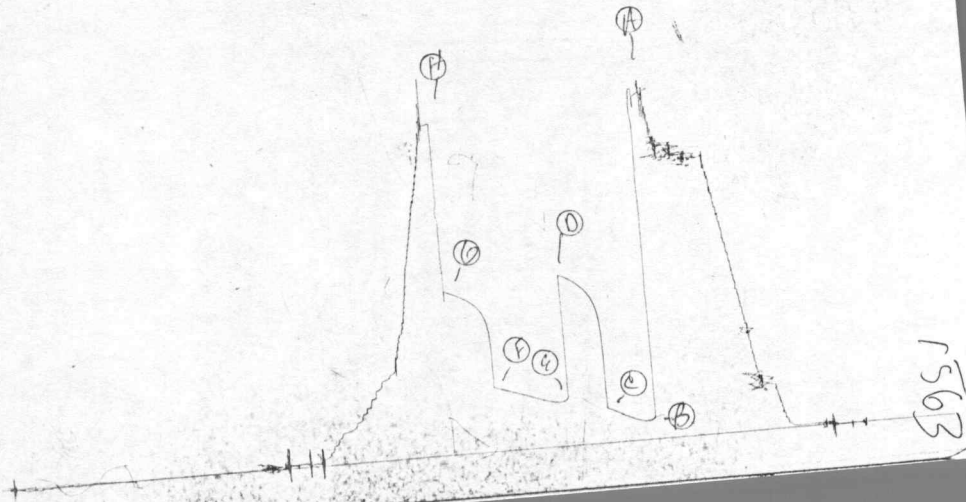
Point	Pressure	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1884</u> P.S.I.		
B. First Initial Flow Pressure	<u>103</u> P.S.I.	<u>30</u> Mins.	<u>35</u> Mins
C. First Final Flow Pressure	<u>189</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins
D. Initial Closed-in Pressure	<u>948</u> P.S.I.	<u>60</u> Mins.	<u>55</u> Mins
E. Second Initial Flow Pressure	<u>245</u> P.S.I.	<u>30</u> Mins.	<u>33</u> Mins
F. Second Final Flow Pressure	<u>357</u> P.S.I.		
G. Final Closed-in Pressure	<u>906</u> P.S.I.		
H. Final Hydrostatic Mud	<u>1824</u> P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>8</u> Inc.		Breakdown: <u>11</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>12</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>103</u>	0	<u>189</u>	0	<u>245</u>	0	<u>357</u>
P 2 5	<u>103</u>	3	<u>742</u>	5	<u>245</u>	3	<u>731</u>
P 3 10	<u>110</u>	6	<u>803</u>	10	<u>249</u>	6	<u>780</u>
P 4 15	<u>123</u>	9	<u>840</u>	15	<u>259</u>	9	<u>811</u>
P 5 20	<u>139</u>	12	<u>866</u>	20	<u>271</u>	12	<u>831</u>
P 6 25	<u>158</u>	15	<u>887</u>	25	<u>284</u>	15	<u>848</u>
P 7 30	<u>178</u>	18	<u>904</u>	30	<u>297</u>	18	<u>862</u>
P 8 35	<u>189</u>	21	<u>921</u>	35	<u>312</u>	21	<u>873</u>
P 9 40		24	<u>934</u>	40	<u>323</u>	24	<u>884</u>
P10 45		27	<u>945</u>	45	<u>337</u>	27	<u>895</u>
P11 50		30	<u>948</u>	50	<u>350</u>	30	<u>903</u>
P12 55		33		55	<u>357</u>	33	<u>906</u>
P13 60		36		60		36	
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	

IR # 9842

I

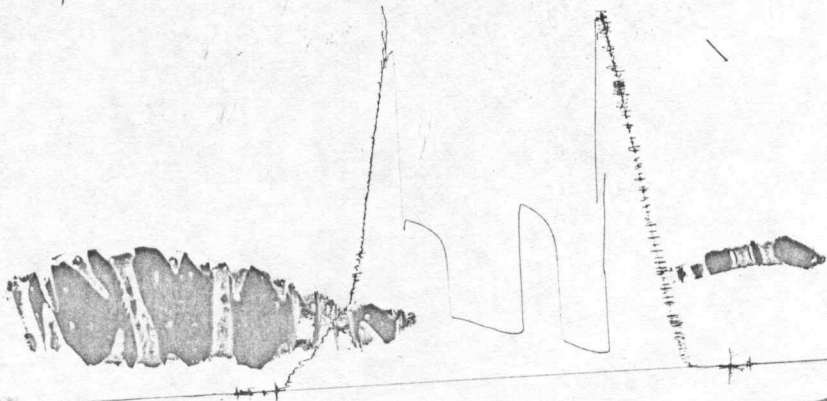


1563

13520

JK # 9842
○

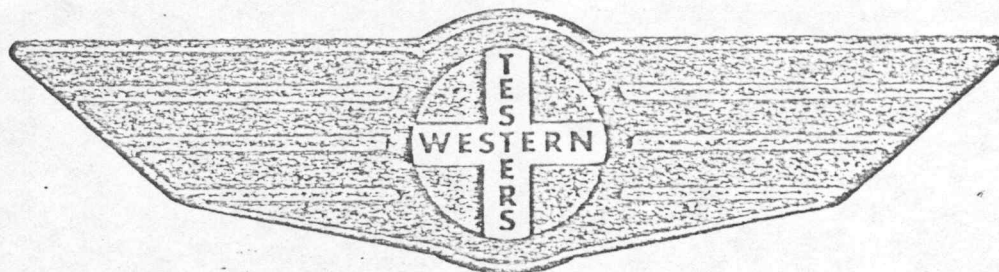
JK # 9842



FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 4-22-85
CUSTOMER: RAINS & WILLIAMSON OIL CO. INC.
WELL: 1 TEST: 5
ELEVATION (KB): 1823 FORMATION: CONGLOMERATE
SECTION: 26 TOWNSHIP: 10S
RANGE: 15W COUNTY: OSBORNE STATE: KANSAS
GAUGE SN #1563 RANGE: 4200 CLOCK: 12

INTERVAL TEST FROM: 3339 FT TO: 3362 FT TOTAL DEPTH: 3362 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 3334 FT SIZE: 6 5/8 IN PACKER DEPTH: 3339 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: R & W RIG #9
MUD TYPE: STARCH VISCOSITY: 50
WEIGHT: 10.2 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 38000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? YES REVERSED OUT? NO
DRILL COLLAR LENGTH: 90 FT I.D.: 2.7 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3228 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 23 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 FAIR BLOW;
INCREASED TO GOOD IN 5 MINUTES.
FINAL FLOW PERIOD VERY GOOD BLOW.

RECOVERED: 660 FT OF: GASSY MUDDY OIL (80% OIL; 15% WATER; 5% MUD).
RECOVERED: 10 FT OF: OIL & GAS CUT WATERY MUD.
RECOVERED: 120 FT OF: MUDDY WATER WITH A TRACE OF OIL.
RECOVERED: FT OF: CHLORIDES 56000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 9:53 AM TIME STARTED OFF BOTTOM: 12:25 PM
WELL TEMPERATURE: 110 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1884 PSI
INITIAL FLOW PERIOD MIN: 35 (B) 103 PSI TO (C) 189 PSI
INITIAL CLOSED IN PERIOD MIN: 30 (D) 948 PSI
FINAL FLOW PERIOD MIN: 55 (E) 245 PSI TO (F) 357 PSI
FINAL CLOSED IN PERIOD MIN: 33 (G) 906 PSI
FINAL HYDROSTATIC PRESSURE (H) 1824 PSI

