



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 7053

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

Elevation 1605GL Formation Topeka Eff. Pay

District Great Bend Date 3-19-85 Customer Order No.

COMPANY NAME Rains & Williams Oil Co. Inc.

ADDRESS 435 PAGE COURT - 220 West Douglas - Wichita, KS 67202

LEASE AND WELL NO. Haise Ranch #2 COUNTY Russell STATE Ks. Sec 19 Twp 12 Rge 14W

Mail Invoice To Same as above No. Copies Requested 5

Co. Name #2 HAISE' RANCH Address No. Copies Requested 5

Mail Charts To Address

Formation Test No. 1 Interval Tested From 2500 ft. to 2530 ft. Total Depth 2530 ft.

Packer Depth 2495 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.

Packer Depth 2500 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2521 ft. Recorder Number 6027 Cap. 4700

Bottom Recorder Depth (Outside) 2524 ft. Recorder Number 11028 Cap. 4300

Below Saddle Recorder Depth Recorder Number Cap.

Drilling Contractor Co. Tools Rig # 9 Drill Collar Length 119 I. D. 2.2 in.

Mud Type Starch Viscosity 48 Weight Pipe Length I. D. in.

Weight 10 Water Loss 11 cc. Drill Pipe Length 2360 I. D. 3.8 in.

Chlorides 57,000 P.P.M. Test Tool Length 21 ft. Tool Size 5/2 00 in.

Jars: Make Serial Number Anchor Length 30 ft. Size 5/2 00 in.

Did Well Flow? no 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 KH in.

Flow: Weak 1" blow: decreasing slightly at end of flow period -

FFP - Weak, decreasing 3/8" blow died in 26 min

Recovered 64' ft. of 50+GCM 75% mud - 10% water - 4% oil - 11.9 gals

Recovered 62' ft. of Oil Speck Mud. 92% mud - 8% gas - trace of oil

Recovered - ft. of

Recovered 126' ft. of Total Recovery

Recovered - ft. of

Chlorides P.P.M. Sample Jars used 2 Remarks: Still tool 3' to Bottom

Time On Location 6:50 AM P.M. Time Pick Up Tool 7:50 AM P.M. Time Off Location 1:45 AM P.M.

Time Set Packer(s) 9:30 AM P.M. Time Started Off Bottom 11:30 AM P.M. Maximum Temperature 90+

Initial Hydrostatic Pressure (A) 1357 P.S.I.

Initial Flow Period Minutes 30 (B) 75 P.S.I. to (C) 75 P.S.I.

Initial Closed In Period Minutes 30 (D) 874 P.S.I.

Final Flow Period Minutes 30 (E) 87 P.S.I. to (F) 87 P.S.I.

Final Closed In Period Minutes 30 (G) 814 P.S.I.

Final Hydrostatic Pressure (H) 1357 P.S.I.

COMPANY TERMS RECEIVED

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 Mike Engelbrecht Signature of Customer or his authorized representative

Western Representative Gene Eberhart OSOO

FIELD INVOICE table with items: 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 3119185 Test Ticket No. 7053  
 Recorder No. 6077 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1350</u> P.S.I.			
B. First Initial Flow Pressure	<u>60</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	
C. First Final Flow Pressure	<u>60</u> P.S.I.	Initial Closed-in Pressure		
D. Initial Closed-in Pressure	<u>865</u> P.S.I.	Second Flow Pressure		
E. Second Initial Flow Pressure	<u>76</u> P.S.I.	Final Closed-in Pressure		
F. Second Final Flow Pressure	<u>76</u> P.S.I.			
G. Final Closed-in Pressure	<u>794</u> P.S.I.			
H. Final Hydrostatic Mud	<u>1350</u> P.S.I.			

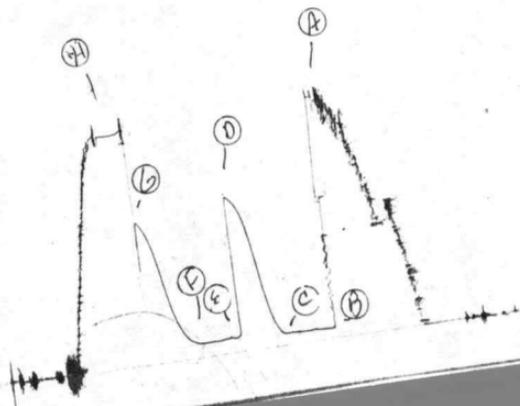
**PRESSURE BREAKDOWN**

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>7</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>60</u>	0	<u>60</u>	0	<u>76</u>	0	<u>76</u>
P 2 5	<u>60</u>	3	<u>60</u>	5		3	<u>87</u>
P 3 10	<u>61</u>	6	<u>83</u>	10		6	<u>104</u>
P 4 15	<u>61</u>	9	<u>142</u>	15		9	<u>137</u>
P 5 20	<u>62</u>	12	<u>233</u>	20		12	<u>191</u>
P 6 25	<u>64</u>	15	<u>349</u>	25		15	<u>277</u>
P 7 30	<u>66</u>	18	<u>502</u>	30	<u>76</u>	18	<u>384</u>
P 8 35		21	<u>638</u>	35		21	<u>517</u>
P 9 40		24	<u>743</u>	40		24	<u>632</u>
P10 45		27	<u>807</u>	45		27	<u>713</u>
P11 50		30	<u>847</u>	50		30	<u>767</u>
P12 55		33	<u>865</u>	55		33	<u>794</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	

6077 #1

JK # 7053

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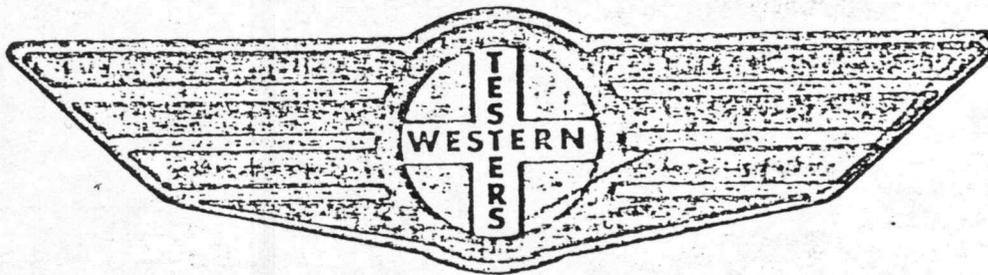


11028 #1

SK # 7053  
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# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RAINS & WILLIAMSON OIL CO. Lease and Well No. #2 HAISE RANCH Sec. 19 Twp. 12S Rge. 14W Test No. 1 Date 3/17/53

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 3/19/85  
CUSTOMER: RAINS & WILLIAMSON OIL CO INC  
WELL: 2 TEST: 1  
ELEVATION (KB): 1610 FORMATION: TOPEKA  
SECTION: 19 TOWNSHIP: 12S  
RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
GAUGE SN #6077 RANGE: 4700 CLOCK: 12

TICKET #7053  
LEASE: HAISE RANCH  
GEOLOGIST: ENGELBRECHT

INTERVAL TEST FROM: 2500 FT TO: 2530 FT TOTAL DEPTH: 2530 FT  
DEPTH OF SELECTIVE ZONE: FT  
PACKER DEPTH: 2495 FT SIZE: 6 5/8 IN PACKER DEPTH: 2500 FT SIZE: 6 5/8 IN  
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON  
MUD TYPE: STARCH VISCOSITY: 48  
WEIGHT: 10.0 WATER LOSS (CC): 11.0  
CHLORIDES (P.P.M.): 57000

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

DRILL COLLAR LENGTH: 119 FT I.D.: 2.25 IN  
WEIGHT PIPE LENGTH: FT I.D.: IN  
DRILL PIPE LENGTH: 2360 FT I.D.: 3.8 IN  
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN  
ANCHOR LENGTH: 30 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 1" BLOW DECREASING  
SLIGHTLY AT THE END. FINAL FLOW PERIOD WEAK  
BLOW DECREASING TO 3/8" BLOW. DIED IN  
26 MINUTES.

RECOVERED: 64 FT OF: SLIGHTLY OIL & GAS CUT MUD.  
RECOVERED: FT OF: (75% MUD; 10% WATER; 4% OIL; 11% GAS).  
RECOVERED: 62 FT OF: OIL SPECKED MUD (92% MUD; 8% GAS; TRACE OF OIL).

RECOVERED: FT OF:  
RECOVERED: FT OF:

REMARKS: SLID TOOL 3 FEET TO BOTTOM.

TIME SET PACKER(S): 9:30 AM

TIME STARTED OFF BOTTOM: 11:30 AM

WELL TEMPERATURE: 90 °F

INITIAL HYDROSTATIC PRESSURE:

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 33

FINAL FLOW PERIOD MIN: 30

FINAL CLOSED IN PERIOD MIN: 33

FINAL HYDROSTATIC PRESSURE

(A) 1350 PSI  
(B) 60 PSI TO (C) 66 PSI  
(D) 865 PSI  
(E) 76 PSI TO (F) 76 PSI  
(G) 794 PSI  
(H) 1350 PSI





WESTERN TESTING CO., INC.  
FORMATION TESTING

TICKET No 7054

OK

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

Elevation 1005 GL Formation Louisiana Eff. Pay Ft.

District Great Bend Date March 20-85 Customer Order No.

COMPANY NAME Rains & Williamson Oil Co Inc

ADDRESS 435 Page Court 220 W. Douglas Wichita 67202

LEASE AND WELL NO. Haise Ranch #2 COUNTY Russell STATE Sec 19 Twp 12 Rge 14W

Mail Invoice To Same as above No. Copies Requested 5

Co. Name #2 HAISE RANCH Address No. Copies Requested 5

Mail Charts To Address

Formation Test No. II Interval Tested From 2802 ft. to 2825 ft. Total Depth 2825 ft.

Packer Depth 2797 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.

Packer Depth 2802 ft. Size 6 3/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2916 ft. Recorder Number 6077 Cap. 4700

Bottom Recorder Depth (Outside) 2820 ft. Recorder Number 11028 Cap. 4300

Below Saddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Co. Tools Rig #9 Drill Collar Length 119 I. D. 2.2 in.

Mud Type Starch Viscosity 47 Weight Pipe Length - I. D. - in.

Weight 10 Water Loss 11.6 cc. Drill Pipe Length 2662 I. D. 3.8 in.

Chlorides 53,000 P.P.M. Test Tool Length 21 ft. Tool Size 5/200 in.

Jars: Make - Serial Number - Anchor Length 23 ft. Size 5/200 in.

Did Well Flow? no 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 x H in.

Blow: IFF - Very weak surface flow only - died in 20 min -

FFP - No blow, flushed tool, no help

Recovered - ft. of mud -

Recovered - ft. of

Recovered - ft. of

Recovered - ft. of

Chlorides P.P.M. Sample Jars used 1 Remarks:

Time On Location 2:00 AM/PM Time Pick Up Tool 4:50 AM/PM Time Off Location 9:50 AM/PM

Time Set Packer(s) 6:15 AM/PM Time Started Off Bottom 8:15 AM/PM Maximum Temperature 97

Initial Hydrostatic Pressure (A) 1514 P.S.I.

Initial Flow Period (B) 30 Minutes (C) 50 P.S.I. to (C) 50 P.S.I.

Initial Closed In Period (D) 30 Minutes (E) 512 P.S.I.

Final Flow Period (E) 30 Minutes (F) 50 P.S.I. to (F) 50 P.S.I.

Final Closed In Period (G) 30 Minutes (H) 548 P.S.I.

Final Hydrostatic Pressure (H) 1514 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 Mike Engelleck  
Signature of Customer or his authorized representative

Western Representative Gene E. ... OSOO

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$250), Misc, 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: March 20 1985 Test Ticket No. 7054  
 Recorder No. 6077 Capacity \_\_\_\_\_ Location \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_

Point	Pressure	P.S.I.	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1514</u>	P.S.I.	_____	_____	_____
B. First Initial Flow Pressure	<u>37</u>	P.S.I.	First Flow Pressure	<u>30</u> Mins.	_____
C. First Final Flow Pressure	<u>37</u>	P.S.I.	Initial Closed-in Pressure		_____
D. Initial Closed-in Pressure	<u>483</u>	P.S.I.	Second Flow Pressure		_____
E. Second Initial Flow Pressure	<u>560</u>	P.S.I.	Final Closed-in Pressure		_____
F. Second Final Flow Pressure	<u>44</u>	P.S.I.			
G. Final Closed-in Pressure	<u>522</u>	P.S.I.			
H. Final Hydrostatic Mud	<u>1514</u>	P.S.I.			

*flush tool*

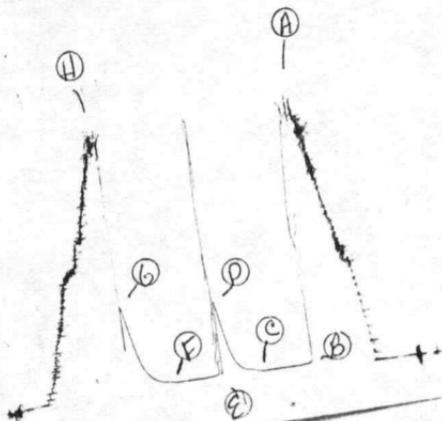
**PRESSURE BREAKDOWN**

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown:	<u>7</u> Inc.	Breakdown:	<u>11</u> Inc.	Breakdown:	<u>7</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>37</u>	0	<u>37</u>	0	<del>560</del>	0	<u>421</u>
P 2 5		3	<u>39</u>	5	<u>53</u>	3	<u>45</u>
P 3 10		6	<u>49</u>	10	<u>44</u>	6	<u>51</u>
P 4 15		9	<u>55</u>	15		9	<u>54</u>
P 5 20		12	<u>61</u>	20		12	<u>60</u>
P 6 25		15	<u>70</u>	25		15	<u>71</u>
P 7 30	<u>37</u>	18	<u>95</u>	30	<u>44</u>	18	<u>88</u>
P 8 35		21	<u>137</u>	35		21	<u>118</u>
P 9 40		24	<u>227</u>	40		24	<u>172</u>
P10 45		27	<u>375</u>	45		27	<u>257</u>
P11 50		30	<u>483</u>	50		30	<u>387</u>
P12 55		33		55		33	<u>522</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	

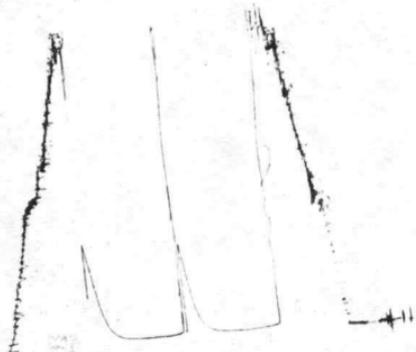
6077 #2

JK # 7054

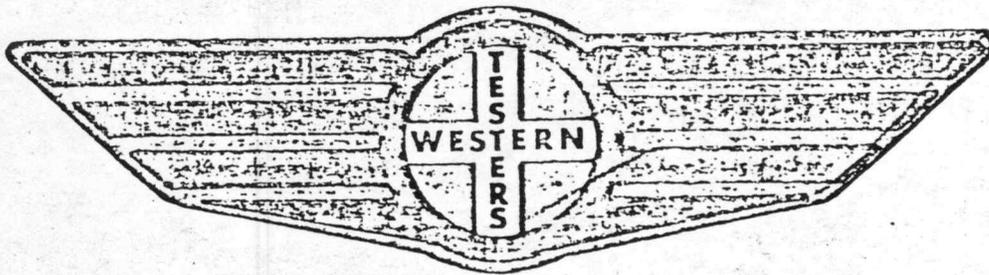
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JK # 7054  
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# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RAINES & WILLIAMSON OIL CO. Lease and Well No. #2 HAISE RANCH Sec. 19 Twp. 12S Rge. 14W Test No. 2 Date 3/20/85

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 3/20/85  
CUSTOMER: RAINS & WILLIAMSON OIL CO INC  
WELL: 2 TEST: 2  
ELEVATION (KB): 1610 FORMATION: LANSING  
SECTION: 19 TOWNSHIP: 12S  
RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
GAUGE SN #6077 RANGE: 4700 CLOCK: 12

TICKET #7054  
LEASE: HAISE RANCH  
GEOLOGIST: ENGELBRECHT

INTERVAL TEST FROM: 2802 FT TO: 2825 FT TOTAL DEPTH: 2825 FT  
DEPTH OF SELECTIVE ZONE: FT  
PACKER DEPTH: 2797 FT SIZE: 6 5/8 IN PACKER DEPTH: 2802 FT SIZE: 6 5/8 IN  
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON  
MUD TYPE: STARCH VISCOSITY: 47  
WEIGHT: 10.0 WATER LOSS (CC): 11.6  
CHLORIDES (P.P.M.): 53000  
JARS - MAKE: SERIAL NUMBER:  
DID WELL FLOW? NO REVERSED OUT?  
DRILL COLLAR LENGTH: 119 FT I.D.: 2.25 IN  
WEIGHT PIPE LENGTH: FT I.D.: IN  
DRILL PIPE LENGTH: 2662 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 VERY WEAK SURFACE  
BLOW. DIED IN 20 MINUTES. FINAL  
FLOW PERIOD NO BLOW. FLUSHED  
TOOL; NO HELP.

RECOVERED: 10 FT OF: MUD.  
RECOVERED: FT OF:  
RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 6:15 PM TIME STARTED OFF BOTTOM: 8:15 PM  
WELL TEMPERATURE: 97 °F  
INITIAL HYDROSTATIC PRESSURE: (A) 1514 PSI  
INITIAL FLOW PERIOD MIN: 30 (B) 37 PSI TO (C) 37 PSI  
INITIAL CLOSED IN PERIOD MIN: 30 (D) 483 PSI  
FINAL FLOW PERIOD MIN: 30 (E) 56 PSI TO (F) 44 PSI  
FINAL CLOSED IN PERIOD MIN: 33 (G) 522 PSI  
FINAL HYDROSTATIC PRESSURE (H) 1514 PSI





WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET N° 7055

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

Elevation 1605 GL Formation Sanding Eff. Pay Ft.

COMPANY NAME R.D.S. Rains & Witherspoon Oil Co Inc
ADDRESS 435 Page Court 220 W Douglas Wichita 67202
LEASE AND WELL NO. Haise Ranch #2 COUNTY Russell STATE Ks Sec. 19 Twp. 12 Rge. 14W
Mail Invoice To Same as above #2 HAISE RANCH No. Copies Requested 3
Co. Name " Address " No. Copies Requested 5

Formation Test No. 117 Interval Tested From 2811 ft. to 2841 ft. Total Depth 2841 ft.
Packer Depth 2806 ft. Size 6 7/8 in. Packer Depth ft. Size in.
Packer Depth 2811 ft. Size 6 7/8 in. Packer Depth ft. Size in.

Top Recorder Depth (Inside) 2832 ft. Recorder Number 6077 Cap. 4700
Bottom Recorder Depth (Outside) 2836 ft. Recorder Number 11028 Cap. 4300
Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor CO Tools Ryma
Mud Type Starch Viscosity 41 Drill Collar Length 119 I. D. 2 1/2 in.
Weight 10.0 Water Loss 11.6 cc. Weight Pipe Length I. D. in.
Chlorides 53,000 P.P.M. Drill Pipe Length 2671 I. D. 3.8 in.
Jars: Make Serial Number Test Tool Length 21 ft. Tool Size 5.500 in.
Anchor Length 30 ft. Size 3.500 in.
Did Well Flow? no 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 x 14 in.

Blow: Weak, 1/2" blow, decreasing slightly during last 15 min of period
FFP - No blow, flushed tool no help
Recovered 10 ft. of Mud w/ a few oil specks in top of tool-

Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Chlorides P.P.M. Sample Jars used 1 Remarks: flushed tool @ 10 min into 2nd opening -

Time On Location 3:30 A.M. Time Pick Up Tool 4:00 P.M. Time Off Location 8:55 A.M.
Time Set Packer(s) 5:10 A.M. Time Started Off Bottom 7:10 A.M. Maximum Temperature 97°+
Initial Hydrostatic Pressure (A) 1562 P.S.I.
Initial Flow Period Minutes 30 (B) 50 P.S.I. to (C) 50 P.S.I.
Initial Closed In Period Minutes 30 (D) 560 P.S.I.
Final Flow Period Minutes 30 (E) 50 P.S.I. to (F) 50 P.S.I.
Final Closed In Period Minutes 30 (G) 669 P.S.I.
Final Hydrostatic Pressure (H) 1538 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 Mike Engelbrecht
Signature of Customer or his authorized representative
Western Representative Gene Cherbat

FIELD INVOICE

Open Hole Test \$ 250
Miscellaneous \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$

0500

WESTERN TESTING CO., INC.

Pressure Data

Date March 21 1985 Test Ticket No. 7055  
 Recorder No. 6077 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft \_\_\_\_\_  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F \_\_\_\_\_

Point	Pressure	P.S.I.	Open Tool	M	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1543</u>	P.S.I.				
B. First Initial Flow Pressure	<u>37</u>	P.S.I.	First Flow Pressure		<u>30</u> Mins.	
C. First Final Flow Pressure	<u>37</u>	P.S.I.	Initial Closed-in Pressure			
D. Initial Closed-in Pressure	<u>543</u>	P.S.I.	Second Flow Pressure			
E. Second Initial Flow Pressure	<u>38</u>	P.S.I.	Final Closed-in Pressure			
F. Second Final Flow Pressure	<u>42</u>	P.S.I.				
G. Final Closed-in Pressure	<u>652</u>	P.S.I.				
H. Final Hydrostatic Mud	<u>1523</u>	P.S.I.				

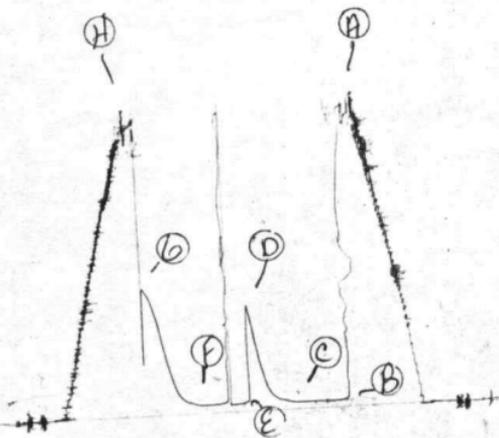
+ flush tool

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>7</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>37</u>	0	<u>37</u>	0	<u>38</u>	0	<u>42</u>
P 2 5		3	<u>38</u>	5	<u>38</u>	3	<u>50</u>
P 3 10		6	<u>48</u>	10	<del>38</del>	6	<u>50</u>
P 4 15		9	<u>54</u>	15	<del>46</del>	9	<u>69</u>
P 5 20		12	<u>64</u>	20	<u>42</u>	12	<u>93</u>
P 6 25		15	<u>85</u>	25	<u>42</u>	15	<u>142</u>
P 7 30	<u>37</u>	18	<u>129</u>	30	<u>42</u>	18	<u>223</u>
P 8 35		21	<u>211</u>	35		21	<u>331</u>
P 9 40		24	<u>328</u>	40		24	<u>453</u>
P10 45		27	<u>461</u>	45		27	<u>556</u>
P11 50		30	<u>543</u>	50		30	<u>621</u>
P12 55		33		55		33	<u>652</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	

6077-<sup>43</sup>

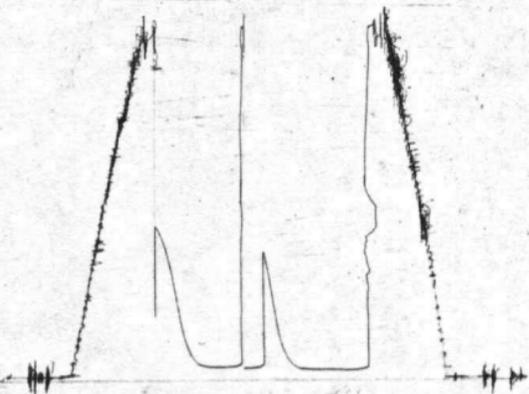
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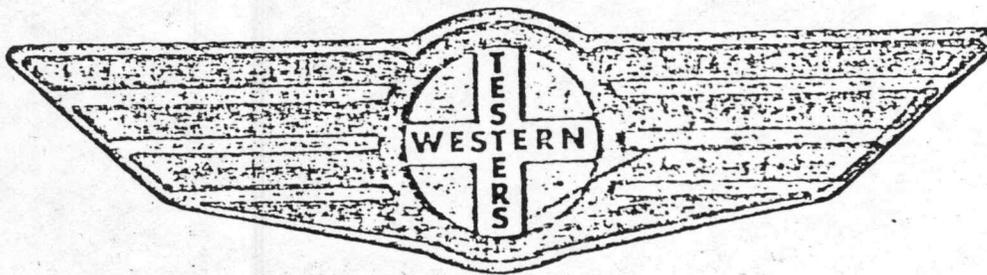
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JK # 7055

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# FORMATION TEST REPORT



Home Office:

P.O. Box 1599

Wichita, Kansas 67201

Phone (316) 262-5861

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 3/21/85  
 CUSTOMER: RAINS & WILLIAMSON OIL CO INC  
 WELL: 2 TEST: 3  
 ELEVATION (KB): 1610 FORMATION: LANSING  
 SECTION: 19 TOWNSHIP: 12S  
 RANGE: 14W COUNTY: RUSSELL STATE: KANSAS  
 GAUGE SN #6077 RANGE: 4700 CLOCK: 12

TICKET #7055  
 LEASE: HAISE RANCH  
 GEOLOGIST: ENGELBRECHT

INTERVAL TEST FROM: 2811 FT TO: 2841 FT TOTAL DEPTH: 2841 FT  
 DEPTH OF SELECTIVE ZONE: FT  
 PACKER DEPTH: 2806 FT SIZE: 6 5/8 IN PACKER DEPTH: 2811 FT SIZE: 6 5/8 IN  
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON  
 MUD TYPE: STARCH VISCOSITY: 41  
 WEIGHT: 10.0 WATER LOSS (CC): 11.6  
 CHLORIDES (P.P.M.): 53000

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

DRILL COLLAR LENGTH:	119	FT	I.D.:	2.25	IN
WEIGHT PIPE LENGTH:		FT	I.D.:		IN
DRILL PIPE LENGTH:	2671	FT	I.D.:	3.8	IN
TEST TOOL LENGTH:	21	FT	TOOL SIZE:	5 1/2 OD	IN
ANCHOR LENGTH:	30	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 1/2" BLOW DECREASING  
 SLIGHTLY DURING LAST 15 MINUTES OF PERIOD.  
 FINAL FLOW PERIOD NO BLOW. FLUSHED TOOL AT  
 10 MINUTES; NO HELP.

RECOVERED: 10 FT OF: MUD WITH A FEW OIL SPECKS IN TOP OF TOOL.  
 RECOVERED: FT OF:  
 RECOVERED: FT OF:

REMARKS:

TIME SET PACKER(S): 5:10 AM  
 WELL TEMPERATURE: 97 °F  
 INITIAL HYDROSTATIC PRESSURE:  
 INITIAL FLOW PERIOD MIN: 30  
 INITIAL CLOSED IN PERIOD MIN: 30  
 FINAL FLOW PERIOD MIN: 30  
 FINAL CLOSED IN PERIOD MIN: 33  
 FINAL HYDROSTATIC PRESSURE

TIME STARTED OFF BOTTOM: 7:10 AM  
 (A) 1543 PSI  
 (B) 37 PSI TO (C) 37 PSI  
 (D) 543 PSI  
 (E) 38 PSI TO (F) 42 PSI  
 (G) 652 PSI  
 (H) 1523 PSI





WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 7056

OK

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

Elevation 1605 GL Formation Eff. Pay Ft.

District Great Bend Date 3-22-85 Customer Order No.

COMPANY NAME Rains & Williamson O.I. Co. Inc.

ADDRESS 435 Page Count 220 W. Douglas Wichita, ks 67202

LEASE AND WELL NO Haise Ranch #2 COUNTY KUSSELL STATE Ks Sec. 19 Twp. 12 Rge. 14W

Mail Invoice To Same as above No. Copies Requested 5

Co. Name #2 HAISE RANCH Address No. Copies Requested 5

Formation Test No. 4 Interval Tested From 2950 ft. to 3017 ft. Total Depth 3017 ft.

Packer Depth 2950 ft. Size 6 7/8 in. Packer Depth 3017 ft. Size 5 in.

Depth of Selective Zone Set Top Recorder Depth (Inside) 3008 ft. Recorder Number 6077 Cap. 4700

Bottom Recorder Depth (Outside) 3012 ft. Recorder Number 11028 Cap. 4300

Below Saddle Recorder Depth Drilling Contractor Cotooley #9 Drill Collar Length 119 I. D. 2.2 in.

Mud Type starch Viscosity 44 Weight Pipe Length 2810 I. D. 3.8 in.

Weight 10 Water Loss 10.8 cc. Drill Pipe Length 21 ft. Tool Size 5 1/2 OP in.

Chlorides 50,000 P.P.M. Anchor Length 67 ft. Size 5 1/2 OP in.

Jars: Make Serial Number Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Did Well Flow? no Reversed Out no Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 XH in.

Blow FPI weak; slowly increased to 1" during 1st 20 min, then slowly throughout. FPI - Very weak 1/4" blow; decreasing to only a few bubbles at end of period.

Recovered 65' ft. of slightly oil, speck wattery mud - 252 & 75%

Recovered ft. of Chlorides P.P.M. Sample Jars used 1 Remarks:

Time On Location 3:30 A.M. Time Pick Up Tool 4:10 P.M. Time Off Location 10:00 A.M.

Time Set Packer(s) 5:15 A.M. Time Started Off Bottom 7:15 P.M. Maximum Temperature 101

Initial Hydrostatic Pressure (A) 1671 P.S.I.

Initial Flow Period 30 Minutes (B) 75 P.S.I. to (C) 75 P.S.I.

Initial Closed In Period 30 Minutes (D) 1004 P.S.I.

Final Flow Period 30 Minutes (E) 86 P.S.I. to (F) 86 P.S.I.

Final Closed In Period 30 Minutes (G) 993 P.S.I.

Final Hydrostatic Pressure (H) 1650 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 Mike Engelbert Signature of Customer or his authorized representative

Western Representative Gene Oberkatt

0500

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test (\$550), Misrun, Saddle 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 3-22-85 Test Ticket No. 7056  
 Recorder No. 11028 Capacity \_\_\_\_\_ Location \_\_\_\_\_ Ft.  
 Clock No. \_\_\_\_\_ Elevation \_\_\_\_\_ Well Temperature \_\_\_\_\_ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>11667</u> P.S.I.			M
B. First Initial Flow Pressure	<u>74</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	Mins.
C. First Final Flow Pressure	<u>74</u> P.S.I.	Initial Closed-in Pressure		Mins.
D. Initial Closed-in Pressure	<u>1000</u> P.S.I.	Second Flow Pressure		Mins.
E. Second Initial Flow Pressure	<u>88</u> P.S.I.	Final Closed-in Pressure		Mins.
F. Second Final Flow Pressure	<u>88</u> P.S.I.			
G. Final Closed-in Pressure	<u>987</u> P.S.I.			
H. Final Hydrostatic Mud	<u>11651</u> P.S.I.			

**PRESSURE BREAKDOWN**

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>74</u>	0	<u>74</u>	0	<u>88</u>	0	<u>88</u>
P 2 5		3	<u>450</u>	5		3	<u>317</u>
P 3 10		6	<u>784</u>	10		6	<u>6602</u>
P 4 15		9	<u>883</u>	15		9	<u>817</u>
P 5 20		12	<u>929</u>	20		12	<u>883</u>
P 6 25		15	<u>952</u>	25		15	<u>917</u>
P 7 30	<u>74</u>	18	<u>969</u>	30	<u>88</u>	18	<u>937</u>
P 8 35		21	<u>982</u>	35		21	<u>952</u>
P 9 40		24	<u>991</u>	40		24	<u>964</u>
P10 45		27	<u>997</u>	45		27	<u>975</u>
P11 50		30	<u>1000</u>	50		30	<u>981</u>
P12 55		33		55		33	<u>987</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	

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.

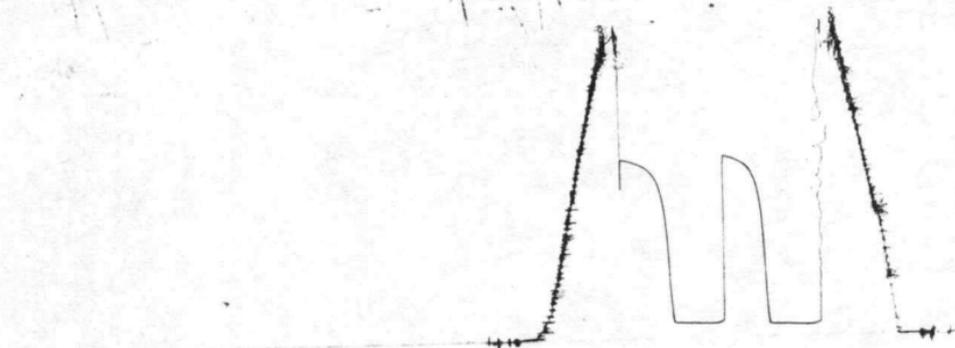
Second Flow Pressure  
Breakdown: \_\_\_\_\_ Inc.  
of 5 mins. and a  
final inc. of 0 Min.

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

6.077 #4

TKT # 7056

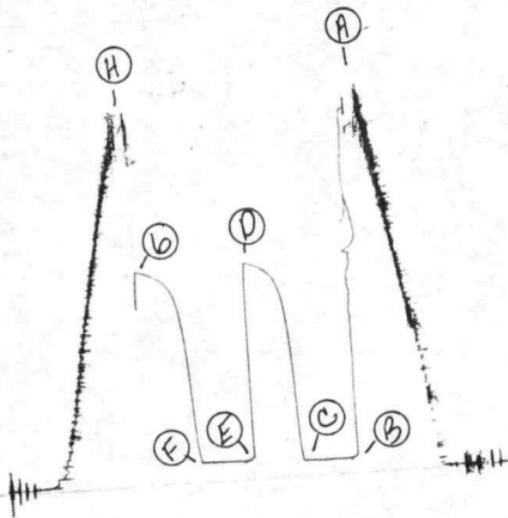
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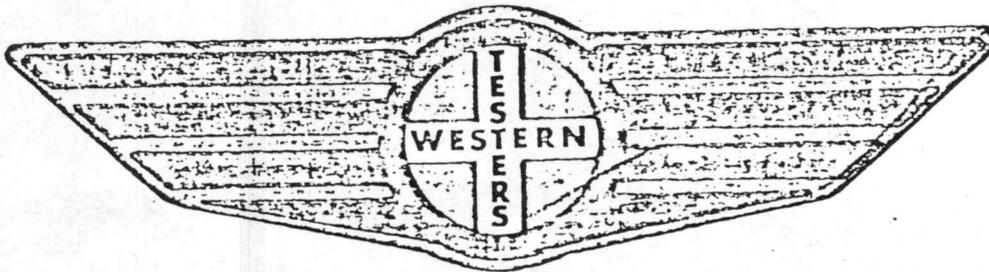
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TKI # 7056

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# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company RAINS & WILLIAMSON OIL CO. Lease and Well No. #2 HAISE RANCH Sec. 17 Twp. 17N L20 R9E, 14W 1800' NW, 1800' NE

WESTERN TESTING CO. INC.  
SUBSURFACE PRESSURE SURVEY

DATE: 3/22/85	TICKET #7056
CUSTOMER: RAINS & WILLIAMSON OIL CO INC	LEASE: HAISE RANCH
WELL: 2	TEST: 4
ELEVATION (KB): 1610	GEOLOGIST: ENGELBRECHT
SECTION: 19	FORMATION:
RANGE: 14W	TOWNSHIP: 12S
GAUGE SN #11028	COUNTY: RUSSELL
	STATE: KANSAS
	RANGE: 4300
	CLOCK: 12

INTERVAL TEST FROM: 2950	FT	TO: 3017	FT	TOTAL DEPTH: 3017	FT
DEPTH OF SELECTIVE ZONE:			FT		
PACKER DEPTH: 2945	FT	SIZE: 6 5/8	IN	PACKER DEPTH: 2950	FT
PACKER DEPTH:	FT	SIZE:	IN	PACKER DEPTH:	FT
				SIZE: 6 5/8	IN
				SIZE:	IN

DRILLING CONTRACTOR: RAINS & WILLIAMSON	
MUD TYPE: STARCH	VISCOSITY: 44
WEIGHT: 10.0	WATER LOSS (CC): 10.8
CHLORIDES (P.P.M.): 50000	
JARS - MAKE:	SERIAL NUMBER:
DID WELL FLOW? NO	REVERSED OUT? NO
DRILL COLLAR LENGTH: 119	FT I.D.: 2.25
WEIGHT PIPE LENGTH:	FT I.D.:
DRILL PIPE LENGTH: 2810	FT I.D.: 3.8
TEST TOOL LENGTH: 21	FT TOOL SIZE: 5 1/2 OD
ANCHOR LENGTH: 67	FT SIZE: 5 1/2 OD
SURFACE CHOKE SIZE: 3/4	IN BOTTOM CHOKE SIZE: 3/4
MAIN HOLE SIZE: 7 7/8	IN TOOL JOINT SIZE: 4 1/2 XH

BLOW: I.F.P. WEAK 1/2" BLOW SLOWLY INCREASING TO A  
1" BLOW DURING FIRST 20 MINUTES; THEN STEADY.  
F.F.P. VERY WEAK 1/4" BLOW DECREASING TO ONLY  
A FEW BUBBLES AT THE END OF PERIOD.

RECOVERED: 65	FT	OF: SLIGHTLY OIL SPECKED WATERY MUD.
RECOVERED:	FT	OF: (LESS THAN 1% OIL; 25% WATER; 75% MUD).
RECOVERED:	FT	OF:

REMARKS: READ OUTSIDE CHART.

TIME SET PACKER(S): 5:15 AM  
WELL TEMPERATURE: 101 °F  
INITIAL HYDROSTATIC PRESSURE:  
INITIAL FLOW PERIOD MIN: 30  
INITIAL CLOSED IN PERIOD MIN: 30  
FINAL FLOW PERIOD MIN: 30  
FINAL CLOSED IN PERIOD MIN: 33  
FINAL HYDROSTATIC PRESSURE

TIME STARTED OFF BOTTOM: 7:15 AM

(A) 1667	PSI	
(B) 74	PSI TO (C) 74	PSI
(D) 1000	PSI	
(E) 88	PSI TO (F) 88	PSI
(G) 987	PSI	
(H) 1651	PSI	

