



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No 8710

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

Elevation 7765 Formation K. City Eff. Pay Ft.

District Great Bend Date 11-11-80 Customer Order No.

COMPANY NAME A. Scott Ritchie

ADDRESS 125 N. Market, Wichita, Kansas 67201

LEASE AND WELL NO. Hansen #1 COUNTY Phillips STATE Kansas Sec. 29 Twp 55 Rge 20W

Mail Invoice To Same as above No. Copies Requested 5

Mail Charts To Same as above No. Copies Requested 5

Formation Test No. 1 Interval Tested from 3363 ft. to 3438 ft. Total Depth 3438 ft.

Packer Depth 3363 ft. Size 6 7/8 in. Packer Depth 3438 ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3365 ft. Recorder Number 6074 Cap. 5100

Bottom Recorder Depth (Outside) 3368 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Murfin Dring Co. Rig #8 Drill Collar Length 146 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 45 Weight Pipe Length I. D. in.

Weight 9.7 Water Loss 14.4 cc. Drill Pipe Length 3201 I. D. 3.8 in.

Chlorides 2000 P.P.M. Test Tool Length 16 ft. Tool Size 5 1/2 in.

Jars: Make No Serial Number No Anchor Length 75 ft. Size 5200+2000 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Weak 1" blow throughout both flow periods. Test

Recovered 1 ft. of Free oil

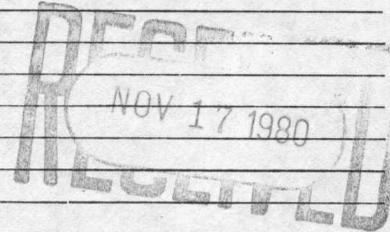
Recovered 210 ft. of Mud

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:



Time On Location A.M. P.M. Time Pick Up Tool A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 2:15 A.M. P.M. Time Started Off Bottom 5:15 A.M. P.M. Maximum Temperature 103

Initial Hydrostatic Pressure (A) 1737 P.S.I.

Initial Flow Period Minutes 45 (B) 38 P.S.I. to (C) 89 P.S.I.

Initial Closed In Period Minutes 45 (D) 613 P.S.I.

Final Flow Period Minutes 45 (E) 89 P.S.I. to (F) 115 P.S.I.

Final Closed In Period Minutes 45 (G) 601 P.S.I.

Final Hydrostatic Pressure (H) 1635 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 Roger Signature of Customer or his authorized representative

Western Representative Vernon Wondra Thank You

FIELD INVOICE

Table with 2 columns: Item and Amount. Items include Open Hole Test (\$550.00), Miscrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub. (\$1520/1250), Mileage, Fluid Sampler, Extra Charts, Insurance, and TOTAL (\$662.50).

WESTERN TESTING CO., INC.

Pressure Data

Date 11-11

Test Ticket No. 8710

Recorder No. 6074

Capacity 5100

Location 3365 Ft.

Clock No. _____

Elevation 2201 LL

Well Temperature 103 °F

Point	Pressure	P.S.I.
A Initial Hydrostatic Mud	<u>1768</u>	P.S.I.
B First Initial Flow Pressure	<u>36</u>	P.S.I.
C First Final Flow Pressure	<u>97</u>	P.S.I.
D Initial Closed-in Pressure	<u>632</u>	P.S.I.
E Second Initial Flow Pressure	<u>107</u>	P.S.I.
F Second Final Flow Pressure	<u>128</u>	P.S.I.
G Final Closed-in Pressure	<u>619</u>	P.S.I.
H Final Hydrostatic Mud	<u>1661</u>	P.S.I.

Open Tool	Time Given	Time Computed
Open Tool	<u>2:15 P.M.</u>	
First Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

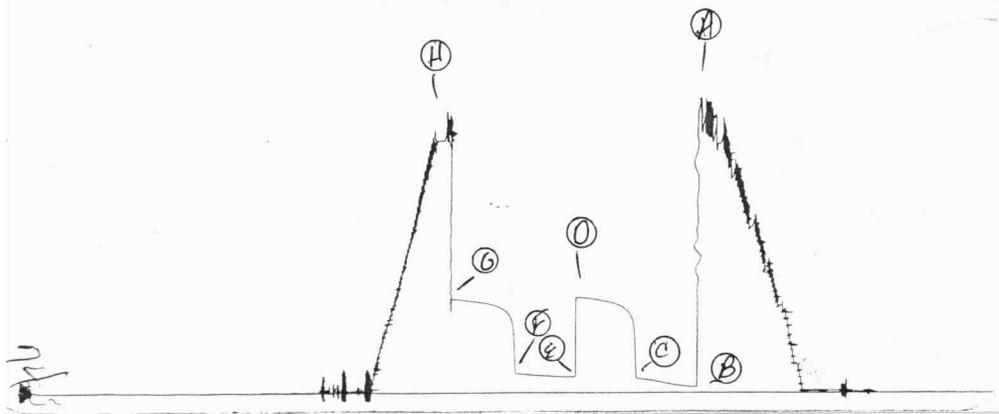
Second Flow Pressure
Breakdown: 9 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 15 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>36</u>	0	<u>97</u>	0	<u>107</u>	0	<u>128</u>
P 2 5	<u>43</u>	3	<u>483</u>	5	<u>107</u>	3	<u>481</u>
P 3 10	<u>49</u>	6	<u>537</u>	10	<u>109</u>	6	<u>527</u>
P 4 15	<u>54</u>	9	<u>560</u>	15	<u>112</u>	9	<u>550</u>
P 5 20	<u>61</u>	12	<u>578</u>	20	<u>114</u>	12	<u>568</u>
P 6 25	<u>69</u>	15	<u>588</u>	25	<u>116</u>	15	<u>575</u>
P 7 30	<u>79</u>	18	<u>598</u>	30	<u>118</u>	18	<u>583</u>
P 8 35	<u>90</u>	21	<u>604</u>	35	<u>122</u>	21	<u>591</u>
P 9 40	<u>95</u>	24	<u>609</u>	40	<u>126</u>	24	<u>596</u>
P10 45	<u>97</u>	27	<u>614</u>	45	<u>128</u>	27	<u>601</u>
P11 50		30	<u>619</u>	50		30	<u>604</u>
P12 55		33	<u>624</u>	55		33	<u>607</u>
P13 60		36	<u>627</u>	60		36	<u>610</u>
P14		39	<u>629</u>	65		39	<u>613</u>
P15		42	<u>632</u>	70		42	<u>616</u>
P16		45	<u>632</u>	75		45	<u>619</u>
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

U4 # 8710

I



Company A. Scott Ritchie Lease & Well No. Hansen #1
 Elevation Est. 2201 Ground Level - Kansas City Effective Pay --- Ft. Ticket No. 8710
 Date 11/11/80 Sec. 29 Twp. 5S Range 20W County Phillips State Kansas
 Test Approved by Roger == Western Representative Vernon Wondra

Formation Test No. 1 Interval Tested from 3363 ft. to 3438 ft. Total Depth 3438 ft.
 Packer Depth 3363 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 3363 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3365 ft. Recorder Number 6074 Cap. 5100
 Bottom Recorder Depth (Outside) 3368 ft. Recorder Number 10979 Cap. 4100
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Murfin Drilling Co. Rig #8 Drill Collar Length 146 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 45 Weight Pipe Length - I. D. - in.
 Weight 9.7 Water Loss 14.4 cc. Drill Pipe Length 320 I. D. 3.8 in.
 Chlorides 2,000 P.P.M. Test Tool Length 16 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 75 ft. Size 5 1/2 OD + 62 in. D.P.
 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 one inch blow throughout test.

Recovered 1 ft. of free oil
 Recovered 210 ft. of mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 2:15 ~~AM~~ P.M. Time Started Off Bottom 5:15 ~~AM~~ P.M. Maximum Temperature 103°
 Initial Hydrostatic Pressure 1768 P.S.I. (A)
 Initial Flow Period 45 Minutes (B) 36 P.S.I. to (C) 97 P.S.I.
 Initial Closed In Period 45 Minutes (D) 632 P.S.I.
 Final Flow Period 45 Minutes (E) 107 P.S.I. to (F) 128 P.S.I.
 Final Closed In Period 45 Minutes (G) 619 P.S.I.
 Final Hydrostatic Pressure 1661 P.S.I. (H)

WESTERN TESTING CO., INC.
Pressure Data

Date 11-11-80 Test Ticket No. 8710
 Recorder No. 6074 Capacity 5100 Location 3365 Ft.
 Clock No. - Elevation 2201 Ground Level Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1768</u> P.S.I.	Open Tool	<u>2:15P</u> M	
B First Initial Flow Pressure	<u>36</u> P.S.I.	First Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>97</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>632</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>107</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>128</u> P.S.I.			
G Final Closed-in Pressure	<u>619</u> P.S.I.			
H Final Hydrostatic Mud	<u>1661</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 9 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 15 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 9 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 15 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 <u>0</u>	<u>36</u>	<u>0</u>	<u>97</u>	<u>0</u>	<u>107</u>	<u>0</u>	<u>128</u>
P 2 <u>5</u>	<u>43</u>	<u>3</u>	<u>483</u>	<u>5</u>	<u>107</u>	<u>3</u>	<u>481</u>
P 3 <u>10</u>	<u>49</u>	<u>6</u>	<u>537</u>	<u>10</u>	<u>109</u>	<u>6</u>	<u>527</u>
P 4 <u>15</u>	<u>54</u>	<u>9</u>	<u>560</u>	<u>15</u>	<u>112</u>	<u>9</u>	<u>550</u>
P 5 <u>20</u>	<u>61</u>	<u>12</u>	<u>578</u>	<u>20</u>	<u>114</u>	<u>12</u>	<u>568</u>
P 6 <u>25</u>	<u>69</u>	<u>15</u>	<u>588</u>	<u>25</u>	<u>116</u>	<u>15</u>	<u>575</u>
P 7 <u>30</u>	<u>79</u>	<u>18</u>	<u>598</u>	<u>30</u>	<u>118</u>	<u>18</u>	<u>583</u>
P 8 <u>35</u>	<u>90</u>	<u>21</u>	<u>604</u>	<u>35</u>	<u>122</u>	<u>21</u>	<u>591</u>
P 9 <u>40</u>	<u>95</u>	<u>24</u>	<u>609</u>	<u>40</u>	<u>126</u>	<u>24</u>	<u>596</u>
P10 <u>45</u>	<u>97</u>	<u>27</u>	<u>614</u>	<u>45</u>	<u>128</u>	<u>27</u>	<u>601</u>
P11 _____	_____	<u>30</u>	<u>619</u>	_____	_____	<u>30</u>	<u>604</u>
P12 _____	_____	<u>33</u>	<u>624</u>	_____	_____	<u>33</u>	<u>607</u>
P13 _____	_____	<u>36</u>	<u>627</u>	_____	_____	<u>36</u>	<u>610</u>
P14 _____	_____	<u>39</u>	<u>629</u>	_____	_____	<u>39</u>	<u>613</u>
P15 _____	_____	<u>42</u>	<u>632</u>	_____	_____	<u>42</u>	<u>616</u>
P16 _____	_____	<u>45</u>	<u>632</u>	_____	_____	<u>45</u>	<u>619</u>
P17 _____	_____	_____	_____	_____	_____	_____	_____
P18 _____	_____	_____	_____	_____	_____	_____	_____
P19 _____	_____	_____	_____	_____	_____	_____	_____
P20 _____	_____	_____	_____	_____	_____	_____	_____



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8711

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

Elevation 1165 RB Formation Kansas Eff. Pay — Ft.

District Great Bend Date 11-12-80 Customer Order No. —

COMPANY NAME A. Scott Ritchie

ADDRESS 125 N. Market, Wichita, Kansas 67201

LEASE AND WELL NO. Hansen #1 COUNTY Phillips STATE Kansas Sec. 29 Twp 55 Rge 20W

Mail Invoice To Same as above No. Copies Requested 5

Co. Name Same as above Address —

Mail Charts To Same as above No. Copies Requested 5

Formation Test No. 2 Interval Tested from 3433 ft. to 3480 ft. Total Depth 3480 ft.

Packer Depth 3433 ft. Size 6 3/8 in. Packer Depth — ft. Size — in.

Packer Depth — ft. Size — in. Packer Depth — ft. Size — in.

Depth of Selective Zone Set —

Top Recorder Depth (Inside) 3435 ft. Recorder Number 6074 Cap. 5100

Bottom Recorder Depth (Outside) 3438 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Murfin Drlg Co. Rig #8 Drill Collar Length 206 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 45 Weight Pipe Length — I. D. — in.

Weight 9.7 Water Loss 14.4 cc. Drill Pipe Length 3169 I. D. 3.8 in.

Chlorides 2000 P.P.M. Test Tool Length 16 ft. Tool Size 5 3/4 in.

Jars: Make — Serial Number — Anchor Length 47 ft. Size 5 3/4 + 3 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 7/8 in. Tool Joint Size 4 1/2 FH in.

Blow: Very weak blow died in 15 min. on 1st flow period. No blow on 2nd flow period.

Recovered 130 ft. of Mud

Recovered — ft. of —

Remarks: —

Time On Location — A.M. P.M. Time Pick Up Tool — A.M. P.M. Time Off Location — A.M. P.M.

Time Set Packer(s) 6:00 A.M. P.M. Time Started Off Bottom 8:00 A.M. P.M. Maximum Temperature 106

Initial Hydrostatic Pressure — (A) 1852 P.S.I.

Initial Flow Period 30 Minutes (B) 63 P.S.I. to (C) 76 P.S.I.

Initial Closed In Period 30 Minutes (D) 780 P.S.I.

Final Flow Period 30 Minutes (E) 76 P.S.I. to (F) 89 P.S.I.

Final Closed In Period 30 Minutes (G) 767 P.S.I.

Final Hydrostatic Pressure — (H) 1813 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.

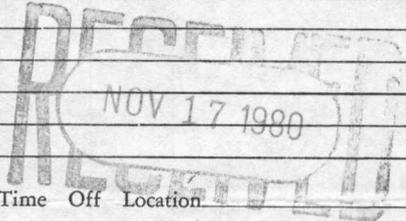
All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By [Signature]
Signature of Customer or his authorized representative

Western Representative Vernon Wondra
Thank You

FIELD INVOICE

Open Hole Test	\$ 550.00
Misrun	\$
Straddle Test	\$
Jars	\$
Selective Zone	\$
Safety Joint	\$
Standby	\$
Evaluation	\$
Extra Packer	\$
Circ. Sub.	\$
Mileage	\$ 27m 20.25
Fluid Sampler	\$
Extra Charts	\$
Insurance	\$
TOTAL	\$ 570.25



WESTERN TESTING CO., INC.

Pressure Data

Date 11-12

Test Ticket No. 8711

Recorder No. 6074

Capacity 5100

Location 3435 Ft.

Clock No. _____ Elevation 2201 ML

Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1857</u> P.S.I.	Open Tool	<u>6:00</u> A.M.	
B First Initial Flow Pressure	<u>79</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>94</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>798</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>92</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>104</u> P.S.I.			
G Final Closed-in Pressure	<u>785</u> P.S.I.			
H Final Hydrostatic Mud	<u>1819</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: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

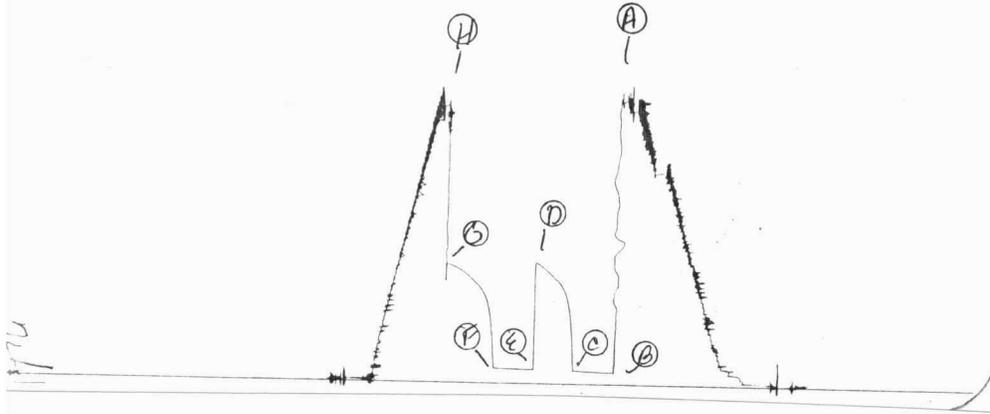
Second Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

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	<u>79</u>	0	<u>94</u>	0	<u>92</u>	0	<u>104</u>
P 2	<u>84</u>	3	<u>465</u>	5	<u>97</u>	3	<u>481</u>
P 3	<u>87</u>	6	<u>591</u>	10	<u>100</u>	6	<u>575</u>
P 4	<u>89</u>	9	<u>645</u>	15	<u>101</u>	9	<u>624</u>
P 5	<u>90</u>	12	<u>680</u>	20	<u>102</u>	12	<u>652</u>
P 6	<u>92</u>	15	<u>703</u>	25	<u>103</u>	15	<u>678</u>
P 7	<u>94</u>	18	<u>729</u>	30	<u>104</u>	18	<u>703</u>
P 8		21	<u>751</u>	35		21	<u>729</u>
P 9		24	<u>775</u>	40		24	<u>747</u>
P10		27	<u>795</u>	45		27	<u>760</u>
P11		30	<u>798</u>	50		30	<u>770</u>
P12		33		55		33	<u>785</u>
P13		36		60		36	
P14		39		65		39	
P15		42		70		42	
P16		45		75		45	
P17		48		80		48	
P18		51		85		51	
P19		54		90		54	
P20		57				57	
		60				60	

SK # 8711

I



Company A. Scott Ritchie Lease & Well No. Hansen #1
 Elevation Est. 2201 Ground Level Kansas City Formation Effective Pay - Ft. Ticket No. 8711
 Date 11/12/80 Sec. 29 Twp. 5S Range 20W County Phillips State Kansas
 Test Approved by Roger----- Western Representative Vernon Wondra

Formation Test No. 2 Interval Tested from 3433 ft. to 3480 ft. Total Depth 3480 ft.
 Packer Depth 3433 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3435 ft. Recorder Number 6074 Cap. 5100
 Bottom Recorder Depth (Outside) 3438 ft. Recorder Number 10979 Cap. 4100
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Murfin Drilling Co. Rig #8 Drill Collar Length 206 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 45 Weight Pipe Length - I. D. - in.
 Weight 9.7 Water Loss 14.4 cc. Drill Pipe Length 3169 I. D. 3.8 in.
 Chlorides 2,000 P.P.M. Test Tool Length 16 ft. Tool Size 5 1/2 OD in.
 Jars: Make -- Serial Number - Anchor Length 47 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: Very weak blow; died in fifteen minutes on initial flow period. No blow on final flow period.

Recovered 130 ft. of mud
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks:

Time Set Packer(s) 6:00 A.M. Time Started Off Bottom 8:00 A.M. Maximum Temperature 106°
 Initial Hydrostatic Pressure (A) 1857 P.S.I.
 Initial Flow Period Minutes 30 (B) 79 P.S.I. to (C) 94 P.S.I.
 Initial Closed In Period Minutes 30 (D) 798 P.S.I.
 Final Flow Period Minutes 30 (E) 92 P.S.I. to (F) 104 P.S.I.
 Final Closed In Period Minutes 30 (G) 785 P.S.I.
 Final Hydrostatic Pressure (H) 1819 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 11-12-80 Test Ticket No. 8711
 Recorder No. 6074 Capacity 5100 Location 3435 Ft.
 Clock No. - Elevation 2201 Ground Level Well Temperature 106 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1857</u> P.S.I.	Open Tool	<u>6:00A</u> M	
B First Initial Flow Pressure	<u>79</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>94</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>798</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>92</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>104</u> P.S.I.			
G Final Closed-in Pressure	<u>785</u> P.S.I.			
H Final Hydrostatic Mud	<u>1819</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>11</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>79</u>	<u>0</u>	<u>94</u>	<u>0</u>	<u>92</u>	<u>0</u>	<u>104</u>
P 2	<u>84</u>	<u>3</u>	<u>465</u>	<u>5</u>	<u>97</u>	<u>3</u>	<u>481</u>
P 3	<u>87</u>	<u>6</u>	<u>591</u>	<u>10</u>	<u>100</u>	<u>6</u>	<u>575</u>
P 4	<u>89</u>	<u>9</u>	<u>645</u>	<u>15</u>	<u>101</u>	<u>9</u>	<u>624</u>
P 5	<u>90</u>	<u>12</u>	<u>680</u>	<u>20</u>	<u>102</u>	<u>12</u>	<u>652</u>
P 6	<u>92</u>	<u>15</u>	<u>703</u>	<u>25</u>	<u>103</u>	<u>15</u>	<u>678</u>
P 7	<u>94</u>	<u>18</u>	<u>729</u>	<u>30</u>	<u>104</u>	<u>18</u>	<u>703</u>
P 8		<u>21</u>	<u>751</u>			<u>21</u>	<u>729</u>
P 9		<u>24</u>	<u>775</u>			<u>24</u>	<u>747</u>
P10		<u>27</u>	<u>795</u>			<u>27</u>	<u>760</u>
P11		<u>30</u>	<u>798</u>			<u>30</u>	<u>770</u>
P12						<u>33</u>	<u>785</u>
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No

8712

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

Elevation 1965 KB Formation K.C. City Eff. Pay Ft.

District Great Bend Date 11-12-80 Customer Order No.

COMPANY NAME A. Scott Ritchie

ADDRESS 125 N. Market, Wichita, Kansas 67201

LEASE AND WELL NO. Hansen #1 COUNTY Phillips STATE Kansas Sec. 29 Twp. 5 S Rge. 20 W

Mail Invoice To Same as above Co. Name Address No. Copies Requested 5

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

Formation Test No. 3 Interval Tested from 3474 ft. to 3570 ft. Total Depth 3570 ft.

Packer Depth 3474 ft. Size 6 7/8 in. Packer Depth ft. Size in.

Packer Depth ft. Size in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3494 ft. Recorder Number 6074 Cap. 5100

Bottom Recorder Depth (Outside) 3497 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Marfin Drlg. Co. Rig #8 Drill Collar Length 146 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 42 Weight Pipe Length I. D. in.

Weight 10.2 Water Loss 12.8 cc. Drill Pipe Length 3412 I. D. 3.8 in.

Chlorides 3,000 P.P.M. Test Tool Length 16 ft. Tool Size 5 1/2 in.

Jars: Make No Serial Number No Anchor Length 96 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 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Very weak blow died in 20 min. on 1st flow period. No blow on 2nd flow period.

Recovered 575 ft. of Mud

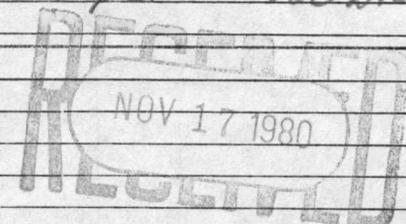
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks:



Time On Location A.M. P.M. Time Pick Up Tool A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 9:25 A.M. P.M. Time Started Off Bottom 11:25 A.M. P.M. Maximum Temperature 103

Initial Hydrostatic Pressure (A) 1890 P.S.I.

Initial Flow Period Minutes 30 (B) 38 P.S.I. to (C) 38 P.S.I.

Initial Closed In Period Minutes 30 (D) 473 P.S.I.

Final Flow Period Minutes 30 (E) 38 P.S.I. to (F) 38 P.S.I.

Final Closed In Period Minutes 30 (G) 447 P.S.I.

Final Hydrostatic Pressure (H) 1852 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 Vernon Wondka Thank You

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test \$550.00, Misc. Test \$, Straddle Test \$, Jars \$, Selective Zone \$, Safety Joint \$, Standby \$, Evaluation \$, Extra Packer \$, Circ. Sub. \$, Mileage \$27m 2025, Fluid Sampler \$, Extra Charts \$, Insurance \$, TOTAL \$570.25

WESTERN TESTING CO., INC.

Pressure Data

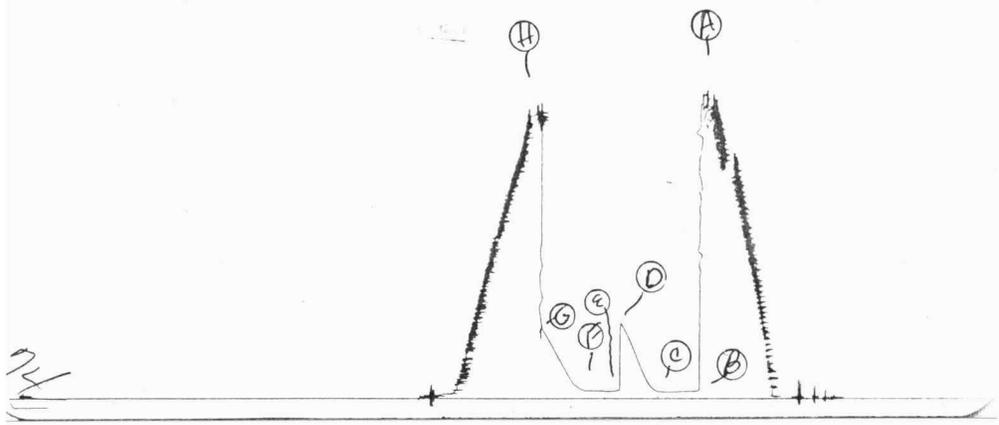
Date 11-12 Test Ticket No. 8712
 Recorder No. 6074 Capacity 5100 Location 3494 Ft.
 Clock No. _____ Elevation 2201 ~~212~~ Well Temperature 103 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1923</u> P.S.I.		<u>9:25</u> P	
B First Initial Flow Pressure	<u>54</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>49</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>491</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>25</u> Mins.
E Second Initial Flow Pressure	<u>56</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
F Second Final Flow Pressure	<u>55</u> P.S.I.			
G Final Closed-in Pressure	<u>460</u> P.S.I.			
H Final Hydrostatic Mud	<u>1842</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>9</u> Inc.		Breakdown: <u>5</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>0</u>	<u>49</u>	<u>0</u>	<u>56</u>	<u>0</u>	<u>55</u>
P 2	<u>5</u>	<u>3</u>	<u>59</u>	<u>5</u>	<u>54</u>	<u>3</u>	<u>64</u>
P 3	<u>10</u>	<u>6</u>	<u>84</u>	<u>10</u>	<u>53</u>	<u>6</u>	<u>82</u>
P 4	<u>15</u>	<u>9</u>	<u>125</u>	<u>15</u>	<u>55</u>	<u>9</u>	<u>102</u>
P 5	<u>20</u>	<u>12</u>	<u>187</u>	<u>20</u>	<u>55</u>	<u>12</u>	<u>148</u>
P 6	<u>25</u>	<u>15</u>	<u>251</u>	<u>25</u>	<u>55</u>	<u>15</u>	<u>192</u>
P 7	<u>30</u>	<u>18</u>	<u>322</u>	<u>30</u>		<u>18</u>	<u>246</u>
P 8	<u>35</u>	<u>21</u>	<u>386</u>	<u>35</u>		<u>21</u>	<u>292</u>
P 9	<u>40</u>	<u>24</u>	<u>442</u>	<u>40</u>		<u>24</u>	<u>343</u>
P 10	<u>45</u>	<u>27</u>	<u>491</u>	<u>45</u>		<u>27</u>	<u>389</u>
P 11	<u>50</u>	<u>30</u>		<u>50</u>		<u>30</u>	<u>435</u>
P 12	<u>55</u>	<u>33</u>		<u>55</u>		<u>33</u>	<u>460</u>
P 13	<u>60</u>	<u>36</u>		<u>60</u>		<u>36</u>	
P 14		<u>39</u>		<u>65</u>		<u>39</u>	
P 15		<u>42</u>		<u>70</u>		<u>42</u>	
P 16		<u>45</u>		<u>75</u>		<u>45</u>	
P 17		<u>48</u>		<u>80</u>		<u>48</u>	
P 18		<u>51</u>		<u>85</u>		<u>51</u>	
P 19		<u>54</u>		<u>90</u>		<u>54</u>	
P 20		<u>57</u>				<u>57</u>	
		<u>60</u>				<u>60</u>	

JK # 8712
I



A. Scott Ritchie

Hansen #1

Company _____ Lease & Well No. _____

Elevation Est. 2201 Ground Level - Kansas City Formation Effective Pay - Ft. Ticket No. 8712

Date 11/12/80 Sec. 29 Twp. 5S Range 20W County Phillips State Kansas

Test Approved by Roger F----- Western Representative Vernon Wondra

Formation Test No. 3 Interval Tested from 3474 ft. to 3570 ft. Total Depth 3570 ft.

Packer Depth 3474 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3494 ft. Recorder Number 6074 Cap. 5100

Bottom Recorder Depth (Outside) 3497 ft. Recorder Number 10979 Cap. 4100

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

Drilling Contractor Murfin Drilling Co. Rig #8 Drill Collar Length 146 I. D. 2 1/4 in.

Mud Type chemical Viscosity 42 Weight Pipe Length - I. D. - in.

Weight 10.2 Water Loss 12.8 cc. Drill Pipe Length 3412 I. D. 3.8 in.

Chlorides 3,000 P.P.M. Test Tool Length 16 ft. Tool Size 5 1/2 OD in.

Jars: Make - Serial Number - Anchor Length 96 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: Very weak blow; died in twenty minutes on initial flow period. No blow on final flow period.

Recovered 15 ft. of mud

Recovered _____ ft. of _____

Remarks: _____

Time Set Packer(s) 9:25 AM P.M. Time Started Off Bottom 11:25 AM P.M. Maximum Temperature 103°

Initial Hydrostatic Pressure (A) 1923 P.S.I.

Initial Flow Period Minutes 30 (B) 54 P.S.I. to (C) 49 P.S.I.

Initial Closed In Period Minutes 27 (D) 491 P.S.I.

Final Flow Period Minutes 25 (E) 56 P.S.I. to (F) 55 P.S.I.

Final Closed In Period Minutes 33 (G) 460 P.S.I.

Final Hydrostatic Pressure (H) 1842 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 11-12-80 Test Ticket No. 8712
 Recorder No. 6074 Capacity 5100 Location 3494 Ft.
 Clock No. - Elevation 2201 Ground Level Well Temperature 103 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1923</u> P.S.I.	Open Tool	<u>9:25P</u> M	
B First Initial Flow Pressure	<u>54</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>49</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>27</u> Mins.
D Initial Closed-in Pressure	<u>491</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>25</u> Mins.
E Second Initial Flow Pressure	<u>56</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
F Second Final Flow Pressure	<u>55</u> P.S.I.			
G Final Closed-in Pressure	<u>460</u> P.S.I.			
H Final Hydrostatic Mud	<u>1842</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: 9 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 5 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 <u>0</u>	<u>54</u>	<u>0</u>	<u>49</u>	<u>0</u>	<u>56</u>	<u>0</u>	<u>55</u>
P 2 <u>5</u>	<u>53</u>	<u>3</u>	<u>59</u>	<u>5</u>	<u>54</u>	<u>3</u>	<u>64</u>
P 3 <u>10</u>	<u>51</u>	<u>6</u>	<u>84</u>	<u>10</u>	<u>53</u>	<u>6</u>	<u>82</u>
P 4 <u>15</u>	<u>49</u>	<u>9</u>	<u>125</u>	<u>15</u>	<u>55</u>	<u>9</u>	<u>102</u>
P 5 <u>20</u>	<u>48</u>	<u>12</u>	<u>187</u>	<u>20</u>	<u>55</u>	<u>12</u>	<u>148</u>
P 6 <u>25</u>	<u>48</u>	<u>15</u>	<u>251</u>	<u>25</u>	<u>55</u>	<u>15</u>	<u>192</u>
P 7 <u>30</u>	<u>49</u>	<u>18</u>	<u>322</u>			<u>18</u>	<u>246</u>
P 8		<u>21</u>	<u>386</u>			<u>21</u>	<u>292</u>
P 9		<u>24</u>	<u>442</u>			<u>24</u>	<u>343</u>
P10		<u>27</u>	<u>491</u>			<u>27</u>	<u>389</u>
P11						<u>30</u>	<u>435</u>
P12						<u>33</u>	<u>460</u>
P13							<u>460</u>
P14							
P15							
P16							
P17							
P18							
P19							
P20							



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET NO: 8713

P. O. BOX 1599 WICHITA, KANSAS 67201

Elevation 1465 KB Formation Regan Sand Eff. Pay Ft.

District Great Bend Date 11-13-80 Customer Order No.

COMPANY NAME A. Scott Ritchie

ADDRESS 125 N. Market, Wichita, Kansas 67201

LEASE AND WELL NO. Hansen #1 COUNTY Phillips STATE Kansas Sec. 29 Twp. 55 Rge. 30W

Mail Invoice To Same as above Co. Name Address No. Copies Requested 5

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

Formation Test No. 4 Interval Tested from 3608 ft. to 3635 ft. Total Depth 3635 ft.

Packer Depth 3608 ft. Size 6 7/8 in. Packer Depth ft. Size in.

Packer Depth ft. Size in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3626 ft. Recorder Number 6074 Cap. 5100

Bottom Recorder Depth (Outside) 3629 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Martin Drfg. Co. Rig #8 Drill Collar Length 146 I. D. 2 1/4 in.

Mud Type Chemical Viscosity 62 Weight Pipe Length I. D. in.

Weight 10.2 Water Loss 8.8 cc. Drill Pipe Length 3446 I. D. 3.8 in.

Chlorides 2,000 P.P.M. Test Tool Length 16 ft. Tool Size 5 600 in.

Jars: Make No Serial Number Anchor Length 27 ft. Size 5 600 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 1/2 in. Tool Joint Size 4 1/2 FH in.

Blow:

Recovered 290 ft. of Mud

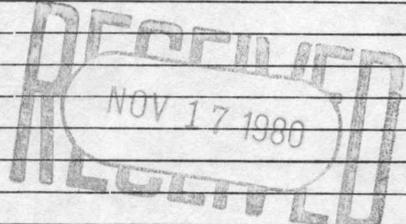
Recovered ft. of

Recovered ft. of

Recovered ft. of

Recovered ft. of

Remarks: No seat for packer. Reset one time.



Time On Location A.M. P.M. Time Pick Up Tool A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 3:45 A.M. P.M. Time Started Off Bottom A.M. P.M. Maximum Temperature

Initial Hydrostatic Pressure (A) 1931 P.S.I.

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

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

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

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

Final Hydrostatic Pressure (H) 1890 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 Vernon Wondra Thank You

FIELD INVOICE

Table with 2 columns: Item, Amount. Includes Open Hole Test, Misrun (300.00), Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage (N/C), Fluid Sampler, Extra Charts, Insurance, and TOTAL (300.00).

SK# 8713

I

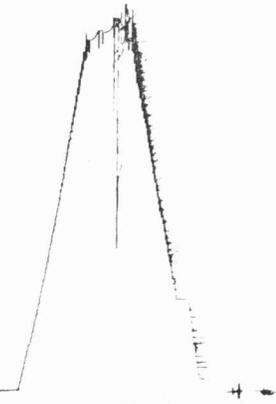
(H) (H)



46

SK# 8713

0



49

Company A. Scott Ritchie Lease & Well No. Hansen #1
 Elevation Est. 2201 Ground Level Formation Reagan Sand Effective Pay - Ft. Ticket No. 8713
 Date 11/13/80 Sec. 29 Twp. 5S Range 20W County Phillips State Kansas
 Test Approved by Roger F----- Western Representative Vernon Wondra

Formation Test No. 4 Interval Tested from 3608 ft. to 3635 ft. Total Depth 3635 ft.
 Packer Depth 3608 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 3626 ft. Recorder Number 6074 Cap. 5100
 Bottom Recorder Depth (Outside) 3629 ft. Recorder Number 10979 Cap. 4100
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Murfin Drlg. Co. Rig #8 Drill Collar Length 146 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 62 Weight Pipe Length - I. D. - in.
 Weight 10.2 Water Loss 8.8 cc. Drill Pipe Length 3446 I. D. 3.8 in.
 Chlorides 2,000 P.P.M. Test Tool Length 16 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 27 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: MISRUN

Recovered 270 ft. of mud
 Recovered - ft. of MISRUN
 Recovered - ft. of -
 Recovered - ft. of -
 Recovered - ft. of -

Remarks: NO SEAT FOR PACKER
RESET ONE TIME

Time Set Packer(s) 3:45 ~~A.M.~~ P.M. Time Started Off Bottom - A.M. P.M. Maximum Temperature -
 Initial Hydrostatic Pressure 1931 P.S.I. (A)
 Initial Flow Period - Minutes (B) - P.S.I. to (C) - P.S.I.
 Initial Closed In Period - Minutes (D) - P.S.I.
 Final Flow Period - Minutes (E) - P.S.I. to (F) - P.S.I.
 Final Closed In Period - Minutes (G) - P.S.I.
 Final Hydrostatic Pressure 1890 P.S.I. (H)



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8714

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

Elevation Est. 2201 88 Formation Regan Sand Eff. Pay Ft.

District Great Bend Date 11-13-80 Customer Order No.

COMPANY NAME A. Scott Ritchie

ADDRESS 125 N. Market, Wichita, Kansas 67201

LEASE AND WELL NO. Hansen #1 COUNTY Phillips STATE Kansas Sec. 29 Twp 55 Rge 20

Mail Invoice To Same as above No. Copies Requested 5

Co. Name Same as above Address No. Copies Requested 5

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

Formation Test No. 5 Interval Tested from 3570 ft. to 3635 ft. Total Depth 3635 ft.

Packer Depth 3565 ft. Size 6 7/8 in. Packer Depth ft. Size in.

Packer Depth 3570 ft. Size 6 7/8 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3590 ft. Recorder Number 6074 Cap. 5100

Bottom Recorder Depth (Outside) 3593 ft. Recorder Number 10979 Cap. 4100

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Murfin Drlg. Co. Rig #8 Drill Collar Length 146 I. D. 2 3/4 in.

Mud Type Chemical Viscosity 62 Weight Pipe Length I. D. in.

Weight 10.2 Water Loss 88 cc. Drill Pipe Length 3403 I. D. 3.8 in.

Chlorides 2,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 6/8 in.

Jars: Make No Serial Number No Anchor Length 65 ft. Size 5 6/8 + 3 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 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Strong blow throughout 1st flow period. Weak blow died

in 20 min on 2nd flow period

Recovered 690 ft. of O.C.M. mud - Top - 14% oil, 7% water, 79% mud

Recovered ft. of Bottom - 10% oil, 12% water, 78% mud

Recovered 190 ft. of slight O.C.M. muddy water

Recovered 1180 ft. of slight O.C.M. water (45,000 ppm chlorides)

Remarks: 2100

Time On Location A.M. P.M. Time Pick Up Tool A.M. P.M. Time Off Location A.M. P.M.

Time Set Packer(s) 7:10 A.M. P.M. Time Started Off Bottom 9:10 A.M. P.M. Maximum Temperature 109

Initial Hydrostatic Pressure (A) 1890 P.S.I.

Initial Flow Period Minutes 30 (B) 613 P.S.I. to (C) 946 P.S.I.

Initial Closed In Period Minutes 30 (D) 959 P.S.I.

Final Flow Period Minutes 30 (E) 946 P.S.I. to (F) 959 P.S.I.

Final Closed In Period Minutes 30 (G) 959 P.S.I.

Final Hydrostatic Pressure (H) 1864 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 Vernon Wondra Frank Gaw

FIELD INVOICE

Table with 2 columns: Item and Amount. Items include Open Hole Test (\$550.00), Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage (\$27m 20.25), Fluid Sampler, Extra Charts, Insurance, and TOTAL (\$570.25).

WESTERN TESTING CO., INC.

Pressure Data

Date 11-13

Test Ticket No. 8714

Recorder No. 6074

Capacity 5100

Location 3590 Ft.

Clock No. _____

Elevation 2201 AL

Well Temperature 109 °F

Point	Pressure	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1908</u> P.S.I.	<u>7:10</u> P	<u>M</u>
B First Initial Flow Pressure	<u>609</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>954</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>962</u> P.S.I.	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>959</u> P.S.I.	<u>30</u> Mins.	<u>27</u> Mins.
F Second Final Flow Pressure	<u>967</u> P.S.I.		
G Final Closed-in Pressure	<u>1222</u> P.S.I.		
H Final Hydrostatic Mud	<u>1875</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: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

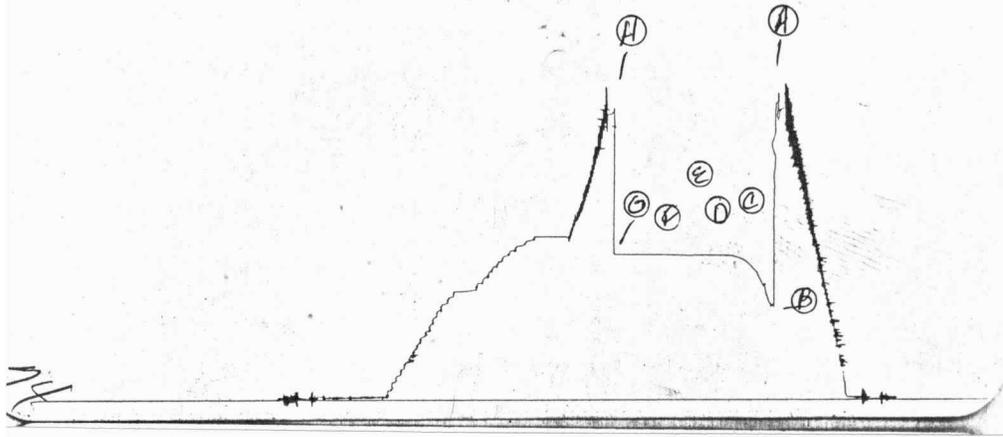
Second Flow Pressure
Breakdown: 6 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 9 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>609</u>	0	<u>954</u>	0	<u>959</u>	0	<u>967</u>	
P 2 5	<u>685</u>	3	<u>955</u>	5	<u>961</u>	3	1222	
P 3 10	<u>793</u>	6	<u>956</u>	10	<u>963</u>	6	}	
P 4 15	<u>867</u>	9	<u>958</u>	15	<u>964</u>	9		
P 5 20	<u>916</u>	12	<u>960</u>	20	<u>967</u>	12		
P 6 25	<u>941</u>	15	<u>962</u>	25	<u>967</u>	15		
P 7 30	<u>954</u>	18	}	30	<u>967</u>	18		
P 8 35		21			35			21
P 9 40		24			40			24
P 10 45		27			45			27
P 11 50		30	<u>962</u>	50		30		
P 12 55		33		55		33		
P 13 60		36		60		36		
P 14		39		65		39		
P 15		42		70		42		
P 16		45		75		45		
P 17		48		80		48		
P 18		51		85		51		
P 19		54		90		54		
P 20		57				57		
		60				60		

JKR # 8714

I



Company A. Scott Ritchie Lease & Well No. Hansen #1
 Elevation Est. 2201 Ground Level Formation Reagan Sand Effective Pay - Ft. Ticket No. 8714
 Date 11/13/80 Sec. 29 Twp. 5S Range 20W County Phillips State Kansas
 Test Approved by Roger F----- Western Representative Vernon Wondra

Formation Test No. 5 Interval Tested from 3570 ft. to 3635 ft. Total Depth 3635 ft.
 Packer Depth 3565 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 3570 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3590 ft. Recorder Number 6074 Cap. 5100
 Bottom Recorder Depth (Outside) 3593 ft. Recorder Number 10970 Cap. 4100
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Murfin Drilling Rig #8 Drill Collar Length 146 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 62 Weight Pipe Length - I. D. - in.
 Weight 10.2 Water Loss 8.8 cc. Drill Pipe Length 3403 I. D. 3.8 in.
 Chlorides 2,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 OD in.
 Jars: Make - Serial Number - Anchor Length 65 ft. 5 1/2 OD + 31' DP 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: Strong blow throughout first flow period. Weak blow; died in twenty minutes on second flow period.

Recovered 690 ft. of oil cut mud Top; 14% oil; 7% water; 79% mud
Bottom; 10% oil; 12% water; 78% mud
 Recovered 190 ft. of slightly oil cut muddy water
 Recovered 1180 ft. of slightly oil cut water (45,000 ppm chlorides)
 Recovered ft. of

Remarks:

Time Set Packer(s) 7:10 ~~A.M.~~ P.M. Time Started Off Bottom 9:10 ~~A.M.~~ P.M. Maximum Temperature 109°
 Initial Hydrostatic Pressure 1908 P.S.I. (A)
 Initial Flow Period 30 Minutes (B) 609 P.S.I. to (C) 954 P.S.I.
 Initial Closed In Period 30 Minutes (D) 962 P.S.I.
 Final Flow Period 30 Minutes (E) 959 P.S.I. to (F) 967 P.S.I.
 Final Closed In Period 27 Minutes (G) 967 P.S.I.
 Final Hydrostatic Pressure 1875 P.S.I. (H)

WESTERN TESTING CO., INC.
Pressure Data

Date 11-13-80

Test Ticket No. 8714

Recorder No. 6074

Capacity 5100

Location 3590

Clock No. -

Elevation 2201 Ground Level

Well Temperature 109

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	1908	P.S.I.	7:10P	M
B First Initial Flow Pressure	609	P.S.I.	30	Mins. 30 Min
C First Final Flow Pressure	954	P.S.I.	30	Mins. 30 Min
D Initial Closed-in Pressure	962	P.S.I.	30	Mins. 30 Mins
E Second Initial Flow Pressure	959	P.S.I.	30	Mins. 27 Mins
F Second Final Flow Pressure	967	P.S.I.		
G Final Closed-in Pressure	1222	P.S.I.		
H Final Hydrostatic Mud	1873	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: 10 Inc.
of 3 mins. and a
final inc. of 0 Min.

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

Final Shut-In
Breakdown: 9 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	609	0	954	0	959	0	967
P 2 5	685	3	955	5	961	3	967
P 3 10	793	6	956	10	963	6	967
P 4 15	867	9	958	15	964	9	967
P 5 20	916	12	960	20	967	12	967
P 6 25	941	15	962	25	967	15	967
P 7 30	954	18	962	30	967	18	967
P 8		21	962			21	967
P 9		24	962			24	967
P10		27	962			27	967
P11		30	962				
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							