

Company Falcon Exploration, Inc. Lease & Well No. Hissons #1
 Elevation 1814 Ground Level Formation Lansing Effective Pay -- Ft. Ticket No. 15211
 Date 5/24/82 Sec. 3 Twp. 28S Range 12W County Pratt State Kansas
 Test Approved by Michael S. Mitchell Western Representative Mike Rogers

Formation Test No. 1 Interval Tested from 3780 ft. to 3795 ft. Total Depth 3795 ft.
 Packer Depth 3775 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 3780 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3784 ft. Recorder Number 1566 Cap. 4300
 Bottom Recorder Depth (Outside) 3788 ft. Recorder Number 3086 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Santa Fe Drlg. Rig #1 Drill Collar Length 274 I. D. 2.2 in.
 Mud Type chemical Viscosity 45 Weight Pipe Length 481 I. D. 3.2 in.
 Weight 9.4 Water Loss 12.8 cc. Drill Pipe Length 3004 I. D. 3.8 in.
 Chlorides 12,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 15 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: Weak one fourth inch blow building to three inches on initial flow epriod. Weak depleating one inch dead in eighteen minutes on final flow period. Flushed tool.

Recovered 30 ft. of drilling mud with a few oil spots
 Recovered 60 ft. of very slightly oil cut drilling mud with 70% mud;28% water;2% oil
 Recovered 30 ft. of drilling mud with slight oil stain and a few drops oil in tool
 Recovered - ft. of with 17,000ppm chlorides
 Recovered - ft. of -

Remarks: _____

Time Set Packer(s) 5:15 A.M. Time Started Off Bottom 7:45 P.M. Maximum Temperature 114°
 Initial Hydrostatic Pressure (A) 1920 P.S.I.
 Initial Flow Period Minutes 30 (B) 76 P.S.I. to (C) 76 P.S.I.
 Initial Closed In Period Minutes 48 (D) 776 P.S.I.
 Final Flow Period Minutes 30 (E) 84 P.S.I. to (F) 110 P.S.I.
 Final Closed In Period Minutes 45 (G) 852 P.S.I.
 Final Hydrostatic Pressure (H) 1920 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 5/24/82 Test Ticket No. 15211
 Recorder No. 1566 Capacity 4300 Location 3784 Ft.
 Clock No. -- Elevation 1814 Ground Level Well Temperature 114 °F

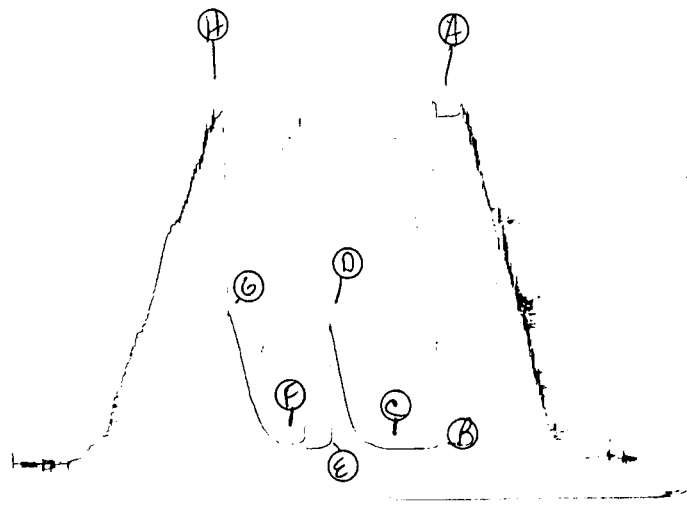
Point	Pressure			Time Given	Time Computed
		P.S.I.			
A Initial Hydrostatic Mud	1920	P.S.I.	Open Tool	5:15P	M
B First Initial Flow Pressure	76	P.S.I.	First Flow Pressure	30	30
C First Final Flow Pressure	76	P.S.I.	Initial Closed-in Pressure	45	48
D Initial Closed-in Pressure	776	P.S.I.	Second Flow Pressure	30	30
E Second Initial Flow Pressure	84	P.S.I.	Final Closed-in Pressure	45	45
F Second Final Flow Pressure	110	P.S.I.			
G Final Closed-in Pressure	852	P.S.I.			
H Final Hydrostatic Mud	1920	P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of	5 mins. and a	of	3 mins. and a	of	5 mins. and a	of	3 mins. and a
	final inc. of	0 Min.	final inc. of	0 Min.	final inc. of	0 Min.	final inc. of	0 Min.
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.	
P 1 0	76	0	76	0	84	0	110	
P 2 5	76	3	77	5	84	3	111	
P 3 10	76	6	77	10	84	6	116	
P 4 15	76	9	79	15	84	9	123	
P 5 20	76	12	84	20	FLUSHED TOOL	12	136	
P 6 25	76	15	91	25	116	15	156	
P 7 30	76	18	105	30	110	18	184	
P 8		21	111			21	222	
P 9		24	125			24	279	
P10		27	150			27	337	
P11		30	194			30	422	
P12		33	255			33	524	
P13		36	355			36	641	
P14		39	474			39	725	
P15		42	601			42	802	
P16		45	703			45	852	
P17		48	776					
P18								
P19								
P20								

HA # 15211

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 15211 OK

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

Elevation 1814 g1 Formation Lansing - Eff. Pay Ft.

District Pratt Date 5-24-82 Customer Order No.
COMPANY NAME Falcon Exploration Inc. K&B Bldg, Suite 1531
ADDRESS 125 N. Market Wichita, Ka. 67202
LEASE AND WELL NO #1 Hissons COUNTY Pratt STATE Ka. Sec. 3 Twp. 28S Rge. 12W
Mail Invoice To Co. Name Address No. Copies Requested
Mail Charts To Address No. Copies Requested

Formation Test No. 1 Interval Tested From 3780 ft. to 3795 ft. Total Depth 3795 ft.
Packer Depth 3775 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth 3780 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Depth of Selective Zone Set -
Top Recorder Depth (Inside) 3784 ft. Recorder Number 1566 Cap. 4366
Bottom Recorder Depth (Outside) 3788 ft. Recorder Number 3086 Cap. 4500
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Sento Fe Rig 1 Drill Collar Length 274' I. D. 2.2 in.
Mud Type Chem. Viscosity 45 Weight Pipe Length 481' I. D. 3.2 in.
Weight 9.4 Water Loss 12.8 cc. Drill Pipe Length 3004' I. D. 3.8 in.
Chlorides 12,000 P.P.M. Test Tool Length 21' ft. Tool Size 5 1/2 in.
Jars: Make - Serial Number - Anchor Length 15' 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: OK 1/4 in. Building to 3 inches I.F.P. Weak deflecting line dead in 18 min F.F.P. Flashed tool. -
Recovered 30' ft. of Delq mud w/ a few oil spots -
Recovered 60' ft. of Very slightly oil cont delq mud w/ 70% mud 28% wtr 2% oil
Recovered 30' ft. of Delq mud w/ slight oil stain + a few drops oil in tool.
Recovered ft. of w/ 17,000 chlorides. -
Recovered ft. of
Remarks:
MAY 26 1982

Time On Location 2:00 A.M. Time Pick Up Tool 3:15 P.M. Time Off Location 10:30 P.M.
Time Set Packer(s) 5:15 P.M. Time Started Off Bottom 7:45 A.M. Maximum Temperature 114°
Initial Hydrostatic Pressure (A) 1906 P.S.I.
Initial Flow Period Minutes 30 (B) 86 P.S.I. to (C) 75 P.S.I.
Initial Closed In Period Minutes 45 (D) 776 P.S.I.
Final Flow Period Minutes 30 (E) 97 P.S.I. to (F) 97 P.S.I.
Final Closed In Period Minutes 45 (G) 830 P.S.I.
Final Hydrostatic Pressure (H) 1939 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: Michael Mitchell
Signature of Customer or his authorized representative: Michael Mitchell
Western Representative: Mike Rogus Thank You!

FIELD INVOICE
Open Hole Test \$ 600.00
Misrun \$
Straddle Test \$
Jars \$
Selective Zone \$
Safety Joint \$
Standby \$
Evaluation \$
Extra Packer \$
Circ. Sub. \$
Mileage \$ 7.00 chg
Fluid Sampler \$
Extra Charts \$
Insurance \$
Telecopier \$
TOTAL \$ 600.00

WESTERN TESTING CO., INC.

Pressure Data

Date 5-24-82 Recorder No. 1566 Capacity 4300 Test Ticket No. 15211
 Clock No. --- Elevation 1814 GL Location 3784 Well Temperature 114

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1920</u> P.S.I.		<u>5:15 P</u>	
B First Initial Flow Pressure	<u>76</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>76</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>48</u> Mins.
D Initial Closed-in Pressure	<u>776</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>84</u> P.S.I.	Final Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
F Second Final Flow Pressure	<u>110</u> P.S.I.			
G Final Closed-in Pressure	<u>852</u> P.S.I.			
H Final Hydrostatic Mud	<u>1920</u> P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	Press.	Initial Shut-In Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Point Minutes	Press.	Second Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Point Minutes	Press.	Final Shut-In Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.
P 1 0	<u>76</u>	0	<u>76</u>	0	<u>84</u>	0	<u>110</u>	
P 2 5		3	<u>77</u>	5		3	<u>111</u>	
P 3 10		6	<u>77</u>	10		6	<u>116</u>	
P 4 15		9	<u>79</u>	15	<u>84</u>	9	<u>123</u>	
P 5 20		12	<u>84</u>	20	<u>Flushed Tool</u>	12	<u>136</u>	
P 6 25		15	<u>91</u>	25	<u>116</u>	15	<u>156</u>	
P 7 30	<u>76</u>	18	<u>105</u>	30	<u>110</u>	18	<u>184</u>	
P 8 35		21	<u>111</u>	35		21	<u>222</u>	
P 9 40		24	<u>125</u>	40		24	<u>279</u>	
P 10 45		27	<u>150</u>	45		27	<u>337</u>	
P 11 50		30	<u>194</u>	50		30	<u>422</u>	
P 12 55		33	<u>255</u>	55		33	<u>524</u>	
P 13 60		36	<u>355</u>	60		36	<u>641</u>	
P 14		39	<u>474</u>	65		39	<u>725</u>	
P 15		42	<u>601</u>	70		42	<u>802</u>	
P 16		45	<u>703</u>	75		45	<u>852</u>	
P 17		48	<u>776</u>	80		48		
P 18		51		85		51		
P 19		54		90		54		
P 20		57				57		
		60				60		

Company Falcon Exploration, Inc. Lease & Well No. Hissons #1
 Elevation 1814 Ground Level Formation Kansas City Effective Pay - Ft. Ticket No. 15212
 Date 5/25/82 Sec. 3 Twp. 28S Range 12W County Pratt State Kansas
 Test Approved by Michael S. Mitchell Western Representative Mike Rogers

Formation Test No. 2 Interval Tested from 3984 ft. to 4000 ft. Total Depth 4000 ft.
 Packer Depth 3979 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 3984 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 3987 ft. Recorder Number 1566 Cap. 4300
 Bottom Recorder Depth (Outside) 3991 ft. Recorder Number 3086 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Santa Fe Drlg. Rig #1 Drill Collar Length 274 I. D. 2.2 in.
 Mud Type chemcial Viscosity 65 Weight Pipe Length 481 I. D. 3.8 in.
 Weight 9.4 Water Loss 12.0 cc. Drill Pipe Length 3208 I. D. 3.8 in.
 Chlorides 18,000 P.P.M. Test Tool Length 21 ft. Tool Size 5 1/2 in.
 Jars: Make - Serial Number - Anchor Length 16 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: Two inch blow building to strong blow in eight minutes on initial flow period.
Strong blow on final flow period.

Recovered 450 ft. of gas in pipe
 Recovered 60 ft. of heavy gas and slightly oil cut drilling mud with 95% mud;5% oil
 Recovered 60 ft. of heavy gas and oil cut drilling mud with 50% mud;32% oil;18% water
 Recovered 60 ft. of muddy oil with 11% mud;70% oil;19% water with 35,000 ppm chlorides
 Recovered ft. of

Remarks:

Time Set Packer(s) 10:45 ~~A.M.~~ P.M. Time Started Off Bottom 2:00 ~~A.M.~~ P.M. Maximum Temperature 117°
 Initial Hydrostatic Pressure (A) 2047 P.S.I.
 Initial Flow Period Minutes 30 (B) 96 P.S.I. to (C) 99 P.S.I.
 Initial Closed In Period Minutes 45 (D) 1370 P.S.I.
 Final Flow Period Minutes 45 (E) 106 P.S.I. to (F) 110 P.S.I.
 Final Closed In Period Minutes 78 (G) 1496 P.S.I.
 Final Hydrostatic Pressure (H) 1998 P.S.I.

WESTERN TESTING CO., INC.
Pressure Data

Date 5/25/82 Test Ticket No. 15212
 Recorder No. 1566 Capacity 4300 Location 3987 Ft.
 Clock No. --- Elevation 1814 Ground Level Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2047</u> P.S.I.	Open Tool	<u>10:45P</u> M	
B First Initial Flow Pressure	<u>96</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>99</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>1370</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>106</u> P.S.I.	Final Closed-in Pressure	<u>75</u> Mins.	<u>78</u> Mins.
F Second Final Flow Pressure	<u>110</u> P.S.I.			
G Final Closed-in Pressure	<u>1496</u> P.S.I.			
H Final Hydrostatic Mud	<u>1998</u> P.S.I.			

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.	Breakdown:	Inc.
	of <u>6</u> mins. and a final inc. of <u>0</u> Min.		of <u>15</u> mins. and a final inc. of <u>0</u> Min.		of <u>9</u> mins. and a final inc. of <u>0</u> Min.		of <u>26</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>0</u>	<u>96</u>	<u>0</u>	<u>99</u>	<u>0</u>	<u>106</u>	<u>0</u>	<u>110</u>	
P 2 <u>5</u>	<u>96</u>	<u>3</u>	<u>115</u>	<u>5</u>	<u>106</u>	<u>3</u>	<u>187</u>	
P 3 <u>10</u>	<u>96</u>	<u>6</u>	<u>172</u>	<u>10</u>	<u>106</u>	<u>6</u>	<u>279</u>	
P 4 <u>15</u>	<u>96</u>	<u>9</u>	<u>268</u>	<u>15</u>	<u>106</u>	<u>9</u>	<u>374</u>	
P 5 <u>20</u>	<u>96</u>	<u>12</u>	<u>359</u>	<u>20</u>	<u>106</u>	<u>12</u>	<u>484</u>	
P 6 <u>25</u>	<u>96</u>	<u>15</u>	<u>454</u>	<u>25</u>	<u>107</u>	<u>15</u>	<u>588</u>	
P 7 <u>30</u>	<u>99</u>	<u>18</u>	<u>562</u>	<u>30</u>	<u>107</u>	<u>18</u>	<u>684</u>	
P 8 _____		<u>21</u>	<u>675</u>	<u>35</u>	<u>108</u>	<u>21</u>	<u>788</u>	
P 9 _____		<u>24</u>	<u>791</u>	<u>40</u>	<u>109</u>	<u>24</u>	<u>884</u>	
P10 _____		<u>27</u>	<u>916</u>	<u>45</u>	<u>110</u>	<u>27</u>	<u>976</u>	
P11 _____		<u>30</u>	<u>1026</u>			<u>30</u>	<u>1062</u>	
P12 _____		<u>33</u>	<u>1123</u>			<u>33</u>	<u>1139</u>	
P13 _____		<u>36</u>	<u>1209</u>			<u>36</u>	<u>1218</u>	
P14 _____		<u>39</u>	<u>1281</u>			<u>39</u>	<u>1280</u>	
P15 _____		<u>42</u>	<u>1324</u>			<u>42</u>	<u>1309</u>	
P16 _____		<u>45</u>	<u>1370</u>			<u>45</u>	<u>1354</u>	
P17 _____						<u>48</u>	<u>1382</u>	
P18 _____						<u>51</u>	<u>1401</u>	
P19 _____						<u>54</u>	<u>1414</u>	
P20 _____						<u>57</u>	<u>1429</u>	
						<u>60</u>	<u>1443</u>	

WESTERN TESTING CO., INC.

Pressure Data

Date 5/25/82 Recorder No. 1566 Capacity 4300 Test Ticket No. 15212
 Clock No. --- Elevation 1814 Ground Level Location 3987 Ft. ---
 Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	2047	P.S.I.	10:45P	M
B First Initial Flow Pressure	96	P.S.I.	30	30 Mins.
C First Final Flow Pressure	99	P.S.I.	45	45 Mins.
D Initial Closed-in Pressure	1370	P.S.I.	45	45 Mins.
E Second Initial Flow Pressure	106	P.S.I.	75	78 Mins.
F Second Final Flow Pressure	110	P.S.I.		
G Final Closed-in Pressure	1496	P.S.I.		
H Final Hydrostatic Mud	1998	P.S.I.		

PRESSURE BREAKDOWN

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

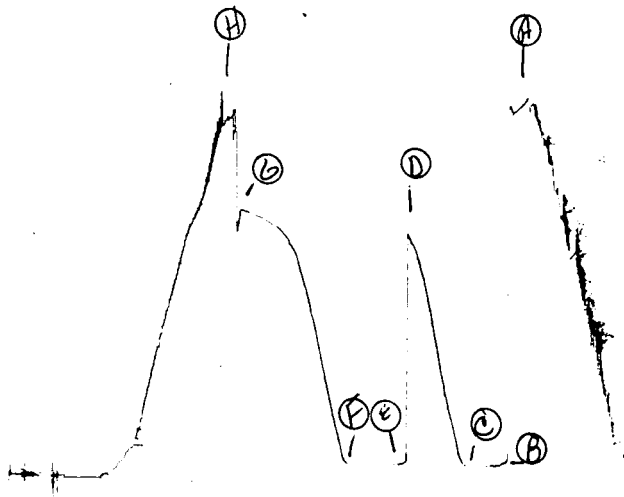
Initial Shut-In
 Breakdown: 15 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

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

Final Shut-In
 Breakdown: 26 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						63	1455
P 2						66	1464
P 3						1 69	1.65 1474
P 4						2 72	1.62 1483
P 5						3 75	1.6 1493
P 6						4 78	1.5 1496
P 7							
P 8							
P 9							
P10							
P11							
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

JK # 15212
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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 15212

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

Elevation 181491 Formation Kansas City Eff. Pay Ft.

District Pratt Date 5-25-82 Customer Order No.

COMPANY NAME Falcon Exploration Inc. Suite 531

ADDRESS KSB Bldg. 125 N. Market Wichita, K. 67202

LEASE AND WELL NO. Hissons #1 COUNTY Pratt STATE Ks. Sec. 3 Twp. 28 Rge. 12W

Mail Invoice To Co. Name Same Address No. Copies Requested 14

Mail Charts To Co. Name Same Address No. Copies Requested 14

Formation Test No. 2 Interval Tested From 3984 ft. to 4000 ft. Total Depth 4000 ft.

Packer Depth 3979 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 3984 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3987 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 3991 ft. Recorder Number 3086 Cap. 4500

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

Drilling Contractor Santa Fe Rig 1 Drill Collar Length 274' I. D. 2.2 in.

Mud Type chem. Viscosity 65 Weight Pipe Length 461 I. D. 3.8 in.

Weight 9.4 Water Loss 12.0 cc. Drill Pipe Length 3208' I. D. 3.8 in.

Chlorides 18,000 P.P.M. Test Tool Length 21' ft. Tool Size 5 1/2 in.

Jars: Make - Serial Number - Anchor Length 16' 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: 2 inch Building to Strong in 8 min. J.F.P. Strong blow on the final flow period

Recovered 450' ft. of Gas-in-pipe

Recovered 60' ft. of Hvy gas & slightly oil cut Dm w/ 95% mud 5% oil

Recovered 60' ft. of Hvy gas & Oil cut Dm w/ 50% mud 30% oil 18% wtr.

Recovered 60' ft. of muddy oil w/ 11% mud 70% oil & 19% wtr.

Remarks: w/ 35,000 Chlorid.

Time On Location 7:30 A.M. Time Pick Up Tool 9:00 P.M. Time Off Location 5:00 A.M.

Time Set Packer(s) 10:45 P.M. Time Started Off Bottom 2:00 P.M. Maximum Temperature 1170

Initial Hydrostatic Pressure (A) 2047 P.S.I.

Initial Flow Period Minutes 30 (B) 108 P.S.I. to (C) 86 P.S.I.

Initial Closed In Period Minutes 45 (D) 1355 P.S.I.

Final Flow Period Minutes 45 (E) 108 P.S.I. to (F) 97 P.S.I.

Final Closed In Period Minutes 75 (G) 1474 P.S.I.

Final Hydrostatic Pressure (H) 2026 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 tests. 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: Michael Mitchell Signature of Customer or his authorized representative

Western Representative: Mike Rogers Thank Again!

262 0961 456-7267 - Howland 177 1607 Emson Hillcrest

FIELD INVOICE

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

WESTERN TESTING CO., INC.
Pressure Data

Date 6-1-58 Test Ticket No. 1002
 Recorder No. 106 Capacity 200 Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	_____ P.S.I.	_____	_____ Mins.	_____ Mins.
B First Initial Flow Pressure	_____ P.S.I.	_____	_____ Mins.	_____ Mins.
C First Final Flow Pressure	_____ P.S.I.	_____	_____ Mins.	_____ Mins.
D Initial Closed-in Pressure	_____ P.S.I.	_____	_____ Mins.	_____ Mins.
E Second Initial Flow Pressure	_____ P.S.I.	_____	_____ Mins.	_____ Mins.
F Second Final Flow Pressure	_____ P.S.I.	_____	_____ Mins.	_____ Mins.
G Final Closed-in Pressure	_____ P.S.I.	_____	_____ Mins.	_____ Mins.
H Final Hydrostatic Mud	_____ P.S.I.	_____	_____ Mins.	_____ Mins.

PRESSURE BREAKDOWN

Point Mins.	First Flow Pressure	Initial Shut-In	Second Flow Pressure	Final Shut-In	
	Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.	
	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	0 <u>121</u>	0 <u>72</u>	0 <u>110</u> <u>118</u>	0 <u>78</u>	
P 2	5 <u>165</u>	5 <u>222</u>	5 <u>152</u> <u>110</u>	5 <u>120</u>	
P 3	10 <u>172</u>	10 <u>306</u>	10 <u>150</u>	10 <u>324</u>	
P 4	15 <u>92</u>	15 <u>514</u>	15 <u>78</u>	15 <u>404</u>	
P 5	20 <u>92</u>	20 <u>672</u>	20 <u>98</u>	20 <u>674</u>	
P 6	25 <u>88</u>	25 <u>812</u>	25 <u>78</u>	25 <u>748</u>	
P 7	30 <u>78</u>	30 <u>1006</u>	30 <u>78</u>	30 <u>866</u>	
P 8	35 _____	35 <u>1122</u>	35 <u>98</u>	35 <u>940</u>	
P 9	40 _____	40 _____	40 <u>78</u>	40 <u>1122</u>	
P10	45 _____	45 <u>120</u>	45 <u>78</u>	45 <u>1218</u>	
P11	50 _____	50 _____	50 _____	50 <u>1268</u>	
P12	55 _____	55 _____	55 _____	55 <u>1314</u>	
P13	60 _____	60 _____	60 _____	60 <u>1350</u>	
P14	_____	_____	65 _____	65 <u>1340</u>	
P15	_____	_____	70 _____	70 <u>1350</u>	
P16	_____	_____	75 _____	75 <u>1388</u>	
P17	_____	_____	80 _____	80 _____	
P18	_____	_____	85 _____	85 _____	
P19	_____	_____	90 _____	90 _____	
P20	_____	_____	_____	_____	

WESTERN TESTING CO., INC.

Pressure Data

Date 5-25-82 Test Ticket No. 15212
 Recorder No. 1566 Capacity 4300 Location 3987 Ft
 Clock No. --- Elevation 1814 GL Well Temperature 117 °F

Point	Pressure	Open Tool	Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2047</u> P.S.I.		<u>10:45</u> M	
B First Initial Flow Pressure	<u>96</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>99</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>45</u> Mins.
D Initial Closed-in Pressure	<u>1370</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
E Second Initial Flow Pressure	<u>106</u> P.S.I.	Final Closed-in Pressure	<u>75</u> Mins.	<u>78</u> Mins.
F Second Final Flow Pressure	<u>110</u> P.S.I.			
G Final Closed-in Pressure	<u>1496</u> P.S.I.			
H Final Hydrostatic Mud	<u>1998</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>15</u> Inc.		Breakdown: <u>9</u> Inc.		Breakdown: <u>26</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>99</u>	<u>0</u>	<u>106</u>	<u>0</u>	<u>110</u>
P 2	<u>5</u>	<u>3</u>	<u>115</u>	<u>5</u>	<u>1</u>	<u>3</u>	<u>187</u>
P 3	<u>10</u>	<u>6</u>	<u>172</u>	<u>10</u>	<u>1</u>	<u>6</u>	<u>279</u>
P 4	<u>15</u>	<u>9</u>	<u>268</u>	<u>15</u>	<u>106</u>	<u>9</u>	<u>374</u>
P 5	<u>20</u>	<u>12</u>	<u>359</u>	<u>20</u>	<u>106</u>	<u>12</u>	<u>484</u>
P 6	<u>25</u>	<u>15</u>	<u>454</u>	<u>25</u>	<u>107</u>	<u>15</u>	<u>588</u>
P 7	<u>30</u>	<u>18</u>	<u>562</u>	<u>30</u>	<u>107</u>	<u>18</u>	<u>684</u>
P 8	<u>35</u>	<u>21</u>	<u>675</u>	<u>35</u>	<u>108</u>	<u>21</u>	<u>788</u>
P 9	<u>40</u>	<u>24</u>	<u>791</u>	<u>40</u>	<u>109</u>	<u>24</u>	<u>884</u>
P 10	<u>45</u>	<u>27</u>	<u>916</u>	<u>45</u>	<u>110</u>	<u>27</u>	<u>976</u>
P 11	<u>50</u>	<u>30</u>	<u>1026</u>	<u>50</u>		<u>30</u>	<u>1062</u>
P 12	<u>55</u>	<u>33</u>	<u>1123</u>	<u>55</u>		<u>33</u>	<u>1139</u>
P 13	<u>60</u>	<u>36</u>	<u>1209</u>	<u>60</u>		<u>36</u>	<u>1218</u>
P 14		<u>39</u>	<u>1281</u>	<u>65</u>		<u>39</u>	<u>1280</u>
P 15		<u>42</u>	<u>1324</u>	<u>70</u>		<u>42</u>	<u>1309</u>
P 16		<u>45</u>	<u>1370</u>	<u>75</u>		<u>45</u>	<u>1354</u>
P 17		<u>48</u>		<u>80</u>		<u>48</u>	<u>1382</u>
P 18		<u>51</u>		<u>85</u>		<u>51</u>	<u>1401</u>
P 19		<u>54</u>		<u>90</u>		<u>54</u>	<u>1414</u>
P 20		<u>57</u>				<u>57</u>	<u>1429</u>
		<u>60</u>				<u>60</u>	<u>1443</u>

WESTERN TESTING CO., INC.
Pressure Data

Date _____

Test Ticket No. 15212

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud _____	P.S.I.	Open Tool	_____ M	_____
B First Initial Flow Pressure _____	P.S.I.	First Flow Pressure	_____ Mins.	_____ Mins.
C First Final Flow Pressure _____	P.S.I.	Initial Closed-in Pressure	_____ Mins.	_____ Mins.
D Initial Closed-in Pressure _____	P.S.I.	Second Flow Pressure	_____ Mins.	_____ Mins.
E Second Initial Flow Pressure _____	P.S.I.	Final Closed-in Pressure	_____ Mins.	_____ Mins.
F Second Final Flow Pressure _____	P.S.I.			
G Final Closed-in Pressure _____	P.S.I.			
H Final Hydrostatic Mud _____	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: _____ Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: _____ 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 _____	_____	63	_____	_____	_____	63	1455
P 2 _____	_____	66	_____	_____	_____	66	1464
P 3 _____	_____	69	_____	_____	_____	69	1474
P 4 _____	_____	72	_____	_____	_____	72	1483
P 5 _____	_____	75	_____	_____	_____	75	1493
P 6 _____	_____	78	_____	_____	_____	78	1496
P 7 _____	_____	81	_____	_____	_____	81	_____
P 8 _____	_____	84	_____	_____	_____	84	_____
P 9 _____	_____	87	_____	_____	_____	87	_____
P10 _____	_____	90	_____	_____	_____	90	_____
P11 _____	_____	93	_____	_____	_____	93	_____
P12 _____	_____	96	_____	_____	_____	96	_____
P13 _____	_____	99	_____	_____	_____	99	_____
P14 _____	_____	102	_____	_____	_____	102	_____
P15 _____	_____	105	_____	_____	_____	105	_____
P16 _____	_____	108	_____	_____	_____	108	_____
P17 _____	_____	111	_____	_____	_____	111	_____
P18 _____	_____	114	_____	_____	_____	114	_____
P19 _____	_____	117	_____	_____	_____	117	_____
P20 _____	_____	120	_____	_____	_____	120	_____



Company Falcon Exploration, Inc. Lease & Well No. #1 Hissons
 Elevation 1814 Ground Level Formation - Effective Pay - Ft. Ticket No. 15213
 Date 5/26/82 Sec 3 Twp 28S Range 12W County Pratt State Kansas
 Test Approved by Michael S. Mitchell Western Representative Mike Rogers

Formation Test No. 3 Interval Tested from 4022 ft. to 4044 ft. Total Depth 4044 ft.
 Packer Depth 4017 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Packer Depth 4022 ft. Size 6 5/8 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4025 ft. Recorder Number 1566 Cap. 4300
 Bottom Recorder Depth (Outside) 4029 ft. Recorder Number 3086 Cap. 4500
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Santa Fe Rig #1 Drill Collar Length 274 I. D. 2.2 in.
 Mud Type Chemical Viscosity 59 Weight Pipe Length 481 I. D. 3.2 in.
 Weight 9.3 Water Loss 13.6 cc. Drill Pipe Length 3246 I. D. 3.8 in.
 Chlorides 19,000 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 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Strong. Gas to surface in 5 minutes on initial flow period. See attached sheet for gas measurements.

Recovered 30 ft. of heavy mud cut oil
 Recovered 60 ft. of mud cut oil
 Recovered 240 ft. of gassy clean oil 24 gravity 69°
 Recovered 60 ft. of salt water Chlorides 93,000 PPM
 Recovered ft. of

Remarks:

Time Set Packer(s) 4:00 ~~AM~~ P.M. Time Started Off Bottom 7:15 ~~AM~~ P.M. Maximum Temperature 117
 Initial Hydrostatic Pressure 2076 P.S.I. (A)
 Initial Flow Period 45 Minutes (B) 327 P.S.I. to (C) 154 P.S.I.
 Initial Closed In Period 42 Minutes (D) 1153 P.S.I.
 Final Flow Period 50 Minutes (E) 205 P.S.I. to (F) 158 P.S.I.
 Final Closed In Period 57 Minutes (G) 1114 P.S.I.
 Final Hydrostatic Pressure 2054 P.S.I. (H)

WESTERN TESTING CO., INC.

Pressure Data

Date 5-26-82 Test Ticket No. 15213
 Recorder No. 1566 Capacity 4300 Location 4025 Ft.
 Clock No. - Elevation 1814 Ground Level Well Temperature 117 °F

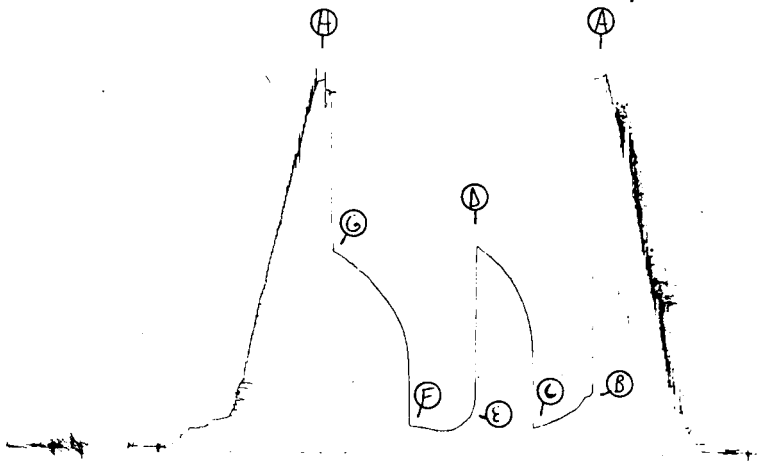
Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2076</u> P.S.I.	Open Tool	<u>4:00A.</u> M	
B First Initial Flow Pressure	<u>327</u> P.S.I.	First Flow Pressure	<u>45</u> Mins.	<u>45</u> Mins.
C First Final Flow Pressure	<u>154</u> P.S.I.	Initial Closed-in Pressure	<u>45</u> Mins.	<u>42</u> Mins.
D Initial Closed-in Pressure	<u>1153</u> P.S.I.	Second Flow Pressure	<u>45</u> Mins.	<u>50</u> Mins.
E Second Initial Flow Pressure	<u>205</u> P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>57</u> Mins.
F Second Final Flow Pressure	<u>158</u> P.S.I.			
G Final Closed-in Pressure	<u>1114</u> P.S.I.			
H Final Hydrostatic Mud	<u>2054</u> P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>9</u> Inc.		Breakdown: <u>14</u> Inc.		Breakdown: <u>10</u> Inc.		Breakdown: <u>19</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>327</u>	<u>0</u>	<u>154</u>	<u>0</u>	<u>205</u>	<u>0</u>	<u>158</u>
P 2 <u>5</u>	<u>327</u>	<u>3</u>	<u>779</u>	<u>5</u>	<u>205</u>	<u>3</u>	<u>641</u>
P 3 <u>10</u>	<u>275</u>	<u>6</u>	<u>844</u>	<u>10</u>	<u>172</u>	<u>6</u>	<u>710</u>
P 4 <u>15</u>	<u>246</u>	<u>9</u>	<u>887</u>	<u>15</u>	<u>145</u>	<u>9</u>	<u>757</u>
P 5 <u>20</u>	<u>223</u>	<u>12</u>	<u>930</u>	<u>20</u>	<u>134</u>	<u>12</u>	<u>799</u>
P 6 <u>25</u>	<u>204</u>	<u>15</u>	<u>973</u>	<u>25</u>	<u>133</u>	<u>15</u>	<u>830</u>
P 7 <u>30</u>	<u>188</u>	<u>18</u>	<u>999</u>	<u>30</u>	<u>138</u>	<u>18</u>	<u>862</u>
P 8 <u>35</u>	<u>171</u>	<u>21</u>	<u>1027</u>	<u>35</u>	<u>147</u>	<u>21</u>	<u>887</u>
P 9 <u>40</u>	<u>160</u>	<u>24</u>	<u>1051</u>	<u>40</u>	<u>152</u>	<u>24</u>	<u>915</u>
P10 <u>45</u>	<u>154</u>	<u>27</u>	<u>1072</u>	<u>45</u>	<u>157</u>	<u>27</u>	<u>940</u>
P11		<u>30</u>	<u>1094</u>	<u>50</u>	<u>158</u>	<u>30</u>	<u>970</u>
P12		<u>33</u>	<u>1110</u>			<u>33</u>	<u>991</u>
P13		<u>36</u>	<u>1127</u>			<u>36</u>	<u>1007</u>
P14		<u>39</u>	<u>1149</u>			<u>39</u>	<u>1030</u>
P15		<u>42</u>	<u>1153</u>			<u>42</u>	<u>1048</u>
P16						<u>45</u>	<u>1063</u>
P17						<u>48</u>	<u>1080</u>
P18						<u>51</u>	<u>1096</u>
P19						<u>54</u>	<u>1109</u>
P20						<u>57</u>	<u>1114</u>

TKT # 15213

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WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 15213

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

Elevation 181491 Formation [scribble] Eff. Pay Ft.

District Pratt Date 5-26-82 Customer Order No.

COMPANY NAME Falcon Exploration, Inc.

ADDRESS 2501 S. Dwyer Suite 1531-12571 Market Wichita, KS 67202

LEASE AND WELL NO. #1 Hissons COUNTY Pratt STATE Ka Sec. 3 Twp. 28 Rge. 12W

Mail Invoice To #1 Hissons Co. Name Some Address No. Copies Requested 16

Mail Charts To Some Address No. Copies Requested 16

Formation Test No. 3 Interval Tested From 4022' ft. to 4044' ft. Total Depth 4044 ft.

Packer Depth 4017' ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Packer Depth 4022' ft. Size 6 5/8 in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4025 ft. Recorder Number 1566 Cap. 4300

Bottom Recorder Depth (Outside) 4029 ft. Recorder Number 3086 Cap. 4600

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

Drilling Contractor Sate 7c Rig 1 Drill Collar Length 224' I. D. 2.2 in.

Mud Type chem. Viscosity 59 Weight Pipe Length 481' I. D. 3.2 in.

Weight 9.3 Water Loss 13.6 cc. Drill Pipe Length 3246' I. D. 3.8 in.

Chlorides 19,000 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 7/8 in. Tool Joint Size 4 1/2 in.

Blow: Strong gas-to-surface 5 min I.F.P. See Flow Chart

Recovered 30' ft. of Hvy mud cut oil

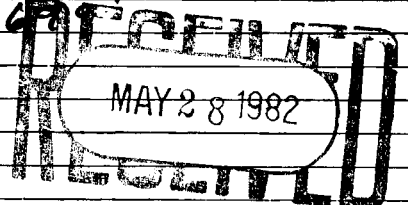
Recovered 60' ft. of mud cut oil

Recovered 240' ft. of gassy clean oil w/ 24 gravity - 1 gal

Recovered 60' ft. of salt water w/ 93,000 chlorides

Recovered - ft. of

Remarks:



Time On Location 1:00 A.M. Time Pick Up Tool 2:15 P.M. Time Off Location 11:00 P.M.

Time Set Packer(s) 4:00 P.M. Time Started Off Bottom 7:15 P.M. Maximum Temperature 117°F

Initial Hydrostatic Pressure (A) 2069 P.S.I.

Initial Flow Period (B) 45 Minutes 324 P.S.I. to (C) 140 P.S.I.

Initial Closed In Period (D) 45 Minutes 1130 P.S.I.

Final Flow Period (E) 45 Minutes 216 P.S.I. to (F) 162 P.S.I.

Final Closed In Period (G) 60 Minutes 1109 P.S.I.

Final Hydrostatic Pressure (H) 2059 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 Michael S. Witek Signature of Customer or his authorized representative

Western Representative Mike Rags Thanks Again!

FIELD INVOICE

Table with 2 columns: Item Name and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL. Amounts are mostly \$0, with Open Hole Test and TOTAL at \$675.00.



Nº 3286

GAS FLOW REPORT

Date 5-26-82 Ticket 15213 Company Falcon Exploration
 Well Name and No. #1 Hissons Dst No. 3 Interval Tested 4022-4044
 County Pratt State Ks. Sec. 3 Twp. 28 Rg. 12

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
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PRE FLOW

Time Gauge in Min.	P.S.I. on Merla Orifice Well Tester	Size of Orifice	P.S.I. on Pitot Tester	P.S.I. on Side Static Tester	Description of Flow
					<i>PSIA</i>
07	109	3/4			gas to surface 5 min. -
10	22	1/2			1,336,000 CFD
15	57				1,011,000 "
20	50				837,000 "
25	42				756,000 "
30	36				662,000 "
35	25				594,000 "
45	15				461,000 "
					331,000 "

SECOND FLOW

10	16	3/4			334,000 C.F./DAY
20	1.5	3/4			93,000
30	10	1/2			116,000
40	8	1/2			101,000
45	7	1/2			94,500

GAS BOTTLE

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

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

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

COMPANY'S NAME _____

Authorized by _____

Liquid Production

B.T. Gauge Numbers		K566		Ticket Number		15213		
Initial Hydrostatic		2076		Elevation		1814 GL ft.		
Final Hydrostatic		2054		Indicated Production		1st Flow bbls. day		
1st Flow	Initial	327		Total Flow		2.97 bbls. day		
	Final	45	154	Drill Collar Length		274 ft.		
Initial Closed In Pressure		42	1153	Drill Collar I.D. <i>weight pipe</i>		2.25 in.		
2nd Flow	Initial	205		Drill Pipe Factor		0.0142 bbls. ft.		
	Final	50	158	Hole Size		7.875 in.		
Final Closed In Pressure		57	1114	Footage Tested		22 ft.		
Extrapolated Static Pressure		Initial	1409 - 609		Mud Weight		9.3 lbs. gal.	
		Final	1390 - 386		Viscosity, Oil or Water			
Slope psi/cycle		Initial	799		Oil API Gravity			
		Final	1003		Water Specific Gravity			

Remarks: _____

SUMMARY

Gauge No. 980 989
 Depth

Product	Equation	INITIAL	FINAL	Units
Production	$Q = \frac{1440 R}{t}$	did not calculate	85.740	bbls. day.
Transmissibility	$\frac{K_h}{\mu} = \frac{162.6 Q}{m}$		13.885	md. ft. cp.
Indicated Flow Capacity	$K_h = \frac{K_h}{\mu} \mu$		5.554	md. ft.
Average Effective Permeability	$K = \frac{K_h}{h}$.370	md.
	$K_i = \frac{K_h}{h_i}$			md.
Damage Ratio	$DR = .183 \frac{P_s - P_f}{m}$.224	—
Theoretical Potential w/Damage Removed	$Q_1 = Q DR$		Less than One	bbls. day
Approx. Radius of Investigation	$b \approx \sqrt{Kt}$ or $\sqrt{Kt_0}$		4.30	ft.
	$b_1 \approx \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$		4.30	ft.
Potentiometric Surface *	Pot. = EI - GD + 2.319 Ps			ft.

NOTICE: These calculations are based upon information furnished by you and taken from Drill Stem Test pressure charts, and are furnished you for your information. In furnishing such calculations and elevations based thereon, Western Testing Co., Inc. is merely expressing its opinion. You agree that Western Testing Co., Inc. makes no warranty express or implied as to the accuracy of such calculations or opinions, and that Western Testing Co., Inc. shall not be liable for any loss or damage, whether due to negligence or otherwise, in connection with such calculations and opinions.

WESTERN TESTING CO., INC.

Pressure Data

Date: 5-26-82 Test Ticket No. 15213
 Recorder No. 1566 Capacity 4300 Location 4025 Ft
 Clock No. --- Elevation 1814 62 Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2076</u>	P.S.I.	<u>4:00A</u> M	
B First Initial Flow Pressure	<u>327</u>	P.S.I.	<u>45</u> Mins.	<u>45</u> Mins
C First Final Flow Pressure	<u>154</u>	P.S.I.	<u>45</u> Mins.	<u>42</u> Mins
D Initial Closed-in Pressure	<u>1153</u>	P.S.I.	<u>45</u> Mins.	<u>50</u> Mins
E Second Initial Flow Pressure	<u>205</u>	P.S.I.	<u>60</u> Mins.	<u>57</u> Mins
F Second Final Flow Pressure	<u>158</u>	P.S.I.		
G Final Closed-in Pressure	<u>1114</u>	P.S.I.		
H Final Hydrostatic Mud	<u>2054</u>	P.S.I.		

PRESSURE BREAKDOWN

First Flow Pressure Breakdown: <u>9</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Initial Shut-In Breakdown: <u>14</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min.		Second Flow Pressure Breakdown: <u>10</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min.		Final Shut-In Breakdown: <u>19</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 0	<u>327</u>	0	<u>154</u>	0	<u>205</u>	0	<u>158</u>
P 2 5	<u>327</u>	3	<u>779</u>	5	<u>205</u>	3	<u>641</u>
P 3 10	<u>275</u>	6	<u>844</u>	10	<u>172</u>	6	<u>710</u>
P 4 15	<u>246</u>	9	<u>887</u>	15	<u>145</u>	9	<u>757</u>
P 5 20	<u>223</u>	12	<u>930</u>	20	<u>134</u>	12	<u>799</u>
P 6 25	<u>204</u>	15	<u>973</u>	25	<u>133</u>	15	<u>830</u>
P 7 30	<u>188</u>	18	<u>999</u>	30	<u>138</u>	18	<u>862</u>
P 8 35	<u>171</u>	21	<u>1027</u>	35	<u>147</u>	21	<u>887</u>
P 9 40	<u>160</u>	24	<u>1051</u>	40	<u>152</u>	24	<u>915</u>
P10 45	<u>154</u>	27	<u>1072</u>	45	<u>157</u>	27	<u>940</u>
P11 50		30	<u>1094</u>	50	<u>158</u>	30	<u>970</u>
P12 55		1 33 2.36	<u>1110</u>	55		33	<u>991</u>
P13 60		2 36 2.25	<u>1127</u>	60		36	<u>1007</u>
P14		3 39 2.15	<u>1149</u>	65		39	<u>1030</u>
P15		4 42 2.07	<u>1153</u>	70		42	<u>1048</u>
P16		45		75		1 .45 2.11	<u>1063</u>
P17		48		80		2 .48 2.04	<u>1080</u>
P18		51		85		3 .51 1.98	<u>1096</u>
P19		54		90		4 .54 1.92	<u>1109</u>
P20		57				5 .57 1.87	<u>1114</u>
		60					<u>60</u>