



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER
Cell: (620) 282-8977**

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name	Ritchie Exploration, Inc.	Well Name	Huseman 20B #1
Well Operator	Ritchie Exploration, Inc.	Unique Well ID	DST #1 Lansing "C" 3996'-4014'
Contact	Justin Clegg	Surface Location	Sec 20-16s-31w-Scott Co.-KS
Site Contact	Kim Shoemaker	Test Unit	#5
Field	NA	Pool	NA
Well Type	Vertical	Job Number	F160
Prepared By	Jake Fahrenbruch	Qualified By	Kim Shoemaker

Test Information

Test Type	Conventional Bottom-Hole	Test Purpose	Initial Test
Formation	Lansing "C" 3996'-4014'	Gauge Name	0062
Start Test Date	2013/08/14	Start Test Time	20:10:00
Final Test Date	2013/08/15	Final Test Time	03:16:00

Test Results

30 minute initial flow period: Surface blow, increased to 3.5" in bucket.
 45 minute initial shut-in period: No blow.
 45 minute final flow period: No blow, increased to surface blow in 7 minutes, increased to 3" in bucket.
 60 minute final shut-in period: No blow.

Recovered: 30' Muddy Water 65% wtr, 35% mud
 120' SMCW 92% wtr, 8% mud

 Total Recovered Fluid: 150'

 Tool Sample: SMCW 90% wtr, 10% mud

 Chlorides: 22,000 PPM

 RW: .22 ohm @ 64 Deg F

 PH: 8.0

 Bottom-Hole Temp: 117 Deg F

Pressures: IHP: 1924
 IFP: 9-46
 ISIP: 967
 FFP: 47-77
 FSIP: 946
 FHP: 1924

Thanks!



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: HUSEMAN20B1DST1

TIME ON: on loc. 6:22 PM / Batt. on 8:10 PM (8-14)
TIME OFF: 3:16 AM (8-15)

Company Ritchie Exploration, Inc. Lease & Well No. Huseman 20B #1
Contractor WW Drilling Rig #8 Charge to Ritchie Exploration, Inc.
Elevation 2493' KB Formation Lansing "C" Effective Pay _____ Ft. Ticket No. F160
Date 8-14-13 Sec. 20 Twp. 16 S Range 31 W County Scott State KANSAS
Test Approved By Kim Shoemaker Diamond Representative Jake Fahrenbruch

Formation Test No. ONE Interval Tested from 3996 ft. to 4014 ft. Total Depth 4014 ft.
Packer Depth 3991 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 3996 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3978 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 4011 ft. Recorder Number 11033 Cap. 5,150 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 56 Drill Collar Length 122 ft. I.D. 2 1/4 in.
Weight 9.1 Water Loss 6.4 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides 2000 P.P.M. Drill Pipe Length 3846 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number #5 safety joint (no jars) Test Tool Length 28 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 18 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Surface blow, increased to 3.5" in bucket.
2nd Open: No blow, increased to surface blow in 7 minutes, increased to 3" in bucket.

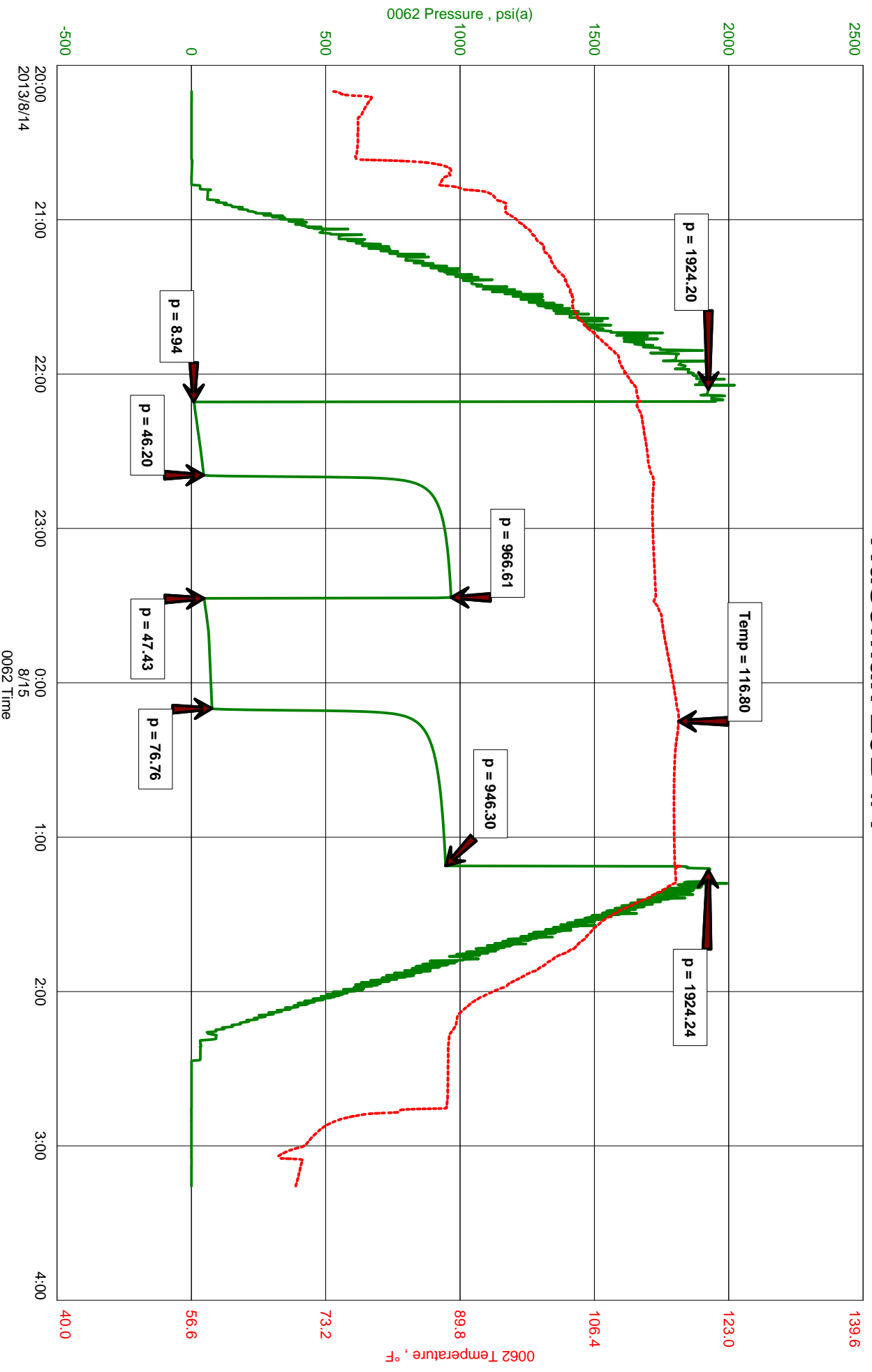
Recovered <u>30 ft.</u> of <u>Muddy Water</u> <u>65% wtr, 35% mud</u>	Price Job Other Charges Insurance Total
Recovered <u>120 ft.</u> of <u>SMCW</u> <u>92% wtr, 8% mud</u>	
Recovered _____ ft. of <u>Total Recovered Fluid: 150'</u>	
Recovered _____ ft. of <u>Tool Sample: SMCW 90% wtr, 10% mud</u>	
Recovered _____ ft. of <u>Chlorides: 22,000 PPM</u>	
Recovered _____ ft. of <u>RW: .22 ohm @ 64 Deg F</u>	
Remarks: _____ <u>PH: 8.0</u>	

Time Set Packer(s) 10:10 PM (8-14) ^{A.M.}/_{P.M.} Time Started Off Bottom 1:10 AM (8-15) ^{A.M.}/_{P.M.} Maximum Temperature 117 Deg F

Initial Hydrostatic Pressure..... (A) 1924 P.S.I.
Initial Flow Period..... Minutes 30 (B) 9 P.S.I. to (C) 46 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 967 P.S.I.
Final Flow Period..... Minutes 45 (E) 47 P.S.I. to (F) 77 P.S.I.
Final Closed In Period..... Minutes 60 (G) 946 P.S.I.
Final Hydrostatic Pressure..... (H) 1924 P.S.I.

Diamond Testing 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, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Huseman 20B #1





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General Information

Company Name	Ritcie Exploration, Inc.	Well Name	Huseman 20B #1
Well Operator	Ritchie Exploration, Inc.	Unique Well ID	DST #2 L/KC "E" 4050'-4075'
Contact	Justin Clegg	Surface Location	Sec 20-16s-31w-Scott Co.-KS
Site Contact	Kim Shoemaker	Test Unit	#5
Field	NA	Pool	NA
Well Type	Vertical	Job Number	F161
Prepared By	Jake Fahrenbruch	Qualified By	Kim Shoemaker

Test Information

Test Type	Conventional Bottom-Hole	Test Purpose	Initial Test
Formation	L/KC "E" 4050'-4075'	Gauge Name	0062
Start Test Date	2013/08/15	Start Test Time	11:22:00
Final Test Date	2013/08/15	Final Test Time	17:57:00

Test Results

30 minute initial flow period:	Surface blow, increased to 3" in bucket.
45 minute initial shut-in period:	No blow.
45 minute final flow period:	No blow, increased to surface blow in 8 minutes, increased to 2.5" in bucket.
60 minute final shut-in period:	No blow.

Recovered: 135' MCW 65% wtr, 35% mud
 ----- Tool Sample: MCW w/scum of oil, <1% oil, 75% wtr, 25% mud
 ----- Chlorides: 13,000 PPM
 ----- RW: .24 ohm @ 97 Deg F
 ----- PH: 8.5
 ----- Bottom-Hole Temp: 117 Deg F

Pressures: IHP: 1968
 IFP: 10-48
 ISIP: 1026
 FFP: 48-75
 FSIP: 1018
 FHP: 1968

Thanks!



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: HUSEMAN20B1DST2

TIME ON: on loc. 11:15 AM / Batt. on 11:22 AM
TIME OFF: 5:57 PM

Company Ritchie Exploration, Inc. Lease & Well No. Huseman 20B #1
Contractor WW Drilling Rig # 8 Charge to Ritchie Exploration, Inc.
Elevation 2493' KB Formation _____ L/KC "E" Effective Pay _____ Ft. Ticket No. F161
Date 8-15-13 Sec. 20 Twp. _____ 16 S Range _____ 31 W County _____ Scott State KANSAS
Test Approved By Kim Shoemaker Diamond Representative Jake Fahrenbruch

Formation Test No. TWO Interval Tested from 4050 ft. to 4075 ft. Total Depth 4075 ft.
Packer Depth 4045 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4050 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4032 ft. Recorder Number 0062 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 4072 ft. Recorder Number 11033 Cap. 5,150 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type Chemical Viscosity 49 Drill Collar Length 122 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 8.0 cc. Weight Pipe Length _____ ft. I.D. 2 7/8 in.
Chlorides 2200 P.P.M. Drill Pipe Length 3900 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number #5 safety joint (no jars) Test Tool Length 28 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 25 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: Surface blow, increased to 3" in bucket.
2nd Open: No blow, increased to surface blow in 8 minutes, increased to 2.5" in bucket.

Recovered 135 ft. of MCW 65% wtr, 35% mud
Recovered _____ ft. of Tool Sample: MCW w/scum of oil, <1% oil, 75% wtr, 25% mud
Recovered _____ ft. of Chlorides: 13,000 PPM
Recovered _____ ft. of RW: .24 ohm @ 97 Deg F

Recovered _____ ft. of <u>PH: 8.5</u>	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
_____	Total

Time Set Packer(s) 1:08 PM A.M. P.M. Time Started Off Bottom 4:08 PM A.M. P.M. Maximum Temperature 117 Deg F

Initial Hydrostatic Pressure..... (A) 1968 P.S.I.
Initial Flow Period..... Minutes 30 (B) 10 P.S.I. to (C) 48 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 1026 P.S.I.
Final Flow Period..... Minutes 45 (E) 48 P.S.I. to (F) 75 P.S.I.
Final Closed In Period..... Minutes 60 (G) 1018 P.S.I.
Final Hydrostatic Pressure..... (H) 1968 P.S.I.

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Riticie Exploration, Inc.
DST #2 L/KC "E" 4050-4075'
Start Test Date: 2013/08/15
Final Test Date: 2013/08/15

Huseman 20B #1

Huseman 20B #1
Formation: L/KC "E" 4050-4075'
Pool: NA
Job Number: F161

