

DIAMOND TESTING

General Information Report

General Information

Company Name RITCHIE EXPLORATION, INC.
Contact JUSTIN CLEGG
Well Name HEIER 29 A #1
Unique Well ID DST #1, LANSING "H", 4028-4065
Surface Location SEC 29-12S-28W, GOVE CO. KS.
Field WILDCAT
Well Type Vertical
Test Type CONVENTIONAL
Formation DST #1, LANSING "H", 402804065
Well Fluid Type 01 Oil

Representative TIM VENTERS
Well Operator RITCHIE EXPLORATION, INC.
Report Date 2013/09/11
Prepared By TIM VENTERS
Qualified By MAX LOVELY

Start Test Date 2013/09/11
Final Test Date 2013/09/11

Start Test Time 14:15:00
Final Test Time 20:11:00

Test Recovery:

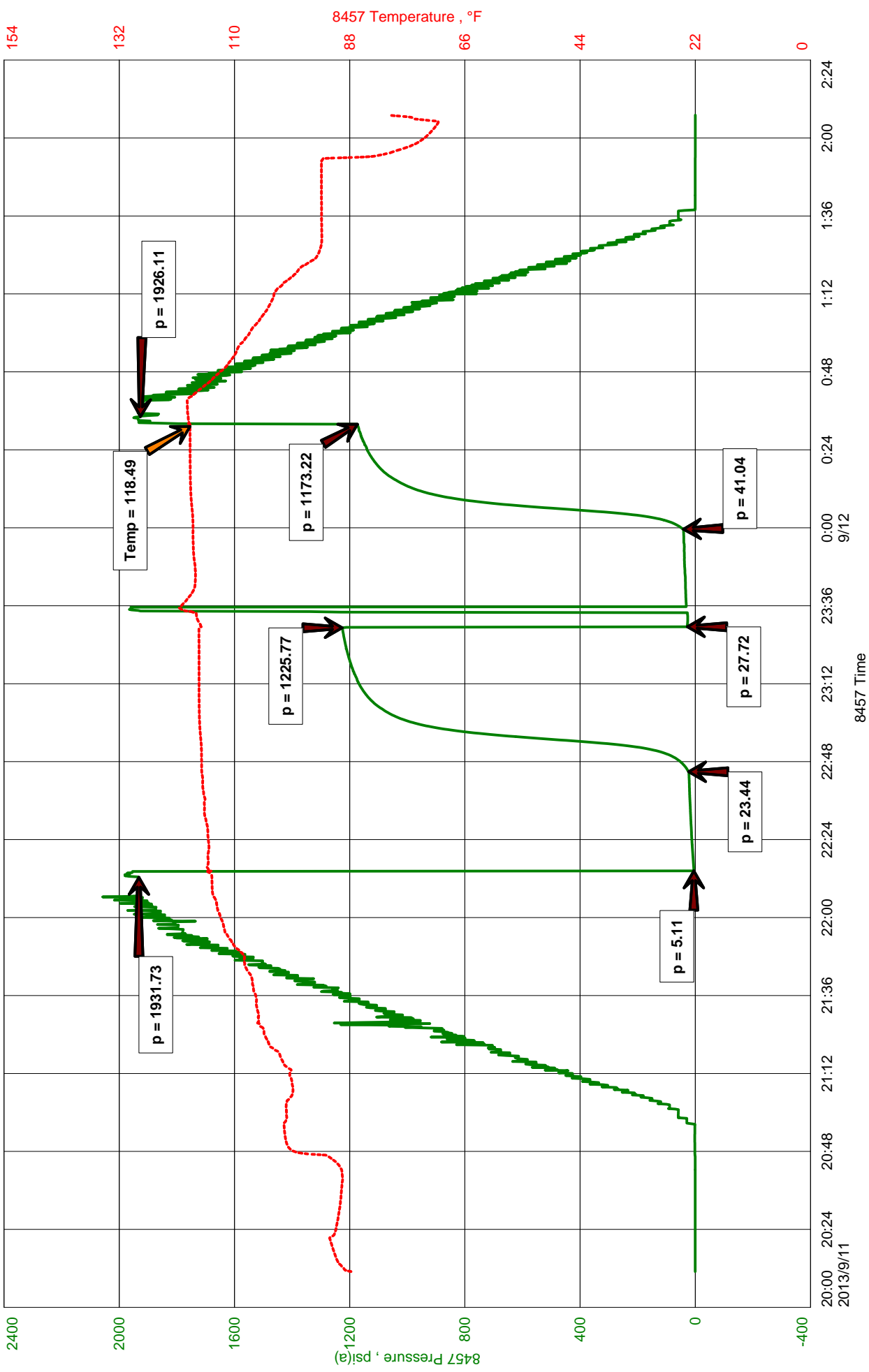
RECOVERED: 65' VSOCM, 2% OIL, 98% MUD

TOOL SAMPLE: 6% GAS, 23% OIL, 71% MUD

RITCHIE EXPLORATION, INC.
DST #1, LANSING "H", 4028-4065
Start Test Date: 2013/09/11
Final Test Date: 2013/09/11

HEIER 29 A #1
Formation: DST #1, LANSING "H", 402804065
Pool: WILDCAT
Job Number: T255

HEIER 29 A #1





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: HEIER29ADST1

TIME ON: 14:15
TIME OFF: 20:11

Company RITCHIE EXPLORATION, INC. Lease & Well No. HEIER 29A #1
Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.
Elevation 2725 KB Formation LANSING "H" Effective Pay _____ Ft. Ticket No. T255
Date 9-11-13 Sec. 29 Twp. 12 S Range 28 W County GOVE State KANSAS
Test Approved By MAX LOVELY Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 1 Interval Tested from 4028 ft. to 4065 ft. Total Depth 4065 ft.
Packer Depth 4023 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4028 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4009 ft. Recorder Number 8457 Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 4062 ft. Recorder Number 11030 Cap. 5,025 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 58 Drill Collar Length 123 ft. I.D. 2 1/4 in.
Weight 9.1 Water Loss 6.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 2,000 P.P.M. Drill Pipe Length 3872 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number 4 Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 37 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: VERY WEAK SURFACE BLOW BUILDING TO 1/2 INCH. (NO BB)
2nd Open: NO BLOW THROUGHOUT PERIOD. (NO BB)

Recovered 65 ft. of VSOCM, 2% OIL, 98% MUD
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Remarks: WE FLUSHED TOOL 5 MIN. INTO FINAL FLOW PERIOD, AND JUST GOT THE SURGE BLOW.
TOOL SAMPLE: 6% GAS, 23% OIL, 71% MUD

Time Set Packer(s) 4:18 PM A.M. P.M. Time Started Off Bottom 6:36 PM A.M. P.M. Maximum Temperature 118 deg.

Initial Hydrostatic Pressure..... (A) 1932 P.S.I.
Initial Flow Period..... Minutes 30 (B) 5 P.S.I. to (C) 23 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 1226 P.S.I.
Final Flow Period..... Minutes 30 (E) 28 P.S.I. to (F) 41 P.S.I.
Final Closed In Period..... Minutes 33 (G) 1173 P.S.I.
Final Hydrostatic Pressure..... (H) 1926 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.

DIAMOND TESTING

General Information Report

General Information

Company Name RITCHIE EXPLORATION, INC.
Contact JUSTIN CLEGG
Well Name HEIER 29A #1
Unique Well ID DST #2, LANSING "I&J", 4063-4125
Surface Location SEC 29-12S-28W, GOVE CO. KS.
Field WILDCAT
Well Type Vertical
Test Type CONVENTIONAL
Formation DST #2, LANSING "I&J", 4063-4125
Well Fluid Type 01 Oil

Representative TIM VENTERS
Well Operator RITCHIE EXPLORATION, INC.
Report Date 2013/09/12
Prepared By TIM VENTERS
Qualified By MAX LOVELY

Start Test Date 2013/09/12
Final Test Date 2013/09/12

Start Test Time 05:17:00
Final Test Time 12:39:00

Test Recovery:

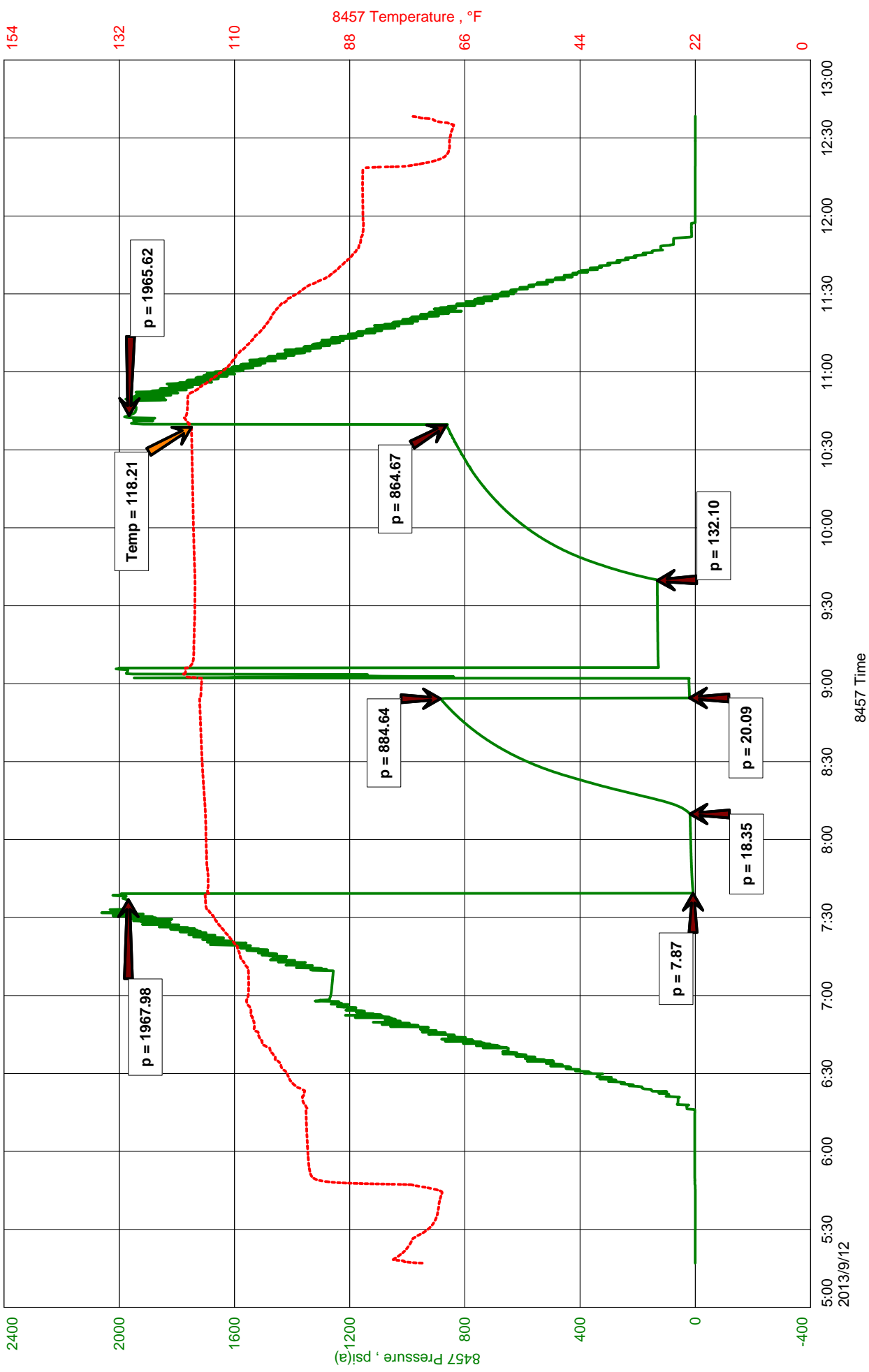
RECOVERED: 250' MUD

TOOL SAMPLE: 100% MUD

RITCHIE EXPLORATION, INC.
DST #2, LANSING "I&J", 4063-4125
Start Test Date: 2013/09/12
Final Test Date: 2013/09/12

HEIER 29A #1
Formation: DST #2, LANSING "I&J", 4063-4125
Pool: WILDCAT
Job Number: T256

HEIER 29A #1





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: HEIER29ADST2

TIME ON: 05:17
TIME OFF: 12:39

Company RITCHIE EXPLORATION, INC. Lease & Well No. HEIER 29A #1
Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.
Elevation 2725 KB Formation LANSING "I&J" Effective Pay _____ Ft. Ticket No. T256
Date 9-12-13 Sec. 29 Twp. _____ 12 S Range _____ 28 W County GOVE State KANSAS
Test Approved By MAX LOVELY Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 2 Interval Tested from 4063 ft. to 4125 ft. Total Depth 4125 ft.
Packer Depth 4058 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4063 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4051 ft. Recorder Number 8457 Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 4122 ft. Recorder Number 11030 Cap. 5,025 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 47 Drill Collar Length 123 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 2,400 P.P.M. Drill Pipe Length 3914 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number _____ Test Tool Length 26 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 30 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ^{32' DP IN ANCHOR} Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK 1/4 INCH BLOW BUILDING TO 1 INCH. (NO BB)
2nd Open: NO BLOW EXCEPT FOR 3-5 MIN. AFTER FLUSHED TOOL. (NO BB)

Recovered 250 ft. of MUD
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____

Remarks: <u>WE FLUSHED TOOL 7 MIN. INTO FINAL FLOW PERIOD, AND GOT A SURFACE BLOW LASTING 3-5 MIN. WE LOST PACKER SEAT WHEN WE FLUSHED TOOL.</u> <u>TOOL SAMPLE: 6% GAS, 23% OIL, 71% MUD</u>	Price Job
	Other Charges
	Insurance
	Total

Time Set Packer(s) 7:39 AM ^{A.M.} P.M. Time Started Off Bottom 10:39 AM ^{A.M.} P.M. Maximum Temperature 118 deg.

Initial Hydrostatic Pressure..... (A) 1968 P.S.I.
Initial Flow Period..... Minutes 30 (B) 8 P.S.I. to (C) 18 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 885 P.S.I.
Final Flow Period..... Minutes 45 (E) 20 P.S.I. to (F) 132 P.S.I.
Final Closed In Period..... Minutes 60 (G) 865 P.S.I.
Final Hydrostatic Pressure..... (H) 1966 P.S.I.

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DIAMOND TESTING

General Information Report

General Information

Company Name RITCHIE EXPLORATION, INC.
Contact JUSTIN CLEGG
Well Name HEIER 29A #1
Unique Well ID DST #3, FT. SCOTT, 4335-4427
Surface Location SEC 29-12S-28W, GOVE CO. KS.
Field WILDCAT
Well Type Vertical
Test Type CONVENTIONAL
Formation DST #3, FT. SCOTT, 4335-4427
Well Fluid Type 01 Oil

Representative TIM VENTERS
Well Operator RITCHIE EXPLORATION, INC.
Report Date 2013/09/14
Prepared By TIM VENTERS
Qualified By MAX LOVELY

Start Test Date 2013/09/13
Final Test Date 2013/09/14

Start Test Time 21:49:00
Final Test Time 04:29:00

Test Recovery:

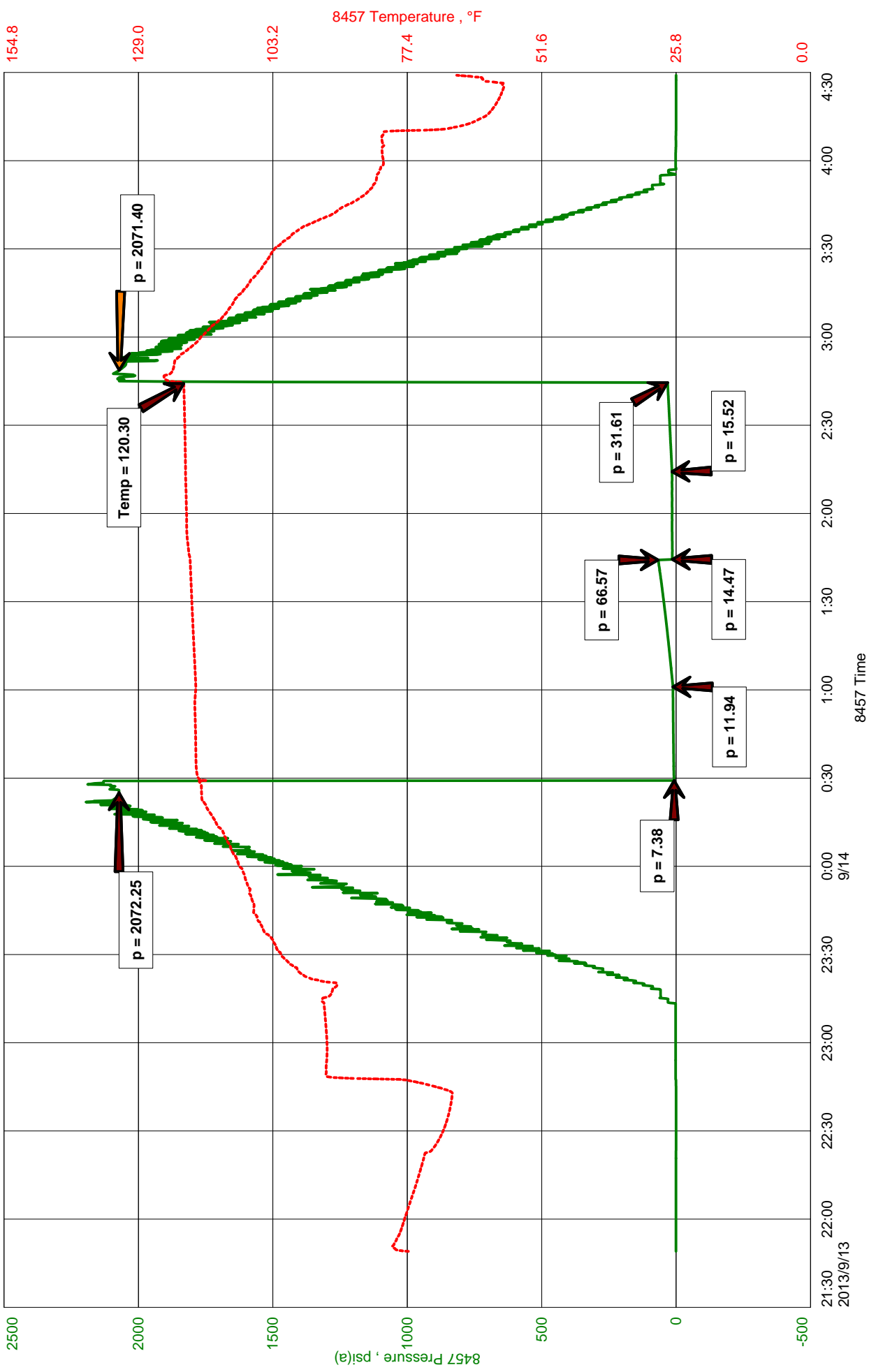
RECOVERED: 10' M W/TR. O, TRACE OIL, 100% MUD

TOOL SAMPLE: TRACE OIL, 100% MUD

RITCHIE EXPLORATION, INC.
DST #3, FT. SCOTT, 4335-4427
Start Test Date: 2013/09/13
Final Test Date: 2013/09/14

HEIER 29A #1
Formation: DST #3, FT. SCOTT, 4335-4427
Pool: WILDCAT
Job Number: T257

HEIER 29A #1





DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313
DRILL-STEM TEST TICKET
FILE: HEIER29ADST3

TIME ON: 21:49 9-13-13
TIME OFF: 04:29 9-14-13

Company RITCHIE EXPLORATION, INC. Lease & Well No. HEIER 29A #1
Contractor WW DRILLING, LLC RIG #2 Charge to RITCHIE EXPLORATION, INC.
Elevation 2725 KB Formation FT. SCOTT Effective Pay _____ Ft. Ticket No. T257
Date 9-14-13 Sec. 29 Twp. _____ 12 S Range _____ 28 W County GOVE State KANSAS
Test Approved By MAX LOVELY Diamond Representative TIMOTHY T. VENTERS

Formation Test No. 3 Interval Tested from 4335 ft. to 4427 ft. Total Depth 4427 ft.
Packer Depth 4330 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.
Packer Depth 4335 ft. Size 6 3/4 in. Packer depth _____ ft. Size 6 3/4 in.

Depth of Selective Zone Set _____
Top Recorder Depth (Inside) 4323 ft. Recorder Number 8457 Cap. 10,000 P.S.I.
Bottom Recorder Depth (Outside) 4424 ft. Recorder Number 11030 Cap. 5,025 P.S.I.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEMICAL Viscosity 47 Drill Collar Length 123 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.
Chlorides 2,400 P.P.M. Drill Pipe Length 4186 ft. I.D. 3 1/2 in.
Jars: Make STERLING Serial Number _____ Test Tool Length 26 ft. Tool Size 3 1/2-IF in.
Did Well Flow? NO Reversed Out NO Anchor Length 29 ft. Size 4 1/2-FH in.
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ^{63' DP IN ANCHOR} Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WEAK 1/4" BLOW BUILDING TO 1", DEPLETING BACK TO 1/2". (NO BB)
2nd Open: VERY WEAK SURFACE BLOW LASTING 6 MIN. (NO BB)

Recovered <u>10</u> ft. of <u>M W/TR. O, TRACE OIL</u>	Price Job Other Charges Insurance Total
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	
TOOL SAMPLE: <u>TRACE OIL, 100% MUD</u>	

Time Set Packer(s) 12:29 AM ^{A.M.} P.M. Time Started Off Bottom 2:44 AM ^{A.M.} P.M. Maximum Temperature 120 deg.
Initial Hydrostatic Pressure..... (A) 2032 P.S.I.
Initial Flow Period..... Minutes 30 (B) 7 P.S.I. to (C) 12 P.S.I.
Initial Closed In Period..... Minutes 45 (D) 67 P.S.I.
Final Flow Period..... Minutes 30 (E) 14 P.S.I. to (F) 16 P.S.I.
Final Closed In Period..... Minutes 30 (G) 32 P.S.I.
Final Hydrostatic Pressure..... (H) 2071 P.S.I.

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