



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HellC5ADST1

TIME ON: 6-1 23:25

TIME OFF: 6-2 07:47

Company Ritchie Exploration Inc Lease & Well No. Hell Creek 5A

Contractor WW Rig #2 Charge to Ritchie Exploration Inc

Elevation 2805 KB Formation  Lan. A-C Effective Pay  Ft. Ticket No. S0341

Date 6-2-13 Sec. 5 Twp.  16 S Range  31 W County Scott State KANSAS

Test Approved By Max Lovely Diamond Representative JACOB MCCALLIE

Formation Test No. 1 Interval Tested from 3863 ft. to 3890 ft. Total Depth 3890 ft.

Packer Depth 3858 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 3863 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3844 ft. Recorder Number 8471 Cap. 10000 P.S.I.

Bottom Recorder Depth (Outside) 3887 ft. Recorder Number 3851 Cap. 5700 P.S.I.

Below Straddle Recorder Depth  ft. Recorder Number  Cap.  P.S.I.

Mud Type Chem Viscosity 54 Drill Collar Length 124 ft. I.D. 2 1/4 in.

Weight 8.9 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 3706 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 3 Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 27 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: 2 1/2" Blow- Built to BB in 2 3/4 min NOBB

2nd Open: 2" Blow- Built to BB in 3 1/2 min NOBB

Recovered 219 ft. of HMCW 60% W 40% M

Recovered 1449 ft. of SLMCW 99% W 1% M

Recovered 1668 ft. of TOTAL FLUID

Recovered ft. of

Recovered ft. of PH: 7 Price Job

Recovered ft. of RW: .25 @ 48 degrees F Other Charges

Remarks: CHLORIDES: 36,000 ppm Insurance

TOOL SAMPLE: 2% O 72% W 26% M Total

Time Set Packer(s) 1:55 AM A.M. P.M. Time Started Off Bottom 4:55 AM A.M. P.M. Maximum Temperature 123

Initial Hydrostatic Pressure..... (A) 1816 P.S.I.

Initial Flow Period..... Minutes 30 (B) 52 P.S.I. to (C) 490 P.S.I.

Initial Closed In Period..... Minutes 60 (D) 1033 P.S.I.

Final Flow Period..... Minutes 30 (E) 489 P.S.I. to (F) 738 P.S.I.

Final Closed In Period..... Minutes 60 (G) 1030 P.S.I.

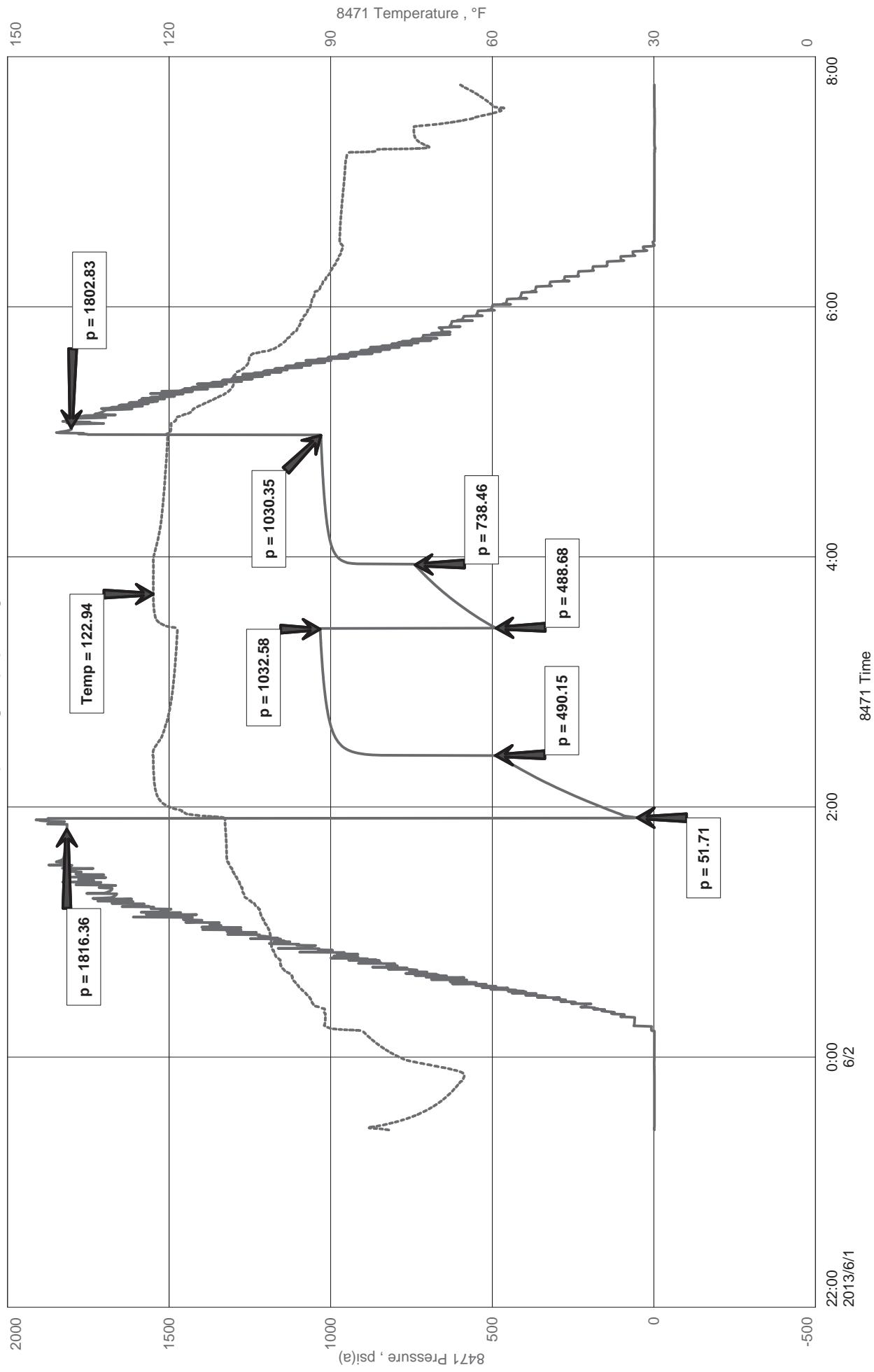
Final Hydrostatic Pressure..... (H) 1803 P.S.I.

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.

Ritchie Exploration Inc.  
DST #1 Lan. A-C 3863-3890'  
Start Test Date: 2013/06/01  
Final Test Date: 2013/06/02

Hell Creek 5A  
Formation: DST #1 Lan. A-C 3863-3890'  
Pool: Wildcat  
Job Number: S0341

## Hell Creek 5A





**DIAMOND TESTING  
ROGER D. FRIEDLY - TESTER  
CELL 620-793-2043**

Company Name	Ritchie Exploration Inc.
Contact	Justin Clegg
Well Name	Hell Creek 5A
Unique Well ID	DST #1 Lan. A-C 3863-3890'
Surface Location	SEC 5-16S-31W Scott County
Field	Wildcat

## Test Information

<b>Test Information</b>	Job Number	S0341
	Test Unit	3
	Representative	Jacob McCallie
	Well Operator	Ritchie Exploration Inc.
	Report Date	2013/06/02
Test Type	Drill Stem Test	Prepared By
Formation	DST #1 Lan. A-C 3863-3890'	Qualified By
Test Purpose	Initial Test	
Well Fluid Type	06 Water	
H2S		
Start Test Date	2013/06/01	Start Test Time
Final Test Date	2013/06/02	Final Test Time
		07:47:00

## Remarks

**RECOVERY:**  
219' HMCW 60% W 40% M  
1449' SLMCW 99% W 1% M  
1668' **TOTAL FLUID**

**PH: 7**  
**RW: .25 @ 48 degrees F**  
**Chlorides: 36,000 ppm**

## TOOL SAMPLE:



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HellC5ADST2

TIME ON: 14:11  
TIME OFF: 21:00

Company Ritchie Exploration Inc Lease & Well No. Hell Creek 5A

Contractor WW Rig #2 Charge to Ritchie Exploration Inc

Elevation 2805 KB Formation  Lan. D Effective Pay  Ft. Ticket No. S0342

Date 6-2-13 Sec. 5 Twp.  16 S Range  31 W County  Scott  State KANSAS

Test Approved By Max Lovely Diamond Representative JACOB MCCALLIE

Formation Test No. 2 Interval Tested from 3894 ft. to 3923 ft. Total Depth 3923 ft.

Packer Depth 3889 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 3894 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3882 ft. Recorder Number 8471 Cap. 10000 P.S.I.

Bottom Recorder Depth (Outside) 3920 ft. Recorder Number 3851 Cap. 5700 P.S.I.

Below Straddle Recorder Depth  ft. Recorder Number  Cap.  P.S.I.

Mud Type Chem Viscosity 67 Drill Collar Length 124 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 7.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides  3,000 P.P.M. Drill Pipe Length 3744 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number N/A 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. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: 1/4" Blow- Built to 10 1/4" in 30 min NOBB

2nd Open: 1/4" Blow- Built to BB in 40 1/2 min NOBB

Recovered 349 ft. of SLMW 90% W 10% M

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of PH: 7

Recovered  ft. of RW: .18 @ 75 degrees F Price Job

Recovered  ft. of Chlorides: 38,000 ppm Other Charges

Remarks:  Insurance

TOOL SAMPLE: 87% W 13% M (few oil speck) Total

Time Set Packer(s) 4:04 PM A.M.  P.M. Time Started Off Bottom 7:04 PM A.M.  P.M. Maximum Temperature 122

Initial Hydrostatic Pressure..... (A) 1824 P.S.I.

Initial Flow Period..... Minutes 30 (B) 8 P.S.I. to (C) 93 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 1067 P.S.I.

Final Flow Period..... Minutes 45 (E) 94 P.S.I. to (F) 165 P.S.I.

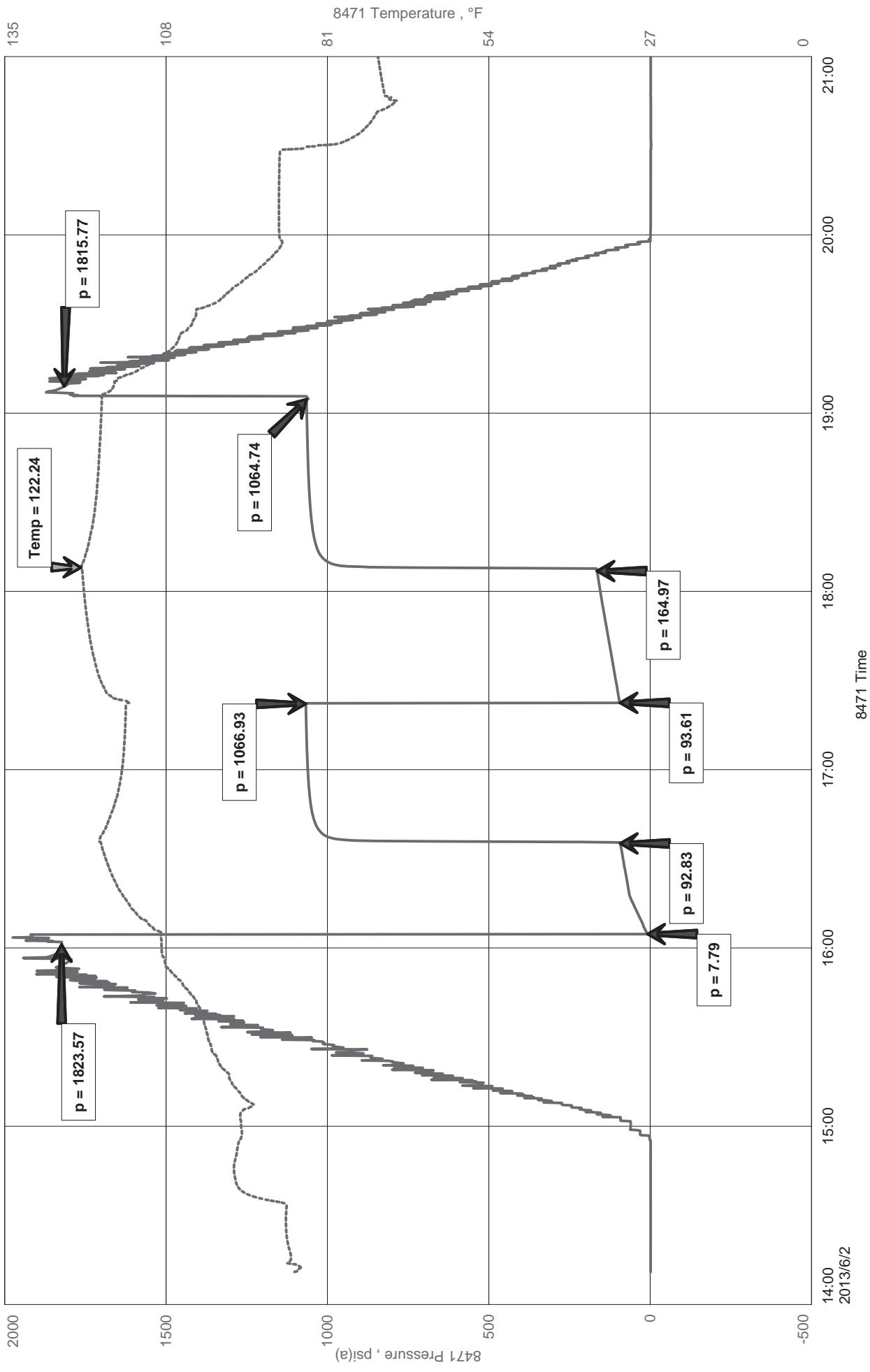
Final Closed In Period..... Minutes 60 (G) 1065 P.S.I.

Final Hydrostatic Pressure..... (H) 1816 P.S.I.

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Formation: DST #2 Lan. D 3894-3923'  
Hell Creek 5A  
Pool: Wildcat  
Job Number: S0342

## Hell Creek 5A





**DIAMOND TESTING  
ROGER D. FRIEDLY - TESTER  
CELL 620-793-2043**

Company Name                   Richie Exploration Inc.  
Contact                           Justin Clegg  
Well Name                       Hell Creek 5A  
Unique Well ID                 DST #2 Lan. D 3894-3923'  
Surface Location               SEC 5-16S-31W Scott County  
Field                             Wildcat

Job Number                     S0342  
Test Unit                       3  
Representative                Jacob McCallie  
Well Operator                 Richie Exploration Inc.  
Report Date                   2013/06/02

Test Type                       Drill Stem Test  
Formation                       DST #2 Lan. D 3894-3923'  
Test Purpose                   Initial Test  
Well Fluid Type               01 Oil  
H2S

Start Test Date               2013/06/02 Start Test Time           14:11:00  
Final Test Date               2013/06/02 Final Test Time           21:00:00

**Remarks**

**RECOVERED:**  
349'                           SLMW                           90% W 10% M

PH: 7  
RW: .18 @ 75 degrees F  
Chlorides: 38,000 ppm

**TOOL SAMPLE:**  
87% W 13% M (few oil specks)



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HellC5ADST3

TIME ON: 16:04  
TIME OFF: 21:33

Company Ritchie Exploration Inc Lease & Well No. Hell Creek 5A

Contractor WW Rig #2 Charge to Ritchie Exploration Inc

Elevation 2805 KB Formation  Lan. J Effective Pay  Ft. Ticket No. S0343

Date 6-3-13 Sec. 5 Twp.  16 S Range  31 W County  Scott  State KANSAS

Test Approved By Max Lovely Diamond Representative JACOB MCCALLIE

Formation Test No. 3 Interval Tested from 4052 ft. to 4084 ft. Total Depth 4084 ft.

Packer Depth 4047 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 4052 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4040 ft. Recorder Number 8471 Cap. 10000 P.S.I.

Bottom Recorder Depth (Outside) 4081 ft. Recorder Number 3851 Cap. 5700 P.S.I.

Below Straddle Recorder Depth  ft. Recorder Number  Cap.  P.S.I.

Mud Type Chem Viscosity 56 Drill Collar Length 124 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides  3,000 P.P.M. Drill Pipe Length 3902 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number N/A Test Tool Length 26 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 32 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: WSB- Died in 5 min NOBB

2nd Open: No Blow- flushed 12 min into open-WSB after flush-died in 17 min NOBB

Recovered 10 ft. of OSM 100% O (few oil specks)

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of  Price Job

Recovered  ft. of  Other Charges

Remarks:  Insurance

TOOL SAMPLE: 100% M (few oil specks) Total

Time Set Packer(s) 5:55 PM A.M. P.M. Time Started Off Bottom 7:55 PM A.M. P.M. Maximum Temperature 113

Initial Hydrostatic Pressure..... (A) 1928 P.S.I.

Initial Flow Period..... Minutes 30 (B) 7 P.S.I. to (C) 11 P.S.I.

Initial Closed In Period..... Minutes 30 (D) 907 P.S.I.

Final Flow Period..... Minutes 30 (E) 11 P.S.I. to (F) 24 P.S.I.

Final Closed In Period..... Minutes 30 (G) 911 P.S.I.

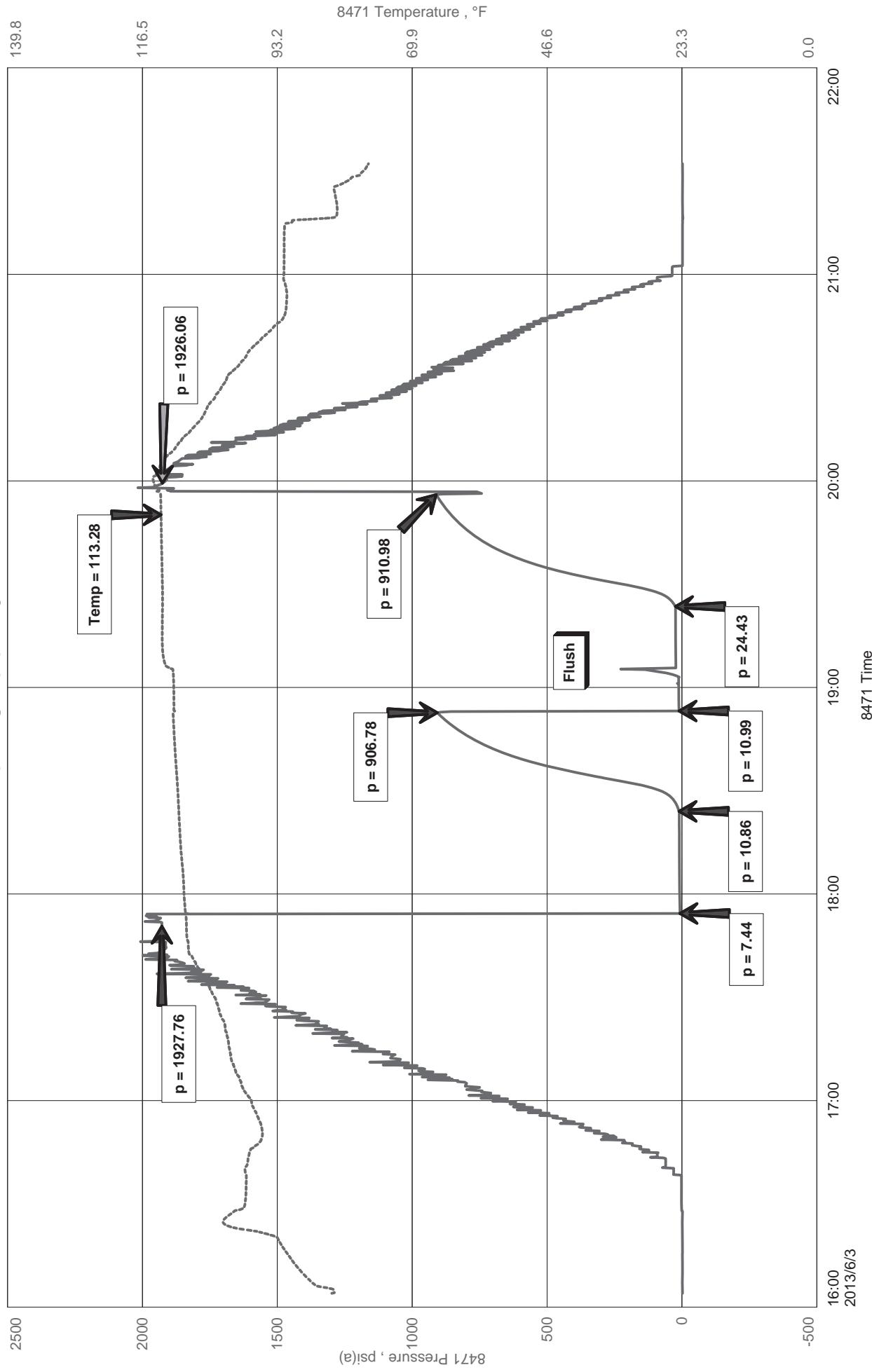
Final Hydrostatic Pressure..... (H) 1926 P.S.I.

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Ritchie Exploration Inc.  
DST #3 Lan. J 4052-4084'  
Start Test Date: 2013/06/03  
Final Test Date: 2013/06/03

Formation: DST #3 Lan. J 4052-4084' Pool: Wildcat Job Number: S0343 Hell Creek 5A

## Hell Creek 5A





**DIAMOND TESTING  
ROGER D. FRIEDLY - TESTER  
CELL 620-793-2043**

Company Name	Ritchie Exploration Inc.
Contact	Justin Clegg
Well Name	Hell Creek 5A
Unique Well ID	DST #3 Lan. J 4052-4084'
Surface Location	SEC 5-16S-31W Scott County
Field	Wildcat

## Test Information

Job Number	S0343
Test Unit	3
Representative	Jacob McCallie
Well Operator	Ritchie Exploration Inc.
Report Date	2013/06/03
Prepared By	Jacob McCallie
Qualified By	Max Lovely

Test Type	Report Date
Formation	Drill Stem Test
Test Purpose	Prepared By
Well Fluid Type	DST #3 Lan. J 4052-4084'
H2S	Qualified By
	Initial Test
	01 Oil

Start Test Date 2013/06/03 Start Test Time 16:04:00  
Final Test Date 2013/06/03 Final Test Time 21:33:00

## Remarks

**RECOVERED:** 10' OSM 100% M (few oil specks)

**TOOL SAMPLE:**  
100% M (few oil specks)



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P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: hellc5ADST4

TIME ON: 05:31  
TIME OFF: 11:40

Company Ritchie Exploration Inc Lease & Well No. Hell Creek 5A

Contractor WW Rig #2 Charge to Ritchie Exploration Inc

Elevation 2805 KB Formation  Lan. K Effective Pay Ft. Ticket No. S0344

Date 6-4-13 Sec. 5 Twp.  16 S Range 31 W County Scott State KANSAS

Test Approved By Max Lovely Diamond Representative JACOB MCCALLIE

Formation Test No. 4 Interval Tested from 4082 ft. to 4124 ft. Total Depth 4124 ft.

Packer Depth 4077 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 4082 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4070 ft. Recorder Number 8471 Cap. 10000 P.S.I.

Bottom Recorder Depth (Outside) 4121 ft. Recorder Number 3851 Cap. 5700 P.S.I.

Below Straddle Recorder Depth  ft. Recorder Number  Cap.  P.S.I.

Mud Type Chem Viscosity 56 Drill Collar Length 124 ft. I.D. 2 1/4 in.

Weight 9.1 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides  3,000 P.P.M. Drill Pipe Length 3932 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number N/A Test Tool Length 26 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 42 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: WSB- Died in 25 min NOBB

2nd Open: No Blow- flushed 8 min into open-1/4" Blow after flush-died in 14 min NOBB

Recovered 62 ft. of SLOSM 100% M (few oil specks)

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of  Price Job

Recovered  ft. of  Other Charges

Remarks:  Insurance

TOOL SAMPLE: 100% M (few oil specks) Total

Time Set Packer(s) 7:44 AM A.M. P.M. Time Started Off Bottom 9:44 AM A.M. P.M. Maximum Temperature 115

Initial Hydrostatic Pressure..... (A) 1946 P.S.I.

Initial Flow Period..... Minutes 30 (B) 7 P.S.I. to (C) 13 P.S.I.

Initial Closed In Period..... Minutes 30 (D) 929 P.S.I.

Final Flow Period..... Minutes 30 (E) 14 P.S.I. to (F) 40 P.S.I.

Final Closed In Period..... Minutes 30 (G) 908 P.S.I.

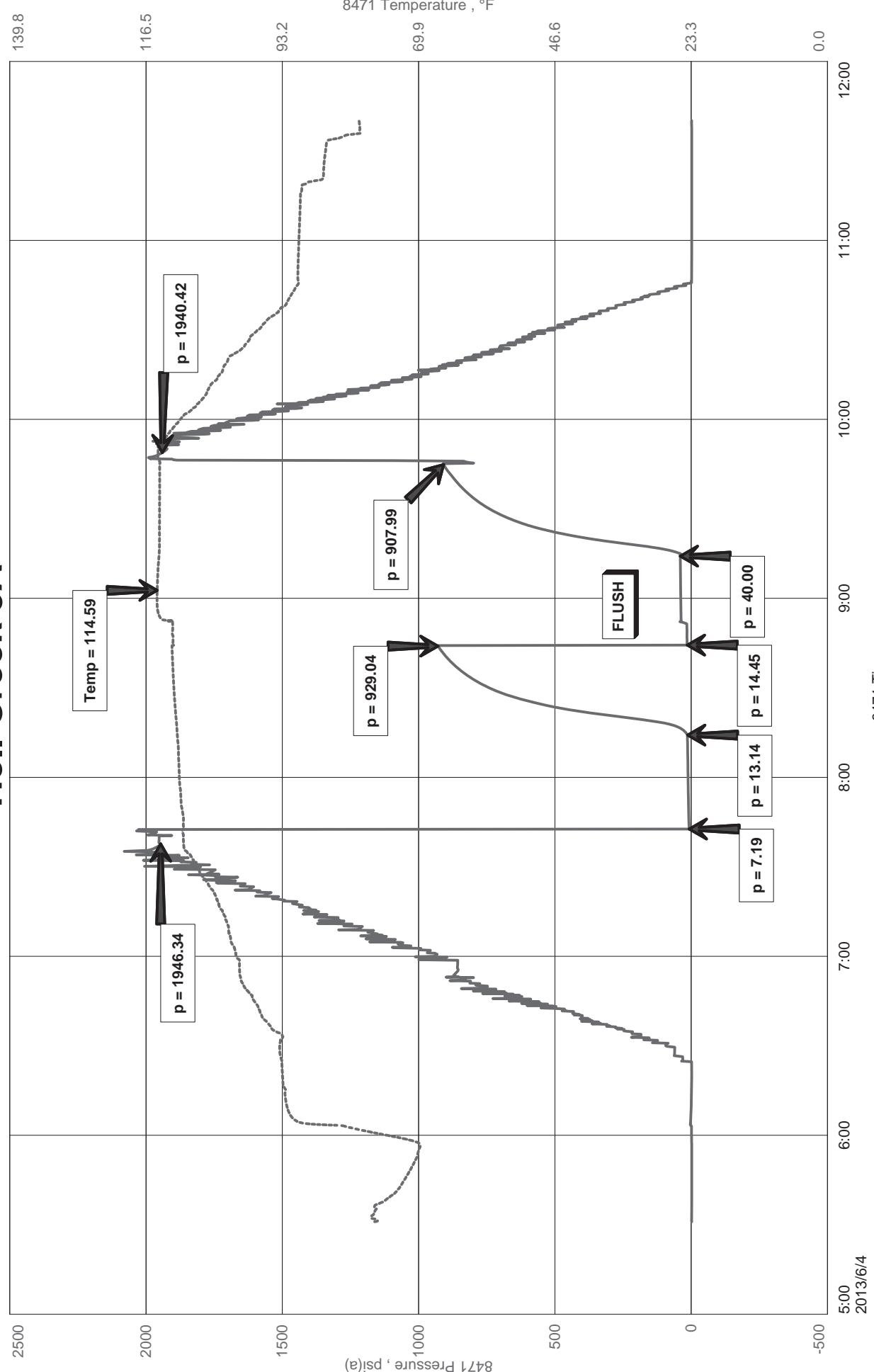
Final Hydrostatic Pressure..... (H) 1940 P.S.I.

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Ritchie Exploration Inc.  
DST #4 Lan. K 4082-4124'  
Start Test Date: 2013/06/04  
Final Test Date: 2013/06/04

Hell Creek 5A  
Formation: DST #4 Lan. K 4082-4124'  
Pool: Wildcat  
Job Number: S0344

## Hell Creek 5A





**DIAMOND TESTING  
ROGER D. FRIEDLY - TESTER  
CELL 620-793-2043**

Company Name	Ritchie Exploration Inc.
Contact	Justin Clegg
Well Name	Hell Creek 5A
Unique Well ID	DST #4 Lan. K 4082-4124'
Surface Location	SEC 5-16S-31W Scott County
Field	Wildcat

## Test Information

Job Number S0344  
Test Unit 3  
Representative Jacob McCallie  
Well Operator Ritchie Exploration Inc.  
Report Date 2013/06/04  
Prepared By Jacob McCallie  
Qualified By Max Lovely

Report Date  
Drill Stem Test Prepared By  
Formation DST #4 Lan. K 4082-4124' Qualified By  
Test Purpose Initial Test  
Well Fluid Type 01 Oil  
H2S

Start Test Date 2013/06/04 Start Test Time 05:31:00  
Final Test Date 2013/06/04 Final Test Time 11:40:00

## Remarks

**RECOVERED:** 62' SLOSM 100% M (few oil specks)

**TOOL SAMPLE:**  
100% M (few oil specks)



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: hellc5ADST5

TIME ON: 6-4 19:11  
TIME OFF: 6-5 00:44

Company Ritchie Exploration Inc Lease & Well No. Hell Creek 5A

Contractor WW Rig #2 Charge to Ritchie Exploration Inc

Elevation 2805 KB Formation  Lan. L Effective Pay Ft. Ticket No. S0345

Date 6-4-13 Sec. 5 Twp.  16 S Range 31 W County Scott State KANSAS

Test Approved By Max Lovely Diamond Representative JACOB MCCALLIE

Formation Test No. 5 Interval Tested from 4122 ft. to 4163 ft. Total Depth 4163 ft.

Packer Depth 4117 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Packer Depth 4122 ft. Size 6 3/4 in. Packer depth -- ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4110 ft. Recorder Number 8471 Cap. 10000 P.S.I.

Bottom Recorder Depth (Outside) 4160 ft. Recorder Number 3851 Cap. 5700 P.S.I.

Below Straddle Recorder Depth  ft. Recorder Number  Cap.  P.S.I.

Mud Type Chem Viscosity 49 Drill Collar Length 124 ft. I.D. 2 1/4 in.

Weight 9.2 Water Loss 8.8 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides  3,000 P.P.M. Drill Pipe Length 3972 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number N/A Test Tool Length 26 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 41 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: WSB- Died in 5 min NOBB

2nd Open: No Blow- No Build NOBB

Recovered 3 ft. of Mud 100% M

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of  Price Job

Recovered  ft. of  Other Charges

Remarks:  Insurance

TOOL SAMPLE: 100% M Total

Time Set Packer(s) 8:59 PM A.M. P.M. Time Started Off Bottom 10:59 PM A.M. P.M. Maximum Temperature 113

Initial Hydrostatic Pressure..... (A) 1955 P.S.I.

Initial Flow Period..... Minutes 30 (B) 7 P.S.I. to (C) 10 P.S.I.

Initial Closed In Period..... Minutes 30 (D) 654 P.S.I.

Final Flow Period..... Minutes 30 (E) 9 P.S.I. to (F) 10 P.S.I.

Final Closed In Period..... Minutes 30 (G) 581 P.S.I.

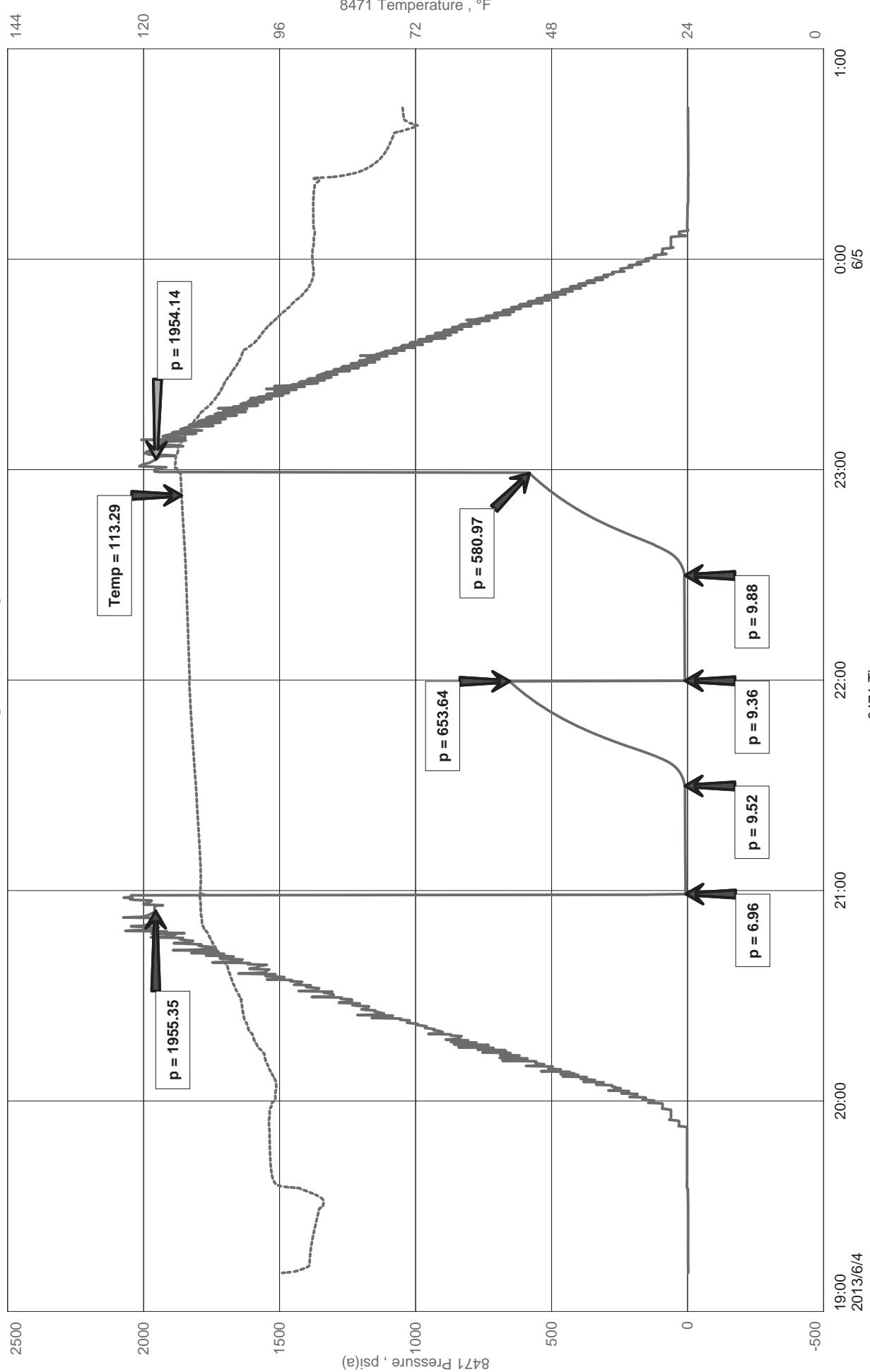
Final Hydrostatic Pressure..... (H) 1954 P.S.I.

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Ritchie Exploration Inc.  
DST #5 Lan. L 4122-4163'  
Start Test Date: 2013/06/04  
Final Test Date: 2013/06/05

Hell Creek 5A  
Formation: DST #5 Lan. L 4122-4163'  
Pool: Wildcat  
Job Number: S0345

## Hell Creek 5A





**DIAMOND TESTING  
ROGER D. FRIEDLY - TESTER  
CELL 620-793-2043**

Company Name	Ritchie Exploration Inc.
Contact	Justin Clegg
Well Name	Hell Creek 5A
Unique Well ID	DST #5 Lan. L 4122-4163'
Surface Location	SEC 5-16S-31W Scott County
Field	Wildcat

## Test Information

<b>Test Information</b>	Job Number	S0345
	Test Unit	3
	Representative	Jacob McCallie
	Well Operator	Ritchie Exploration Inc.
	Report Date	2013/06/04
Test Type	Drill Stem Test	Prepared By
Formation	DST #5 Lan. L 4122-4163'	Qualified By
Test Purpose	Initial Test	
Well Fluid Type	01 Oil	
H2S		
Start Test Date	2013/06/04	Start Test Time
Final Test Date	2013/06/05	Final Test Time
		00:44:00

## Remarks

## RECOVERED:

3' 100% M

## TOOL SAMPLE: 100% M



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P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: hellc5Adst6

TIME ON: 09:36  
TIME OFF: 17:41

Company Ritchie Exploration Inc Lease & Well No. Hell Creek 5A

Contractor WW Rig #2 Charge to Ritchie Exploration Inc

Elevation 2805 KB Formation Johnson Effective Pay  Ft. Ticket No. S0346

Date 6-6-13 Sec. 5 Twp. 16 S Range 31 W County Scott State KANSAS

Test Approved By Max Lovely Diamond Representative JACOB MCCALLIE

Formation Test No. 6 Interval Tested from 4398 ft. to 4449 ft. Total Depth 4449 ft.

Packer Depth 4393 ft. Size 6 3/4 in. Packer depth  ft. Size 6 3/4 in.

Packer Depth 4398 ft. Size 6 3/4 in. Packer depth  ft. Size 6 3/4 in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 4379 ft. Recorder Number 8471 Cap. 10000 P.S.I.

Bottom Recorder Depth (Outside) 4446 ft. Recorder Number 3851 Cap. 5700 P.S.I.

Below Straddle Recorder Depth  ft. Recorder Number  Cap.  P.S.I.

Mud Type Chem Viscosity 49 Drill Collar Length 124 ft. I.D. 2 1/4 in.

Weight 9.4 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3,000 P.P.M. Drill Pipe Length 4241 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 3 Test Tool Length 26 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 51 (19p) 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: WSB- Built to 1 1/4" in 30 min NOBB

2nd Open: No Blow- Built to WSB in 45 min NOBB

Recovered 92' ft. of SLOSM 3% O 97% M

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of

Recovered  ft. of  Price Job

Recovered  ft. of  Other Charges

Remarks:  Insurance

TOOL SAMPLE: 1% O 99% M Total

Time Set Packer(s) 12:53 PM A.M. P.M. Time Started Off Bottom 3:53 PM A.M. P.M. Maximum Temperature 123

Initial Hydrostatic Pressure..... (A) 2098 P.S.I.

Initial Flow Period..... Minutes 30 (B) 8 P.S.I. to (C) 32 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 1116 P.S.I.

Final Flow Period..... Minutes 45 (E) 35 P.S.I. to (F) 59 P.S.I.

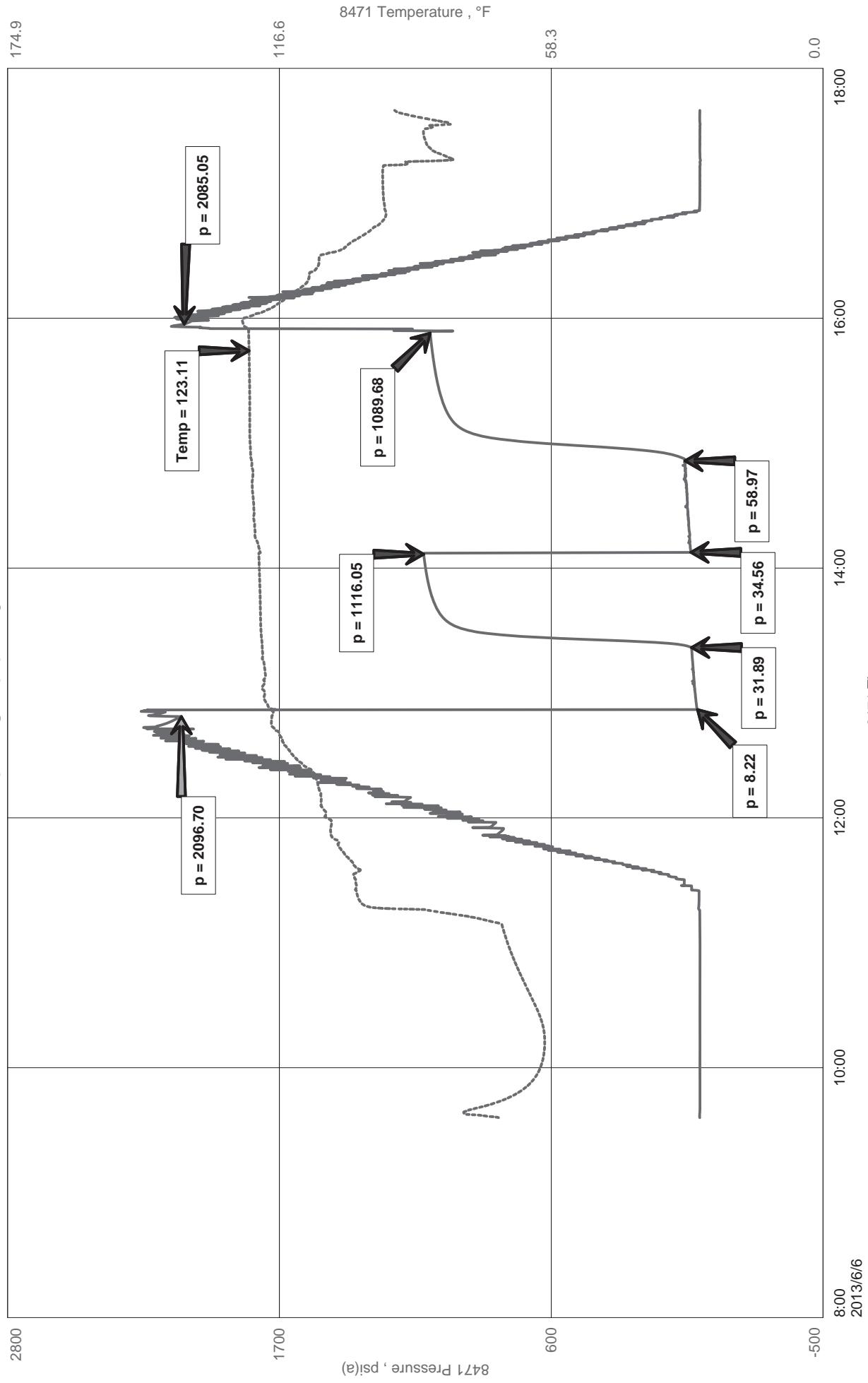
Final Closed In Period..... Minutes 60 (G) 1090 P.S.I.

Final Hydrostatic Pressure..... (H) 2085 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.

## Hell Creek 5A

Formation: DST #6   Johnson 4398-4449'  
Hell Creek 5A  
Pool: Wildcat  
Job Number: S0346





**DIAMOND TESTING  
ROGER D. FRIEDLY - TESTER  
CELL 620-793-2043**

Company Name	Ritchie Exploration Inc.
Contact	Justin Clegg
Well Name	Hell Creek 5A
Unique Well ID	DST #6 Johnson 4398-4449'
Surface Location	SEC 5-16S-31W Scott County
Field	Wildcat

## Test Information

<b>Test Information</b>	Job Number	S0346
	Test Unit	3
	Representative	Jacob McCallie
	Well Operator	Ritchie Exploration Inc.
	Report Date	2013/06/06
Test Type	Drill Stem Test	Prepared By
Formation	DST #6 Johnson 4398-4449'	Qualified By
Test Purpose	Initial Test	
Well Fluid Type	01 Oil	
H2S		

Start Test Date 2013/06/06 Start Test Time 09:36:00  
Final Test Date 2013/06/06 Final Test Time 17:41:00

## Remarks

**RECOVERED:** 92' SLOSM 3% O 97% M

## TOOL SAMPLE: