KOLAR Document ID: 1402115

Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34876
Name: Triple Crown Operating LLC
Address 1: 2201 S. UTICA PL STE 100
Address 2:
City: TULSA State: OK Zip: 74114 + 7099
Contact Person: Doyle Williams
Phone: (918) 518-5422
CONTRACTOR: License # 5123
Name: Pickrell Drilling Company, Inc.
Wellsite Geologist: Sean Deenihan
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☐ Oil ☐ WSW ☐ SWD
☐ Gas ☑ DH ☐ EOR
☐ OG ☐ GSW
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

10/27/2017 Spud Date or Recompletion Date
11/05/2017 Date Reached TD
11/20/2017 Completion Date or Recompletion Date

API No.: 15-135-25976-00-00
Spot Description:
NW - NE - SE - SE Sec. 29 Twp. 20 S. R. 22 ☐ East ☑ West
1080 Feet from ☐ North / ☑ South Line of Section
482 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Ness
Lease Name: KOERNER Well #: 1-29
Field Name:
Producing Formation: Mississippian
Elevation: Ground: 2186 Kelly Bushing: 2193
Total Vertical Depth: 4373 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 1424 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 5000 ppm Fluid volume: 540 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Permit #:

AFFIDAVIT
I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
☐ **Confidentiality Requested**
Date:
☐ **Confidential Release Date:**
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 03/23/2018

Operator Name: Triple Crown Operating LLC Lease Name: KOERNER Well #: 1-29

Sec. 29 Twp. 20 S. R. 22 ☐ East ☑ West County: Ness

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:

Compensated Density Neutron
Dual Induction

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Anhydrite	1409	feet
Heebner	3696	feet
Ft Scott	4265	feet

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	1424	Common	430	3% CC 2% Gel
Production	7.875	5.5	17	4366	Common	180	10% Salt 5% Gilsonite

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/ Injection:	Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Triple Crown Operating LLC
Well Name	KOERNER 1-29
Doc ID	1402115

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	1424	Common	430	3% CC 2% Gel
Production	7.875	5.5	17	4366	Common	180	10% Salt 5% Gilsonite

DRILL STEM TEST REPORT

Triple Crown Operating, LLC

2201 S. Utica Pl.
Ste. 100
Tulsa, OK 74114
ATTN: Sean Deenihan

29-20S-22W Ness, KS

Koerner #1-29

Job Ticket: 63107 **DST#: 1**

Test Start: 2017.11.03 @ 17:58:45

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:06:36
Time Test Ended: 03:03:50

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 4306.00 ft (KB) To 4368.00 ft (KB) (TVD)
Total Depth: 4368.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

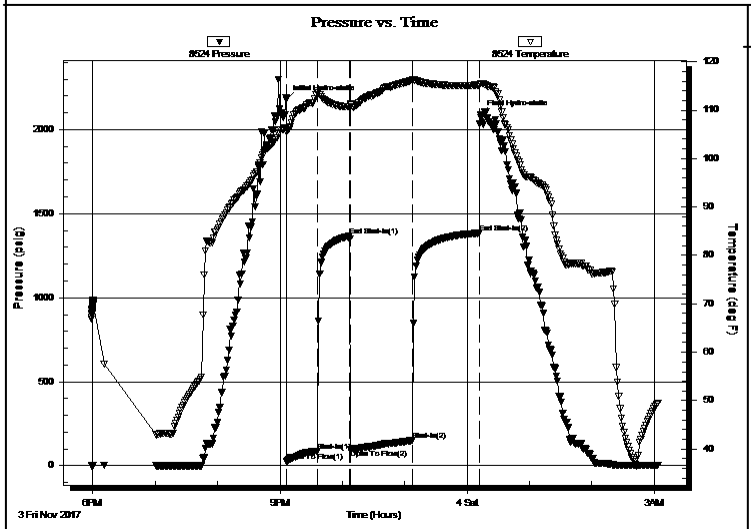
Reference Elevations: 2191.00 ft (KB)
2186.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8524 **Outside**

Press@RunDepth: 150.43 psig @ 4332.00 ft (KB)
Start Date: 2017.11.03 End Date: 2017.11.04
Start Time: 17:58:46 End Time: 03:03:50

Capacity: 8000.00 psig
Last Calib.: 2017.11.04
Time On Btm: 2017.11.03 @ 21:06:21
Time Off Btm: 2017.11.04 @ 00:13:06

TEST COMMENT: 30- IF- Slowly built to 6.5"
30- ISI- No blow
60- FF- Slowly built to 6.5"
60- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2179.93	106.42	Initial Hydro-static
1	28.38	105.61	Open To Flow (1)
30	88.53	113.59	Shut-In(1)
61	1366.88	110.72	End Shut-In(1)
62	96.76	111.17	Open To Flow (2)
121	150.43	116.19	Shut-In(2)
186	1383.69	115.17	End Shut-In(2)
187	2087.02	115.56	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
266.00	SOCM, 5%O 95%M	2.66
10.00	CO	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

Triple Crown Operating, LLC

2201 S. Utica Pl.
Ste. 100
Tulsa, OK 74114
ATTN: Sean Deenihan

29-20S-22W Ness, KS

Koerner #1-29

Job Ticket: 63107 **DST#: 1**

Test Start: 2017.11.03 @ 17:58:45

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:06:36
Time Test Ended: 03:03:50

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

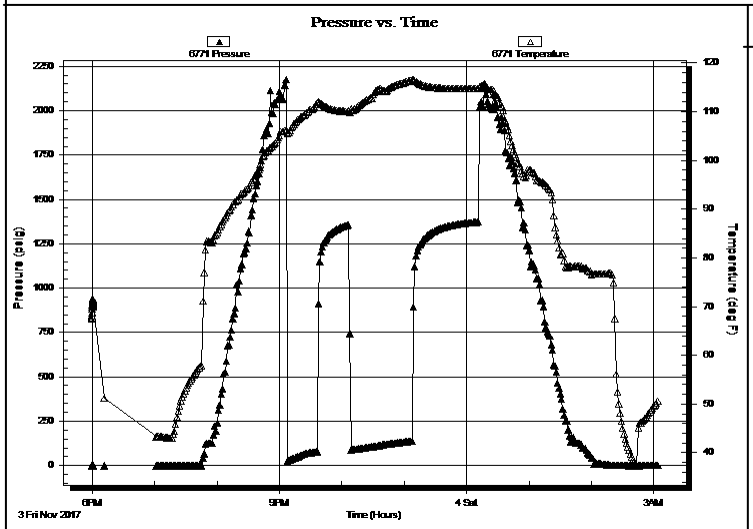
Interval: 4306.00 ft (KB) To 4368.00 ft (KB) (TVD)
Total Depth: 4368.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2191.00 ft (KB)
2186.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6771 **Inside**
Press@RunDepth: psig @ 4332.00 ft (KB)
Start Date: 2017.11.03 End Date: 2017.11.04
Start Time: 17:59:13 End Time: 03:04:02

Capacity: 8000.00 psig
Last Calib.: 2017.11.04
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- Slowly built to 6.5"
30- ISI- No blow
60- FF- Slowly built to 6.5"
60- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
266.00	SOCM, 5%O 95%M	2.66
10.00	CO	0.14

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Triple Crown Operating, LLC

2201 S. Utica Pl.
Ste. 100
Tulsa, OK 74114
ATTN: Sean Deenihan

29-20S-22W Ness, KS

Koerner #1-29

Job Ticket: 63107 **DST#: 1**

Test Start: 2017.11.03 @ 17:58:45

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	33 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.59 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

Recovery Information

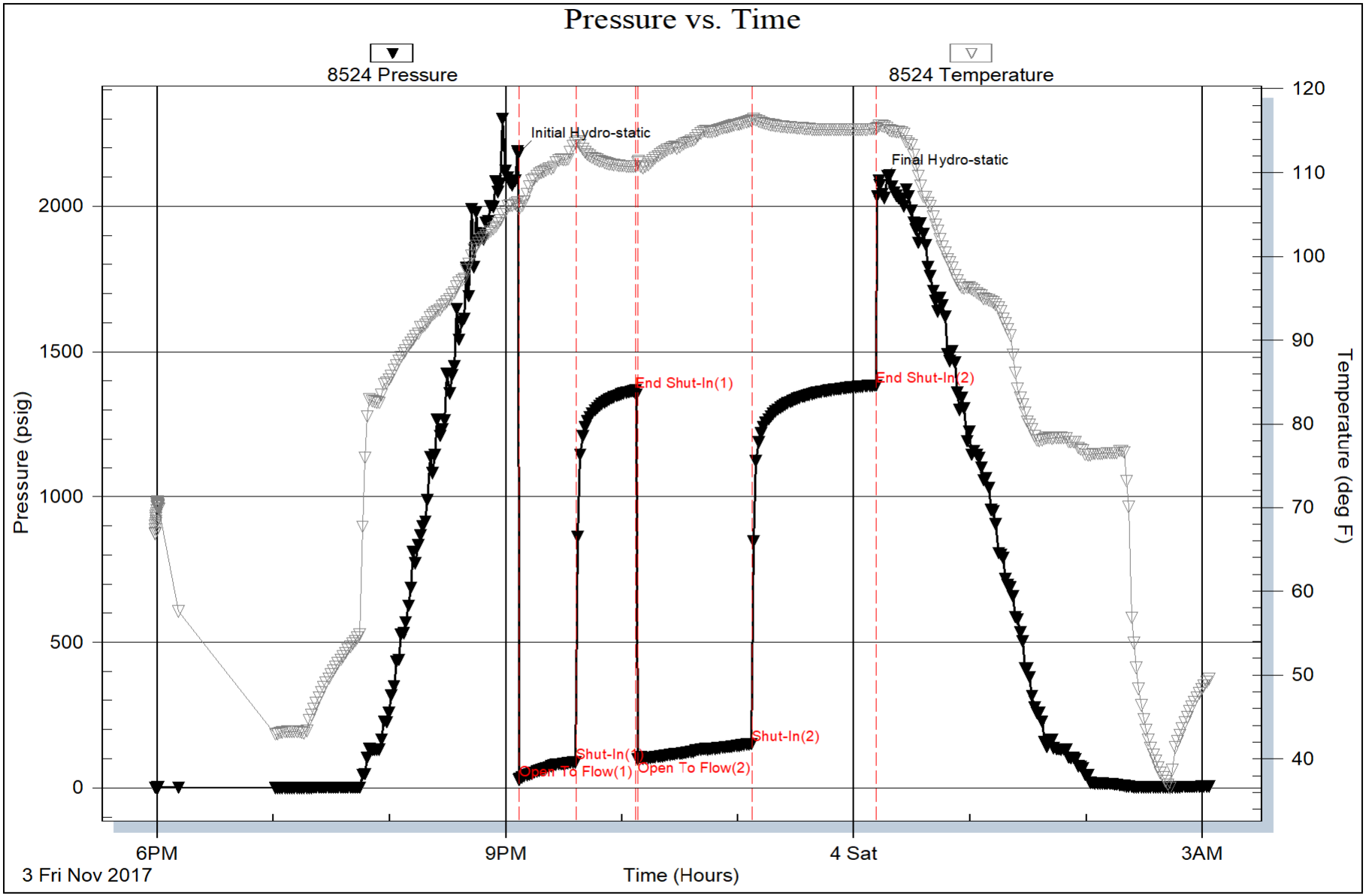
Recovery Table

Length ft	Description	Volume bbl
266.00	SOCM, 5%O 95%M	2.660
10.00	CO	0.142

Total Length: 276.00 ft Total Volume: 2.802 bbl

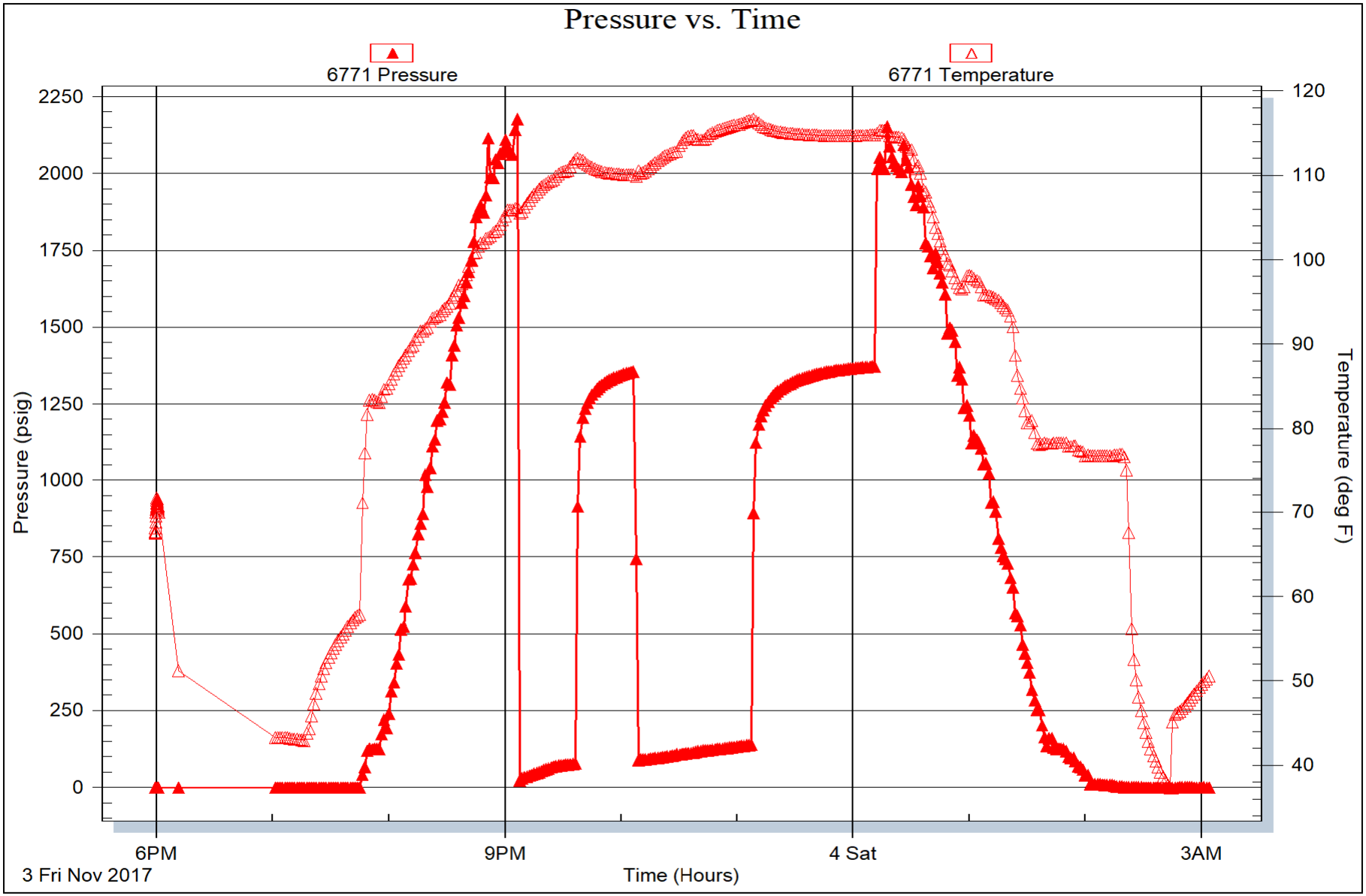
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8524 **Outside** Triple Crow n Operating, LLC Koerner #1-29 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 63107 Printed: 2017.11.04 @ 08:04:31

Serial #: 6771 **Inside** Triple Crow n Operating, LLC Koerner #1-29 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 63107 Printed: 2017.11.04 @ 08:04:31

DRILL STEM TEST REPORT

Triple Crown Operating, LLC

2201 S. Utica Pl.
Ste. 100
Tulsa, OK 74114
ATTN: Sean Deenihan

29-20S-22W Ness, KS

Koerner #1-29

Job Ticket: 63108 **DST#: 2**

Test Start: 2017.11.04 @ 09:32:36

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:11:57
Time Test Ended: 17:47:12

Test Type: Conventional Bottom Hole (Reset)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 4308.00 ft (KB) To 4373.00 ft (KB) (TVD)
Total Depth: 4373.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

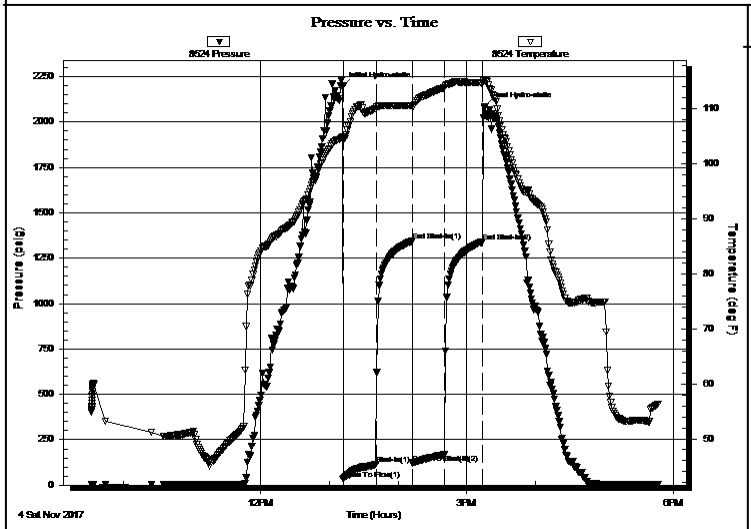
Reference Elevations: 2191.00 ft (KB)
2186.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8524 **Outside**

Press@RunDepth: 167.60 psig @ 4336.00 ft (KB)
Start Date: 2017.11.04 End Date: 2017.11.04
Start Time: 09:32:37 End Time: 17:47:12

Capacity: 8000.00 psig
Last Calib.: 2017.11.04
Time On Btm: 2017.11.04 @ 13:11:42
Time Off Btm: 2017.11.04 @ 15:15:42

TEST COMMENT: 30- IF- Slowly built to 1.5"
30- ISI- No blow
30- FF- Slowly built to 1"
30- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2196.91	104.88	Initial Hydro-static
1	33.49	104.21	Open To Flow (1)
29	113.67	110.11	Shut-In(1)
61	1344.49	110.67	End Shut-In(1)
62	121.42	110.35	Open To Flow (2)
89	167.60	113.91	Shut-In(2)
122	1340.91	114.74	End Shut-In(2)
124	2083.17	115.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
230.00	OCM, 10%O 90%M	2.15

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

Triple Crown Operating, LLC

2201 S. Utica Pl.
Ste. 100
Tulsa, OK 74114
ATTN: Sean Deenihan

29-20S-22W Ness, KS

Koerner #1-29

Job Ticket: 63108 **DST#: 2**

Test Start: 2017.11.04 @ 09:32:36

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:11:57
Time Test Ended: 17:47:12

Test Type: Conventional Bottom Hole (Reset)
Tester: Brannan Lonsdale
Unit No: 73

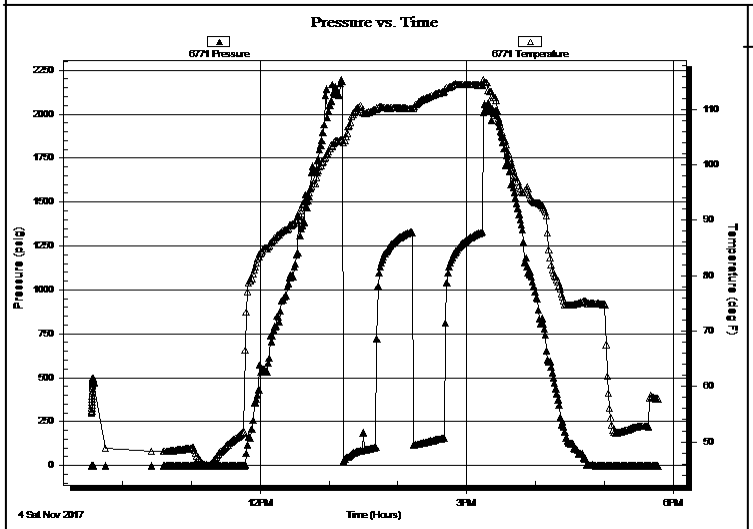
Interval: 4308.00 ft (KB) To 4373.00 ft (KB) (TVD)
Total Depth: 4373.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2191.00 ft (KB)
2186.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 6771 **Inside**
Press@RunDepth: psig @ 4336.00 ft (KB)
Start Date: 2017.11.04 End Date: 2017.11.04
Start Time: 09:32:47 End Time: 17:47:07

Capacity: 8000.00 psig
Last Calib.: 2017.11.04
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- Slowly built to 1.5"
30- ISI- No blow
30- FF- Slowly built to 1"
30- FSI- No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
230.00	OCM, 10%O 90%M	2.15

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

DRILL STEM TEST REPORT

FLUID SUMMARY

Triple Crown Operating, LLC

2201 S. Utica Pl.
Ste. 100
Tulsa, OK 74114
ATTN: Sean Deenihan

29-20S-22W Ness, KS

Koerner #1-29

Job Ticket: 63108 **DST#: 2**

Test Start: 2017.11.04 @ 09:32:36

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	33 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.58 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	6000.00 ppm				
Filter Cake:	inches				

Recovery Information

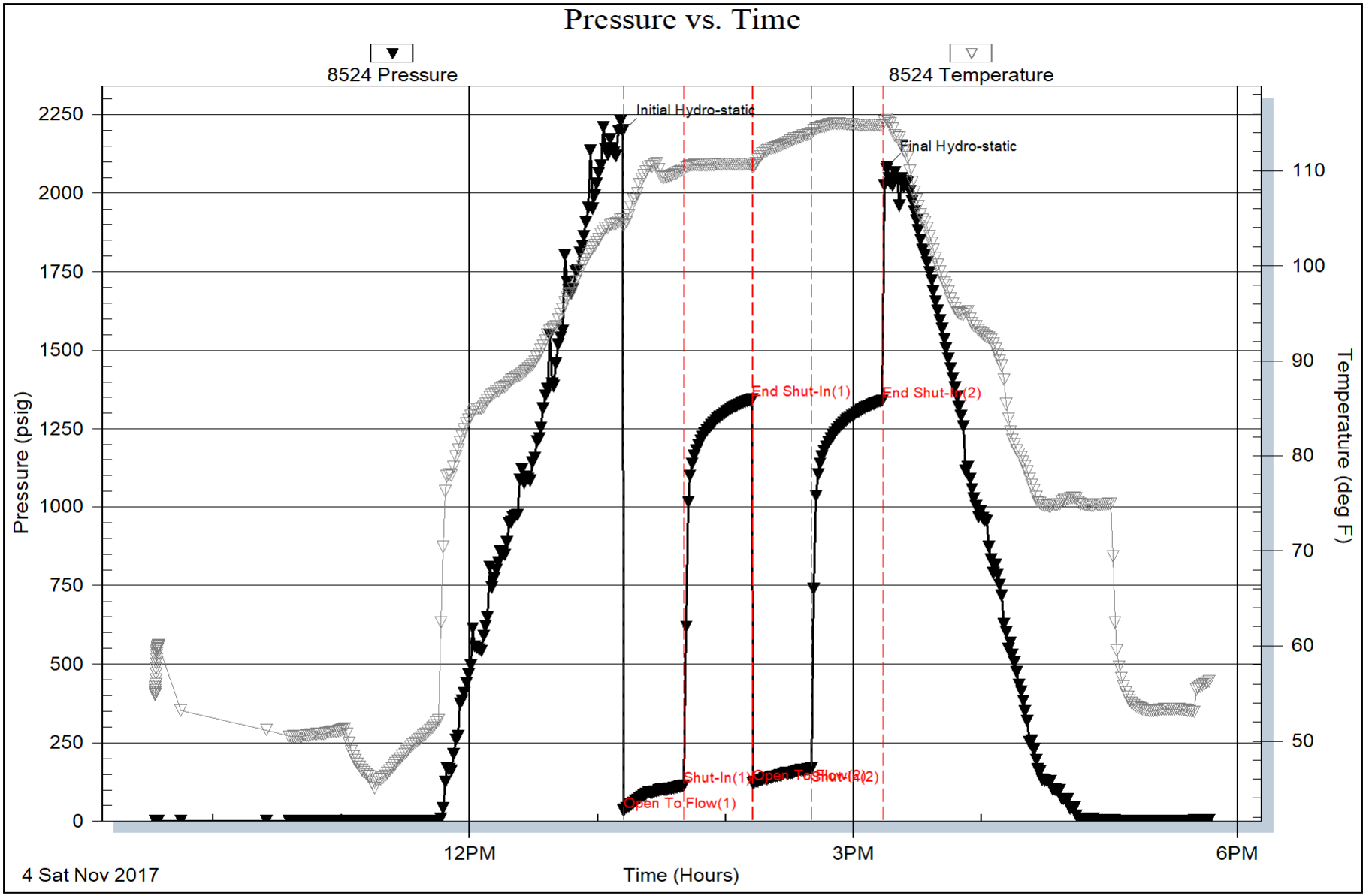
Recovery Table

Length ft	Description	Volume bbl
230.00	OCM, 10%O 90%M	2.149

Total Length: 230.00 ft Total Volume: 2.149 bbl

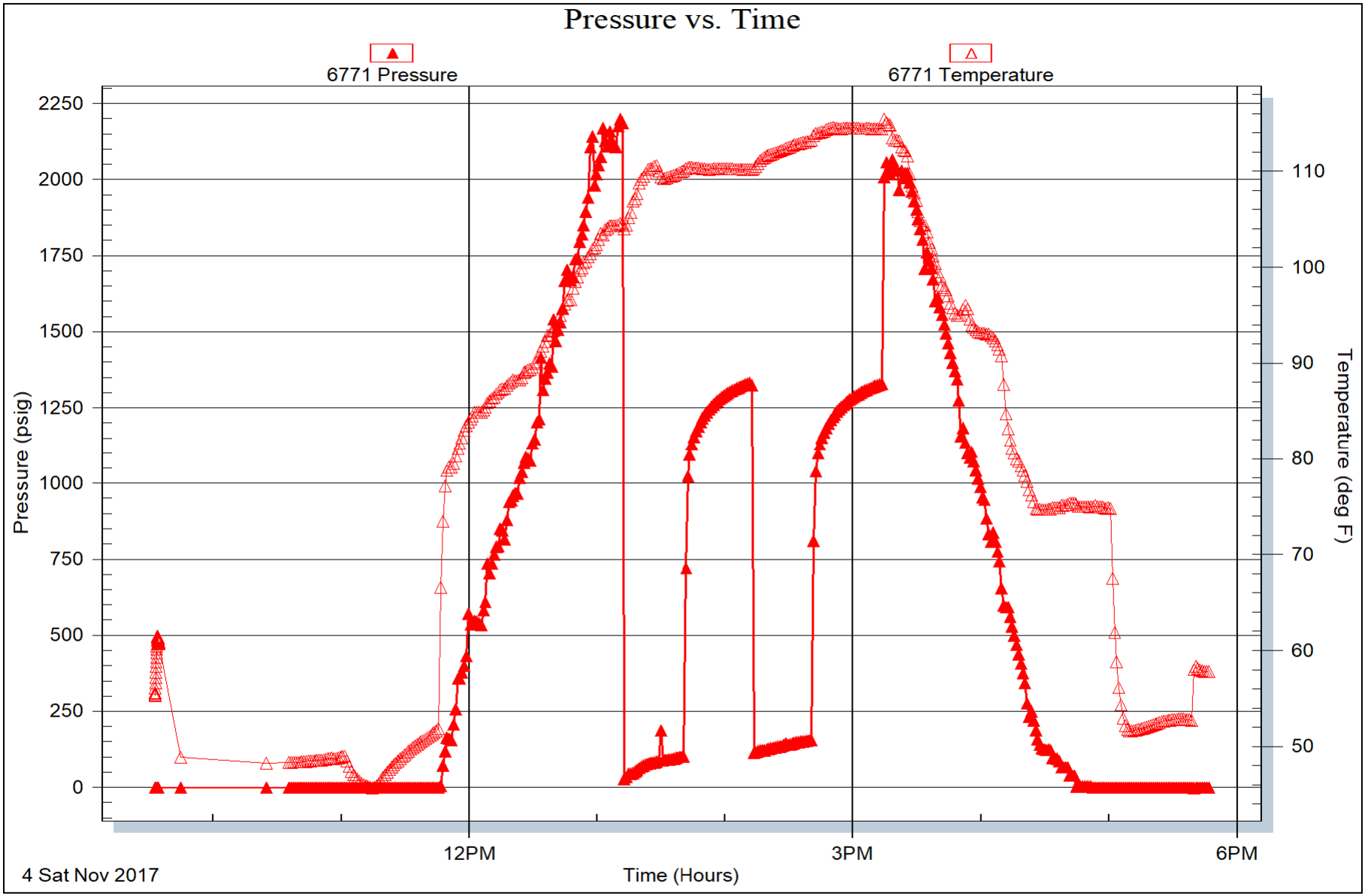
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8524 **Outside** Triple Crow n Operating, LLC Koerner #1-29 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 63108 Printed: 2017.11.04 @ 18:07:44

Serial #: 6771 **Inside** Triple Crow n Operating, LLC Koerner #1-29 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 63108 Printed: 2017.11.04 @ 18:07:44

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 434

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
10-29-17	29	20	22	Ness	Ks		5:00 PM

Location Bazine West side DD Rd Sto 20 Rd 4W to

Lease Koerner Well No. 1-29

Owner Z Rd 1/4 S W/S

Contractor Pickrell #10

Type Job Surface

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size 12 1/4" T.D. 1424'

Charge To Triple Crown Operation LLC

Csg. 8 5/8" Depth 1420.34'

Street

Tbg. Size Depth

City State

Tool Depth

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 42.21' Shoe Joint 42.21'

Cement Amount Ordered 400 70/30 3+2 1/4# Flo-seal

Meas Line Displace 87 3/4 BLS

150 Com 3+2

EQUIPMENT

Pumptrk 5 No. Cementer Helper Brett

Rick

Bulktrk 21 No. Driver Driver David

Bulktrk 15 No. Driver Driver Jordan

Common 430

Poz. Mix 120

Gel. 11

Calcium 22

JOB SERVICES & REMARKS

Hulls

Remarks:

Salt

Rat Hole

Flowseal 100#

Mouse Hole

Kol-Seal

Centralizers 7, 9, 11, 13, 15, 17, 19, 21, 24

Mud CLR 48

Baskets 16, 25

CFL-117 or CD110 CAF 38

D/V or Port Collar

Sand

Handling 584

Mileage

Cement did Circulate

Shut in @ 700#

FLOAT EQUIPMENT

Guide Shoe 1

Centralizer 9

Baskets 2

AFU Inserts Rubber plug

Float Shoe Baffle plate

Latch Down

Thanks

Pumptrk Charge Long Surface

Mileage 25

Tax

Discount

X Signature

Total Charge

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025 Home Office P.O. Box 32 Russell, KS 67665 No. 439

Cell 785-324-1041

Date	Sec.	Twp.	Range	County	State	On Location	Finish
11-5-17	29	20	22	Ness	Ks		9:00 AM

Location Bazine - West side DD Rd, 5 to 20 Rd, 40 to Z Rd, 1/4 S, W/S

Lease Koerner Well No. 1-29

Owner

Contractor Pickrell #10

Type Job Longstring

Hole Size 7 7/8" T.D. 4373'

Csg. 5 1/2" 17# Depth 4366.05'

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 41.86' Shoe Joint 41.86'

Meas Line Displace 100 1/4 Bbls

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To Triple Crown

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 220 Com 10% Salt 5% Gilsonite 500 gal mud Clear 48 - 20 Bbls KCL

Common 180 used 180 sk

Poz. Mix

Gel.

Calcium KCL 2 gal

Hulls

Salt 16

Flowseal

Kol-Seal 900 #

Mud CLR 48 500 gal

CFL-117 or CD110 CAF 38

Sand

Handling 220

Mileage

EQUIPMENT

Pumptrk 20 No. Cementer Helper David

Bulktrk 9 No. Driver Driver Doug

~~Bulktrk~~ P.U. No. Driver Driver Rick

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers 2, 4, 6, 8, 11, 14, 18

Baskets 3, 19

D/V or Port Collar Pipe on bottom, break Circulation pump 500 gal mud Clear 48 20 Bbls KCL, plug Rathole w/ 30sx Cement 5 1/2" w/ 150 sx Cement. Shut down wash pump & lines. Displaced plug w/ 100 1/4 Bbls. Released & Held

Lift pressure 1000 #

Land plug to 1800 #

Used 150 sk Down 5 1/2"

FLOAT EQUIPMENT

~~Guide Shoe~~ Packer Shoe

Centralizer 7

Baskets 2 Caged w/clamps

~~AFU Inserts~~ Baker Lock

Float Shoe

Latch Down 1

Pumptrk Charge Prod String

Mileage 25

Tax

Discount

Total Charge

X Signature

Sean Deenihan
Petroleum Geologist

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY: Triple Crown Operating, LLC

LEASE: Koerner #1-29

WELL NO.

LOCATION: 1310' FSL & 990' FEL

SEC. 29 TWP. 20 S RGE. 22 W

COUNTY: Ness STATE: KS

ELEVATIONS

KB: 2192'

DF:

GL: 2185'

Mud Co.: Mud Service

From: Kelly Bushing

CASING

CONDUCTOR: 8 5/8" @ 1432'

PRODUCTION: 5.5" / 0H.

ELECTRICAL SURVEYS

DUAL IND., MIC.

SAMPLES SAVED FROM: 3600' TO: RTD

DRILLING TIME KEPT FROM: 3600' TO: RTD

SAMPLES EXAMINED FROM: 3600' TO: RTD

GEOLOGICAL SUPERVISION FROM: 3600' TO: RTD

REFERENCE WELL

Formation	Sample Tops	E-log Tops	Pool
Anhydrite	(-1300')	(-1303')	
Base Anhydrite	(-1334')	(-1337')	
Heebner	(-1540')	(-1542')	
Lansing	(-1584')	(-1586')	
Muncie Creek	(-1748')	(-1752')	
Stark Sh.	(-1842')	(-1852')	
Hushpuckney	(-1880')	(-1892')	
Base Kansas City	(-1924')	(-1932')	
Marmaton	(-1932')	(-1940')	
Pawnee	(-2026')	(-2034')	
Myrick Station	(-2062')	(-2070')	
Fort Scott	(-2080')	(-2088')	
Cherokee Sh.	(-2092')	(-2100')	
Mississippian	(-2160')	(-2168')	

REMARKS_ Based on sample analysis, DST & E-log evaluation, and relative structural position, The Koerner #1-29 will be further evaluated through production casing.

Respectfully Submitted,

Sean P. Deenihan

Curve Track 1
ROP (Min/Ft)

Lithology

Geological Descriptions

Engineering Data
T2 (units)
C2 (units)
C3 (units)
C4 (units)
C5 (units)

ROP (Min/Ft)

3590 — Ls, wh, vf-gr, sdy, p-fr intrgran Pcs; fri, soft, no show

Ls, gy, tri, wh, vf-gr, chlky, sdy,ff; no show

3600 — Ls, crm, gy, vf-gr, p-intrgran Pcs fri-firm, barren

LS - crm,f gr,fr intgran Pcr, vug, fos, no show

Ls, crm, wh, Pyr,p-fr intgran Pcr, sme chlky fos, grys, No show

Hoebner Sh. 3694 (-1502)

3700 — Sh, blk

LS - crm-med sh, v poor-fr por, chalky ff mds

Ls, crm, gy, vf-gr,p-intgran Pcr, vug, fos, no show

SH - grey, green, gummy soft

Lansing 3738 (-1546)

3730 — LS - some as above, some fine sh & dense, platy, transition to white

Shale - dark brown, organic, & limestone, white & grey, some coarse sh, sandy texture

Ls, wh, tn, crm, vf-gr, sli dolic, dnse, vug, p-fr/sh Por, barren, no odr

Ls, xx, gran, sli dolo fos

3760 — LS - cm-tn white, fr med gr, suc fos, abd chlk

LS - buff, fine to med sh, foss, occ & com porosity, no odor, some slight staining, ratti

3790 — LS - as above

Ls, wh, gy, vf-gr, p intgran Pcs; no show Cht, wh, gy, fresh

CH - as above & LS - cm-tn white & gry, occ, barren porosity, no odor, ratti

Ls, wh, - n chlky, sme p-fr intgran Pcr, vug, barren, soft, no show

3820 — Ls, crm, gy, vf-gr, p/intgran Pcs, chlky, no show

Ovst, wh, tn, vf-dn, suc, barren. Cht, wh, gy, fos, no show

LS - creamy tan, most med sh, fine-occ-occ porosity, barren, some foss, fair pyritic development, ratti

3850 — LS cm-tn, fr,f gr,p intgran Por, fos, no odr, Cht, wh, gy, translucent-opq, fresh, sharp

SH - mostly grey-green & blocky

LS - white, med sh, occ-vf-con texture, well cemented & chalky, ratti

3880 — LS - buff to cream, heavy occ-com porosity, fine crush, barren porosity, chalky, no odor, ratti

LS - wh, mod, fine sh, heavy occ-com, barren, ratti

3910 — LS - cm-tn gy, med sh, chlky matrix, abd fos

LS - gy, fine sh, platy & lithographic

Ls, gy, chlky/ff, vf gr,p-fr intgran Pcr, barren, no odr

3940 — Ls, gy, dk gy, shaly, dnse, inc. chlky wi depth, no odr

Ls, v chlky

Ls, gy vf-gr,p intgran occ dnse, no show

Sh, blk

3970 — Ls, gy, dk gy, vf-gr,p intgran Pcs; dnse

Ls, crm, tn, gy, fos, dnse, NVF, hd

Ls, wh, v chlky soft

Sh, gy, dk gy

4000 — Sh, gy, dk gy

Sh, lt gy, lead, brn

Marmaton 4114 (-1922)

Ls, brn, fos, dnse, p intgran Por, fst, no show

Ls, gy, dnse. Sh, gy, dk gy, fis

Sh gy, Ls, gy, pred dnse, sme chky

4030 — Ls, wh, gy, chlky, sme chorty, occ cm wl gy, ang. fr Cht,

Ls, gy, vf-vf gr, dnse, p-fr pcs; fst, tr Pyr, no odr

Ls, tn, gy, vf-gr, dnse, wx-fd, sme dolic, p intgran Pcr, hd, no odr

Inc, Sh., gy, dk gy Ls, aa

Pawnee 4188 (-1996)

4060 — Ls, tn, gy, dnse, sli dolic - Suc Pr,p-fr intgran Pcr, sme chlky, fst, tr Oil, pyrah, fresh

Ls, gy, dnse, firm, no show

DST #1

4306-4366'
30-30-60-60"
IF: 6.5"
FF: 6.5"

Rec: 10' CO.
(5%O, 95%M)

IFP: 28-89#
FFP: 97-150#
SIP: 1367-1364#

4090 — Ls, wh, gy, dv-vf gr, p-fr intgran Pcs; no odr

Ls, gy, tn, vf gr, fos, sli chlky,p ss Pcs; no show

Sh, gy, dk gy

4120 — Sh, blk

Ls, gy, fr,p intgran Por, fos, firm, silter-Ls etc, NSFO, no odr

Ft. Scott 4258 (-2066)

4150 — Cht, wh, gy, fresh, spk, sharp, NSFO

Ls, crm, vf gr, fos, p intgran Por, firm, occ chky sli stn, fr odor NSFO

Cherokee Sh. 4284 (-2092)

4180 — Sh, blk, sli gas bubble

Ls, tn, brn, vf gr, dnse, Ch, gy, opq, spic

Ls, tn, gy, fos, vf gr, v hd, NVF

4210 — Ls, tn, vf-vf gr, dnse, chly ff/ fine, no show

Sh, varic - yel, grn, lead, brn, gy

Cht, wh, yel, fos, p Ovds, SSFO, fr odr?

Sh, varic - maroon, lead, brn, gy, grn

4240 — Sh, varic, dod fresh Ch, sli stn, no show, no odr

Mississippi 4358 (-2166)

4270 — Ovd, gy, tn, f-ch, vug, occ-sec, mod brn-blk Cuts, Pkd w/ fluor

Cht, wh, weath- fresh, tr frly, vug, dolic, fri, FSFO - fr brn, gd odr

4300 — Ch, ss w/ lmc, occ dol, vf-sh, pred firm, sme fri, wt tr brn-brn stn, tr fr brn Ch lam, fluor

Sh., gy, dy gy, blk, gassy odr

4330 — Ls, gy, dk gy, bk, gassy odr

4360 — Ls, gy, dk gy, bk, gassy odr

4390 — Ls, gy, dk gy, bk, gassy odr

4400 — Ls, gy, dk gy, bk, gassy odr

Bottom of Hole

Bourrup to Surface Casing

Oil Trip @ KDF

RTD: 4373'
LTD: 4377'

Triple Crown Operating, LLC.
Koerner #1-29
29 -20S-22W
Ness Co., KS

KB: 2192'