

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

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 #: _____

Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

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: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> 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: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	SOWERS 1-5
Doc ID	1328130

All Electric Logs Run

DIL
CND
Micro
Sonic

Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	SOWERS 1-5
Doc ID	1328130

Tops

Name	Top	Datum
Anhy	2258	+664
Base Anhy	2297	+625
Heeb	3746	-824
Toronto	3767	-845
Lansing	3797	-875
Muncie	3964	-1042
Stark	4056	-1134
BKC	4133	-1211
Marm	4184	-1262
Alta	4197	-1275
Pawnee	4272	-1350
Fort Scott	4323	-1401
Cherokee	4352	-1430
Mississippi	4518	-1596

Form	ACO1 - Well Completion
Operator	Culbreath Oil & Gas Company, Inc.
Well Name	SOWERS 1-5
Doc ID	1328130

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	4202-4208	250 gal MA, 1500 gal NA	4208
4	4203-4207	No Treatment	4207

Summary of Changes

Lease Name and Number: SOWERS 1-5

API/Permit #: 15-109-21482-00-00

Doc ID: 1328130

Correction Number: 1

Approved By: Karen Ritter

Field Name	Previous Value	New Value
Approved Date	11/23/2016	01/17/2017
CasingNumbSacksUse dPDF_2	625	175
CasingSettingDepthPD F_2	4644	4643
CasingSizeCasingSetP DF_1	8.625	8.25
Completion Or Recompletion Date	10/11/2016	12/01/2016
Date of First or Resumed Production or SWD or Enhr Fluid Mngmt - Chloride Content	11/17/2016	11/27/2016
If Alternate II Completion - Sacks of Cement	175	450
Perf_Depth_2	4208	4207
Production - Barrels Oil	30	10

Summary of changes for correction 1 continued

Field Name	Previous Value	New Value
Production - Barrels of Water	7	8
Save Link	../kcc/detail/operatorEditDetail.cfm?docID=1322592	../kcc/detail/operatorEditDetail.cfm?docID=1328130



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1322592
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed

Form must be Signed

All blanks must be Filled

CONFIDENTIAL WELL COMPLETION FORM

WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- 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 ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

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
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas Company Inc.

5-15S-34W Logan, KS

3501 S. Yale Ave.
Tulsa, OK 74135

Sowers #1-5

Job Ticket: 61287

DST#: 1

ATTN: Richard Bell

Test Start: 2016.10.06 @ 15:38:23

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

40000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 12500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
917.00	MW, 30%M 70%W	12.999

Total Length: 917.00 ft Total Volume: 12.999 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .25 @ 47deg



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Culbreath Oil & Gas Company Inc.

5-15S-34W Logan, KS

3501 S. Yale Ave.
Tulsa, OK 74135

Sowers #1-5

Job Ticket: 65616

DST#: 2

ATTN: Richard Bell

Test Start: 2016.10.07 @ 18:34:15

GENERAL INFORMATION:

Formation: **LKC J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:09:30

Time Test Ended: 02:03:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4023.00 ft (KB) To 4064.00 ft (KB) (TVD)

Reference Elevations: 2922.00 ft (KB)

Total Depth: 4064.00 ft (KB) (TVD)

2912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 10.00 ft

Serial #: 6751 Outside

Press@RunDepth: 649.60 psig @ 4025.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.07

End Date:

2016.10.08

Last Calib.: 2016.10.08

Start Time: 18:34:15

End Time:

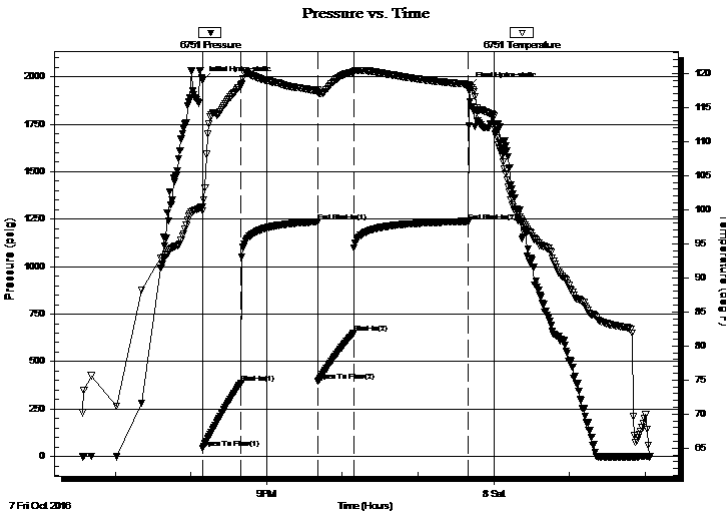
02:03:15

Time On Btm: 2016.10.07 @ 20:09:15

Time Off Btm: 2016.10.07 @ 23:40:30

TEST COMMENT: IF:BOB in 4 min.
IS:No return blow
FF:BOB in 4 min.
FS:No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1980.01	100.38	Initial Hydro-static
1	41.78	99.81	Open To Flow (1)
31	388.02	118.28	Shut-In(1)
92	1234.94	117.52	End Shut-In(1)
92	396.49	117.21	Open To Flow (2)
120	649.60	120.18	Shut-In(2)
211	1238.26	118.37	End Shut-In(2)
212	1946.16	117.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
496.00	sw cm 20%sw 80%m	7.03
992.00	sw 100%sw	14.06

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas Company Inc.

5-15S-34W Logan, KS

3501 S. Yale Ave.
Tulsa, OK 74135

Sowers #1-5

Job Ticket: 65616

DST#: 2

ATTN: Richard Bell

Test Start: 2016.10.07 @ 18:34:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

17000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 20000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
496.00	sw cm 20%sw 80%m	7.031
992.00	sw 100%sw	14.062

Total Length: 1488.00 ft Total Volume: 21.093 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .558@49.6= 17,000 ppm

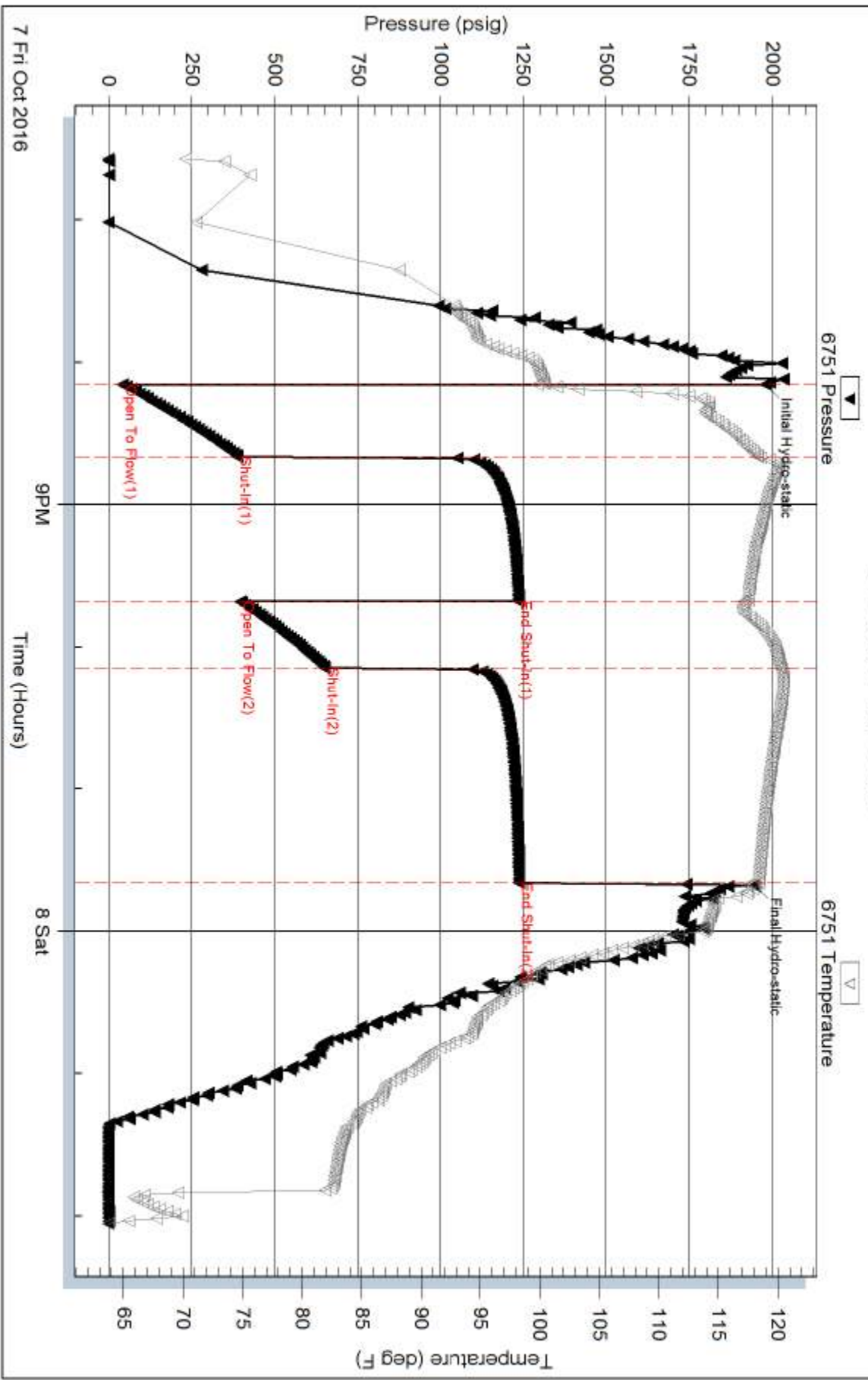
Serial #: 6751

Outside Culbreath Oil & Gas Company Inc.

Sowers #1-5

DST Test Number: 2

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 65616

Printed: 2016.10.08 @ 08:01:13



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Culbreath Oil & Gas Company Inc.

5-15S-34W Logan, KS

3501 S. Yale Ave.
Tulsa, OK 74135

Sowers #1-5

Job Ticket: 65617

DST#: 3

ATTN: Richard Bell

Test Start: 2016.10.08 @ 19:08:15

GENERAL INFORMATION:

Formation: **Altamont A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:48:00

Time Test Ended: 02:34:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4195.00 ft (KB) To 4228.00 ft (KB) (TVD)

Reference Elevations: 2922.00 ft (KB)

Total Depth: 4228.00 ft (KB) (TVD)

2912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 10.00 ft

Serial #: 6751 Outside

Press@RunDepth: 190.11 psig @ 4223.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.08

End Date:

2016.10.09

Last Calib.:

2016.10.09

Start Time: 19:08:15

End Time:

02:34:45

Time On Btm:

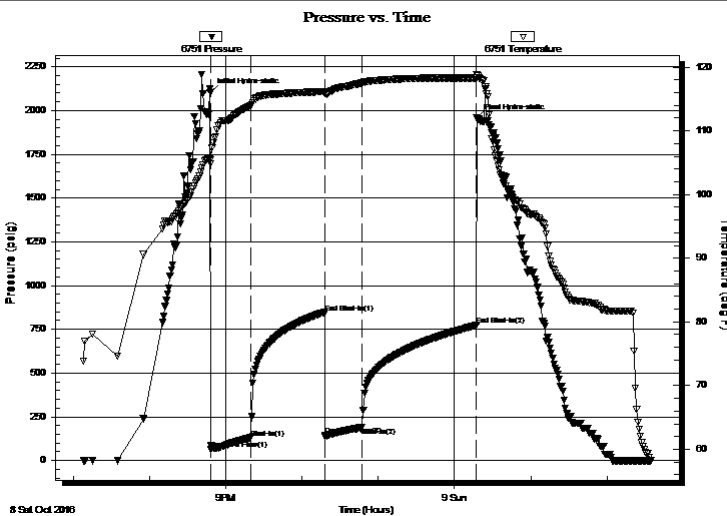
2016.10.08 @ 20:47:45

Time Off Btm:

2016.10.09 @ 00:17:30

TEST COMMENT: IF:BOB in 4 min.
IS:Return blow built to 3"
FF:BOB in 5 min.
FS:Return blow built to 3"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2103.85	105.82	Initial Hydro-static
1	66.15	104.83	Open To Flow (1)
32	129.57	113.99	Shut-In(1)
90	843.27	116.15	End Shut-In(1)
91	142.94	115.87	Open To Flow (2)
120	190.11	117.51	Shut-In(2)
210	773.22	118.29	End Shut-In(2)
210	1956.45	118.86	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP= 496 feet	0.00
231.00	free oil 100%o	3.27
62.00	mcgo 5%m 15%g 85%o	0.88
186.00	mcgo 20%m 30%g 50%o	2.64

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas Company Inc.

5-15S-34W Logan, KS

3501 S. Yale Ave.
Tulsa, OK 74135

Sowers #1-5

Job Ticket: 65617

DST#: 3

ATTN: Richard Bell

Test Start: 2016.10.08 @ 19:08:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.38 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 24000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GIP= 496 feet	0.000
231.00	free oil 100%o	3.275
62.00	mcgo 5%m 15%g 85%o	0.879
186.00	mcgo 20%m 30%g 50%o	2.637

Total Length: 479.00 ft Total Volume: 6.791 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

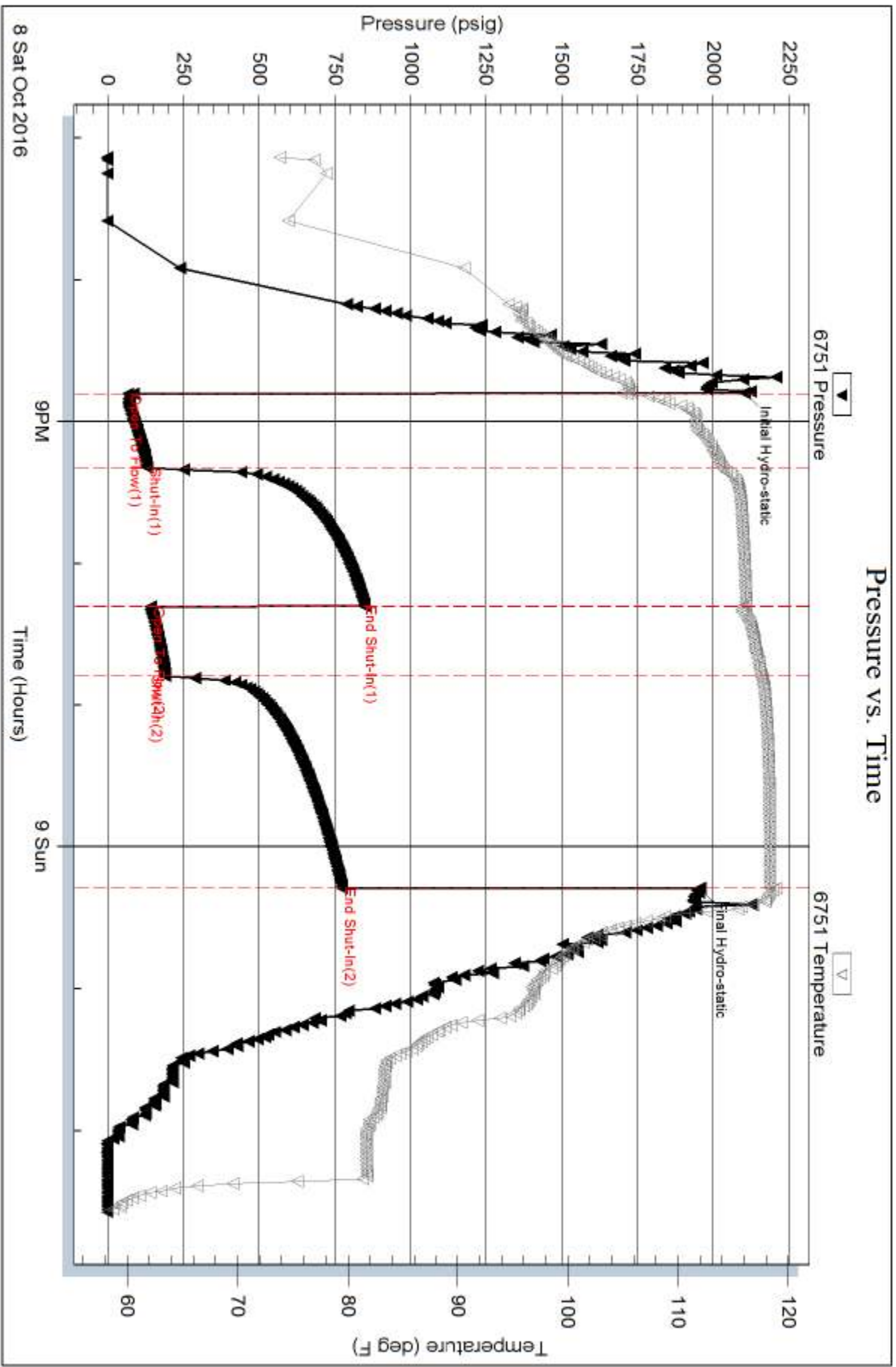
Recovery Comments: API= 34 @ 60 corrected to 34

Serial #: 6751

Outside Culbreath Oil & Gas Company Inc.

Sowers #1-5

DST Test Number: 3



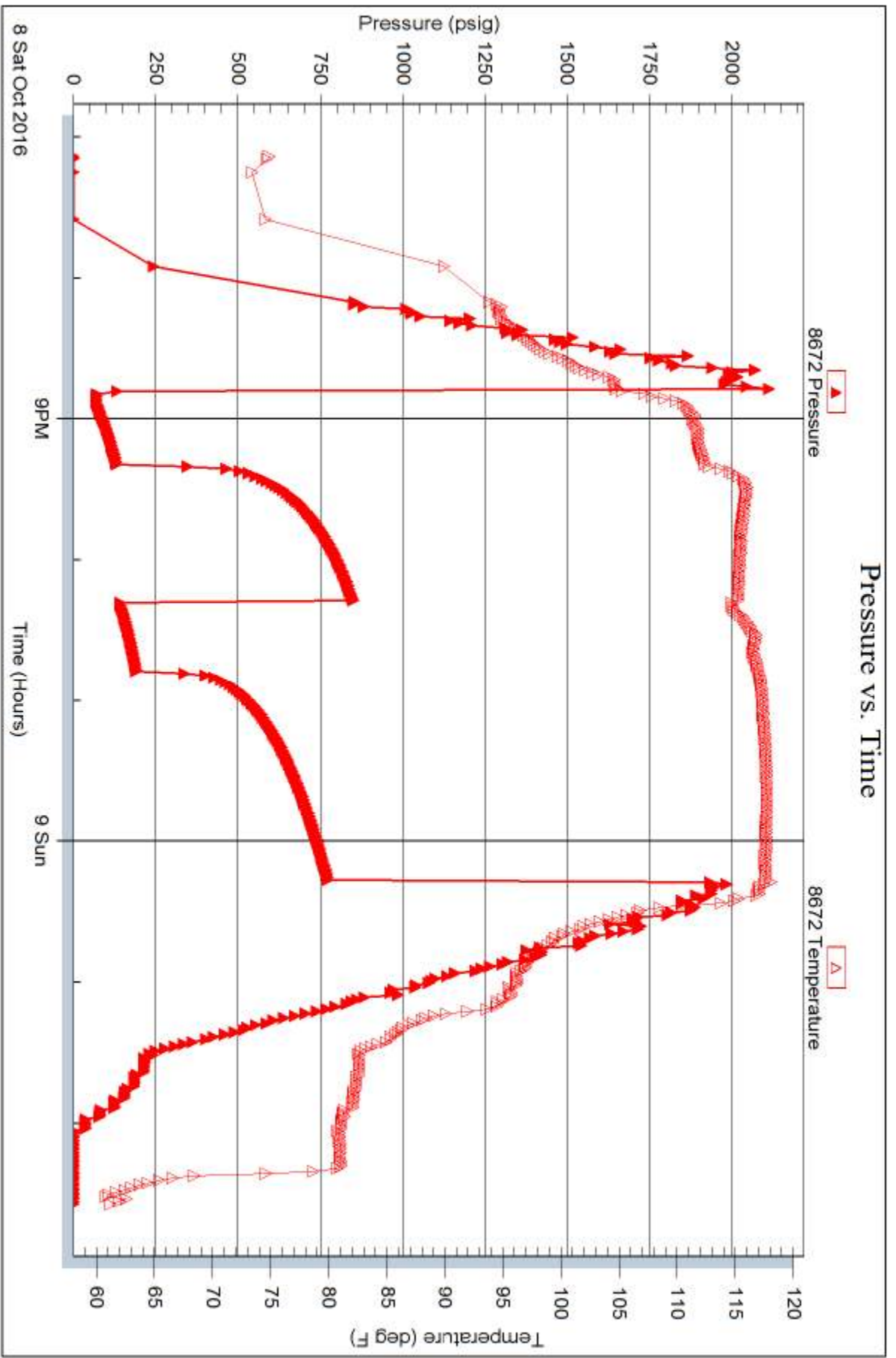
Serial #: 8672

Inside

Culbreath Oil & Gas Company Inc.

Sowers #1-5

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 65617

Printed: 2016, 10:09 @ 07:58:28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Culbreath Oil & Gas Company Inc.

5-15S-34W Logan, KS

3501 S. Yale Ave.
Tulsa, OK 74135

Sowers #1-5

Job Ticket: 65618

DST#: 4

ATTN: Richard Bell

Test Start: 2016.10.10 @ 02:59:15

GENERAL INFORMATION:

Formation: **Cherokee-Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:02:00

Time Test Ended: 09:51:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: **4354.00 ft (KB) To 4420.00 ft (KB) (TVD)**

Reference Elevations: 2922.00 ft (KB)

Total Depth: 4420.00 ft (KB) (TVD)

2912.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 10.00 ft

Serial #: 6751 Outside

Press@RunDepth: 52.56 psig @ 4357.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.10.10

End Date:

2016.10.10

Last Calib.: 2016.10.10

Start Time: 02:59:15

End Time:

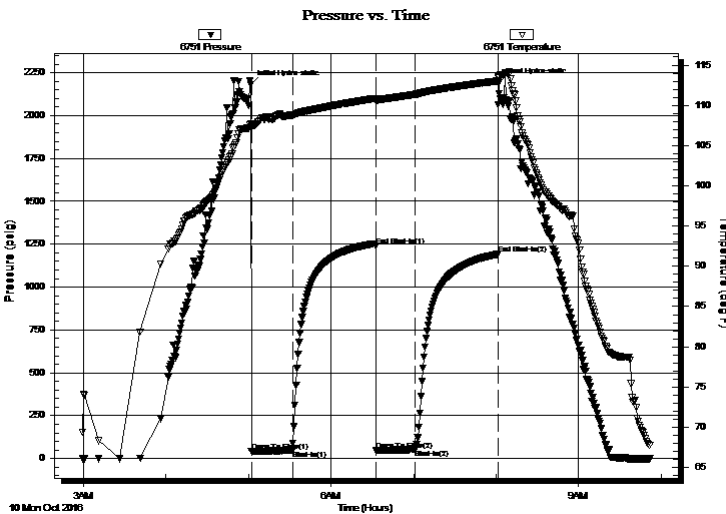
09:51:45

Time On Btm: 2016.10.10 @ 05:01:30

Time Off Btm: 2016.10.10 @ 08:02:00

TEST COMMENT: IF: Built to 1" blow
IS: No return blow
FF: No blow
FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2181.66	107.69	Initial Hydro-static
1	40.63	107.28	Open To Flow (1)
31	47.26	108.75	Shut-In(1)
91	1241.63	110.86	End Shut-In(1)
91	48.99	110.50	Open To Flow (2)
120	52.56	111.34	Shut-In(2)
180	1192.18	113.03	End Shut-In(2)
181	2191.14	113.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	mud with oil spots in the tool 100% m	0.88

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas Company Inc.

5-15S-34W Logan, KS

3501 S. Yale Ave.
Tulsa, OK 74135

Sowers #1-5

Job Ticket: 65618

DST#: 4

ATTN: Richard Bell

Test Start: 2016.10.10 @ 02:59:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 58000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	mud w ith oil spots in the tool 100%m	0.879

Total Length: 62.00 ft Total Volume: 0.879 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

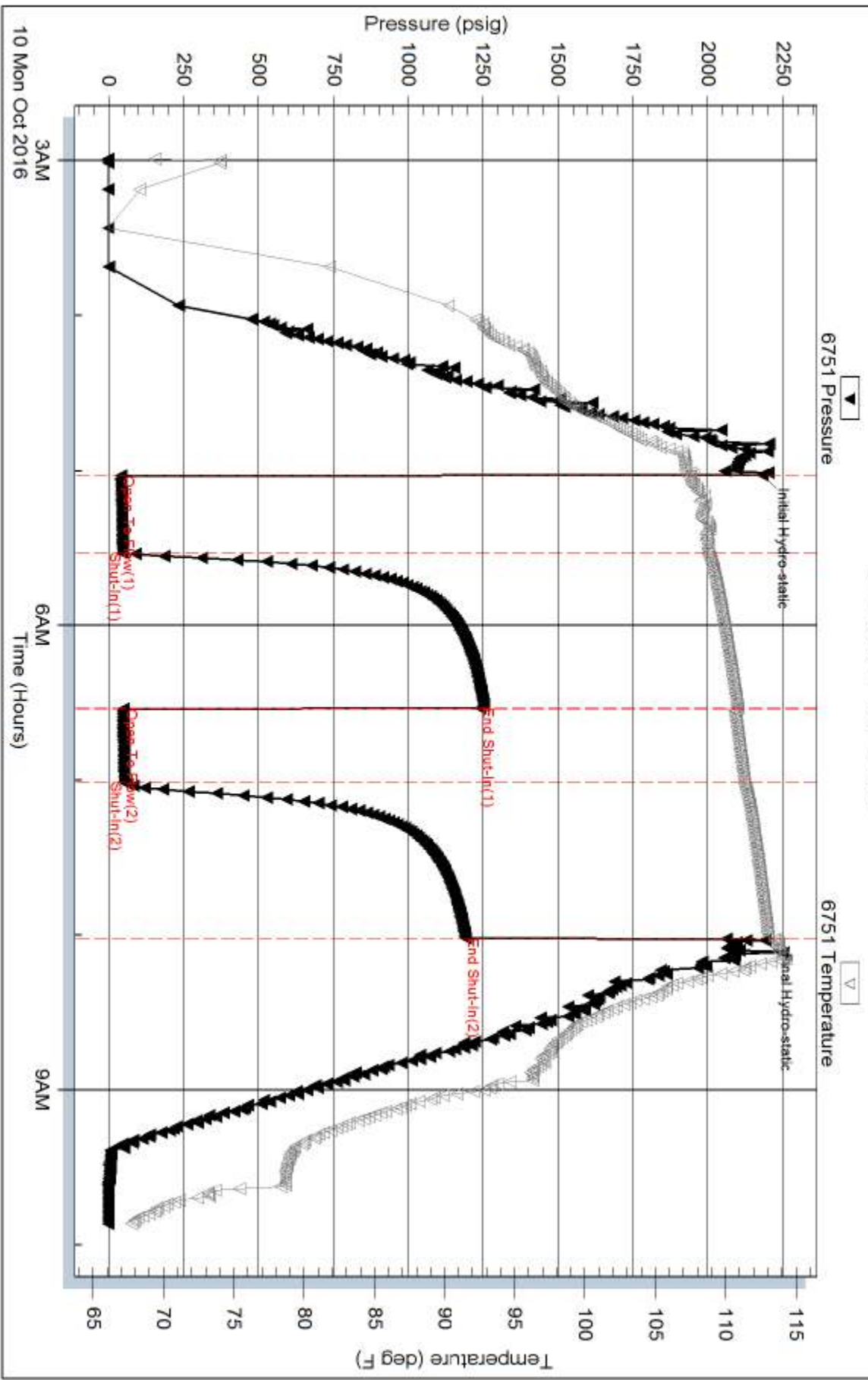
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



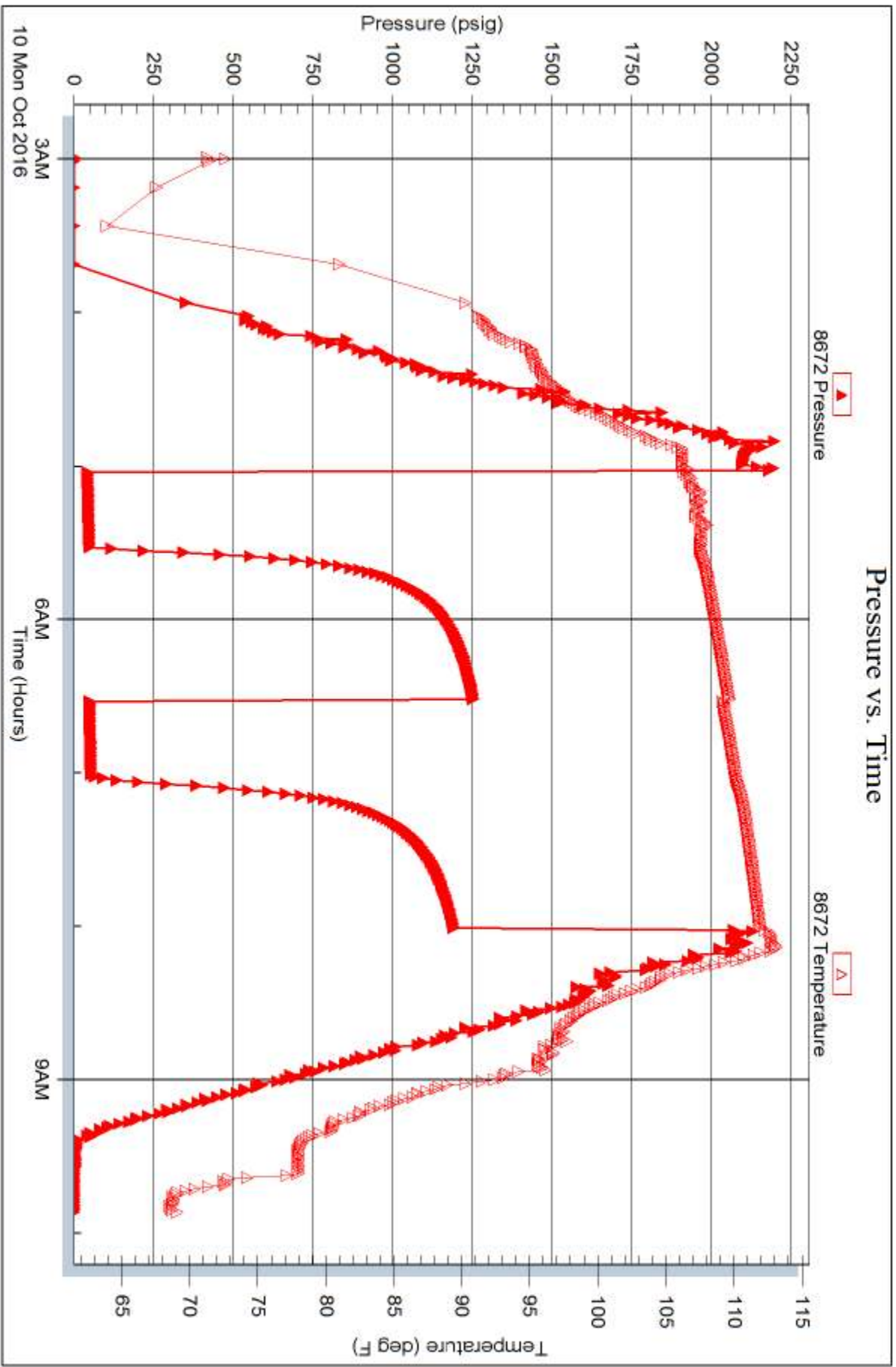
Serial #: 8672

Inside

Culbreath Oil & Gas Company Inc.

Sowers #1-5

DST Test Number: 4





001534
CRD NO.

PRO-STAKE

Construction Site Staking

LLC

12790
INVOICE NO.



Culbreath Oil & Gas Company, Inc.
OPERATOR

Logan County, KS
COUNTY

Sowers 1-5
LEASE NAME

926' FSL - 1398' FEL
LOCATION SPOT

2912.6'
GR. ELEVATION

5 **15s** **34w**
Sec. Twp. Rng.

SCALE: 1" = 1000'
DATE STAKED: Sept. 16th, 2015
MEASURED BY: Kent c.
DRAWN BY: Norby S.
AUTHORIZED BY: Kevin H.
DATE REVISED:

P.O. Box 2324 Garden City, Kansas 67846
Office/Fax: (620) 276-6159 – Cell: (620) 272-1499
burt@pro-stakellc.kscoxmail.com

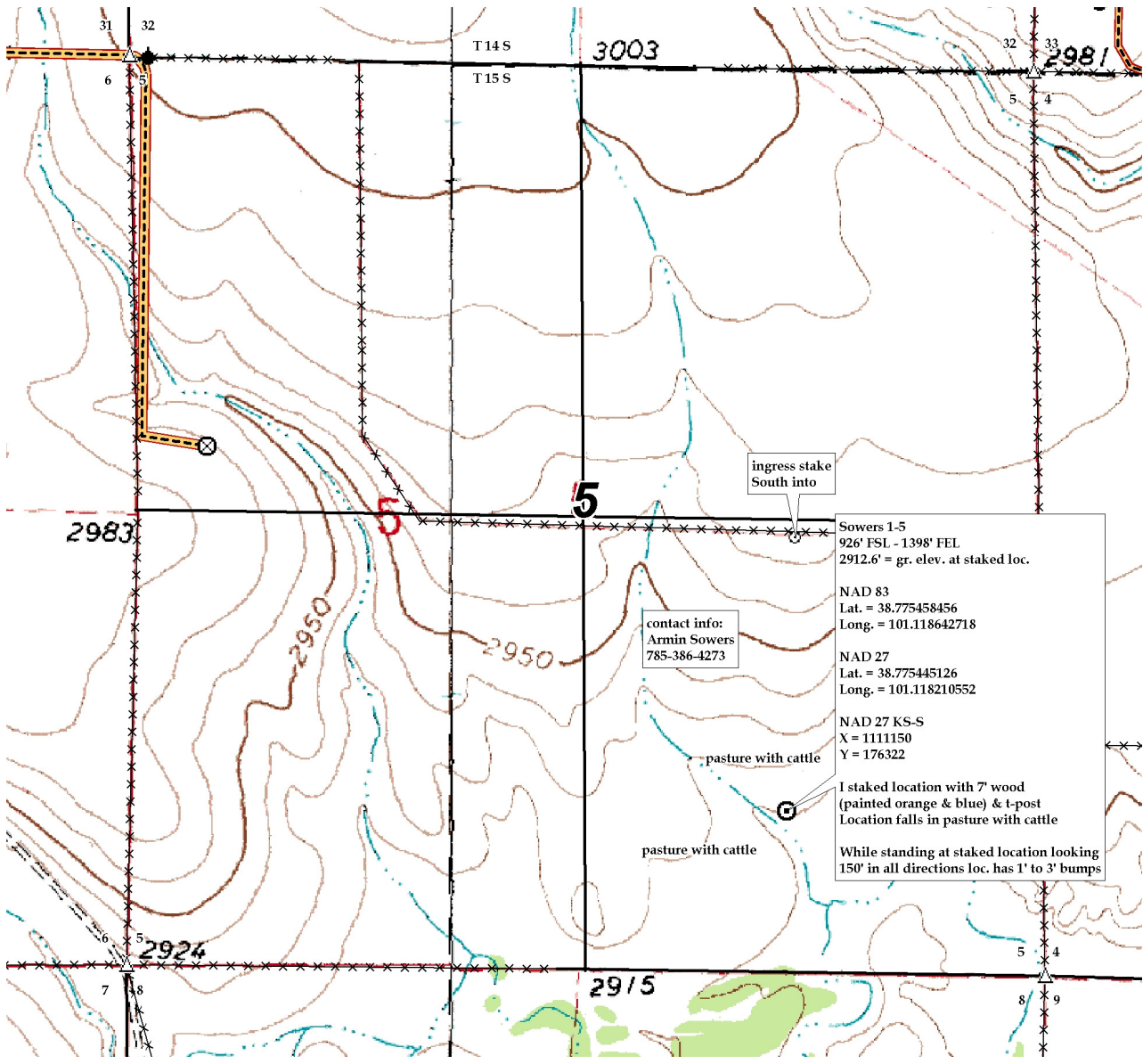
LEGEND

- irr. well
- water hydrant
- tank battery
- staked loc.
- prod. well/aband. well
- house
- gas line
- water line
- transmission powerline
- 3 phase powerline
- single phase powerline
- fence
- gravel/ sand rd.
- gravel trail/ lease rd.
- dirt rd.
- dirt trail/ lease rd.
- Hwy/ blacktop rd.



DIRECTIONS: From the West side of Russell Springs, KS at the intersection of Hwy 25 & Broadway St. – Now go 0.8 miles East on Broadway St. – Now go 8.5 miles South on 270 Rd. – Now go 1 mile East on Gold Rd. – Now go 1 mile East on lease rd. to the NW corner of section 5-15s-34w – Now go 0.5 mile South & East on lease rd. – Now go approx. 3470 S-SE & East through pasture with cattle to ingress stake South into – Now go approx. 1570' South through pasture with cattle, into staked location.

Final ingress must be verified with landowner or operator.
This drawing does not constitute a monumented survey or a land survey plat.
This drawing is for construction purposes only.



Sowers 1-5
926' FSL - 1398' FEL
2912.6' = gr. elev. at staked loc.

NAD 83
Lat. = 38.775458456
Long. = 101.118642718

NAD 27
Lat. = 38.775445126
Long. = 101.118210552

NAD 27 KS-S
X = 1111150
Y = 176322

I staked location with 7' wood (painted orange & blue) & t-post
Location falls in pasture with cattle

While standing at staked location looking 150' in all directions loc. has 1' to 3' bumps

contact info:
Armin Sowers
785-386-4273



6835
6736

TICKET NUMBER 51603
LOCATION Oakleyks
FOREMAN Jerry

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

FIELD TICKET & TREATMENT REPORT
CEMENT **Invoice # 808811**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
10-2-16	2777	Sewers 1-5	5	15S	34W	Logan
CUSTOMER Culbrea Th			Russell Spgs Sto Gold Etode deid Saccross pasture			
MAILING ADDRESS 3501 South Yale Avenue			TRUCK #	DRIVER	TRUCK #	DRIVER
CITY Tulsa			731	Cory D		
STATE OK			479	Cory D		
ZIP CODE 74135			772-7129	Walt D		

JOB TYPE 2 Stage HOLE SIZE 7 7/8 HOLE DEPTH 4650 CASING SIZE & WEIGHT 5 1/2 15.5#
 CASING DEPTH 4644 DRILL PIPE _____ TUBING _____ OTHER DV @ 2290
 SLURRY WEIGHT 14.2/11.6 SLURRY VOL 1.42/1.9 WATER gal/sk _____ CEMENT LEFT in CASING 44'
 DISPLACEMENT 109/54 1/2 DISPLACEMENT PSI 1000# MIX PSI 1700# RATE _____

REMARKS: Safety meeting & rig upon Sec. thru wind run float eq. scratchers on 6, 7, 8, 9, 10, 11, 12, 110, 13, 14, 15 centralizers on 2, 4, 7, 9, 10, 12, 14, 17, 23, 52, baskets on 5, 24, 53, DV Tool (top of 53 set @ 2290 run casing to bottom pump ball thru & circ. vis & 36 pump 5 bbl H₂O mix 500 gal mud flush pump 20 bbl KCL water mix 175 sks Thixobland III 5# Kol seal shut down release plug clean pump lines & displace 111 1/2 bbl (50 H₂O 61 mud) Final lift 1000# plug landed 1700# released back & float held open tool @ 1000# & circulate 3 hrs mix 450 sks lite blend VII after 500 gal mud flush shut down release plug clean pump lines displace with 55 bbl H₂O 500# lift plug landed & tool closed @ 1100# released back & float held put cement to pit
 20 sks mouse hole 30 sks Rat hole Cement Circulated
 Thank you
 Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE0454	1	PUMP CHARGE	3900 ⁰⁰	3900 ⁰⁰
CE0062	30	MILEAGE	7 ¹⁵	214 ⁵⁰
CE0710	29.73	ton mileage delivery	175	1570 ⁸⁸
CC5862	175 sks	Thixobland III	26 ⁰⁰	4550 ⁰⁰
CC6077	875 #	Kol seal	50	4375 ⁰⁰
CC5831	500 sks	lite blend VII	175 ⁰⁰	8750 ⁰⁰
CC6075	125 #	flow seal	3 ⁰⁰	375 ⁰⁰
CC6125	1000 gal	mud flush	65	6500 ⁰⁰
CC5300	2 gal	KCL	39 ⁰⁰	78 ⁰⁰
CP8485	1	5 1/2 APU Flat shoe	585 ⁰⁰	585 ⁰⁰
CP8254	1	5 1/2 latchdown assy	400 ⁰⁰	400 ⁰⁰
CP8554	10	5 1/2 centralizers	81 ⁰⁰	810 ⁰⁰
CP8629	3	5 1/2 baskets	385 ⁰⁰	1155 ⁰⁰
CP8676	40	5 1/2 scratchers	75 ⁰⁰	3000 ⁰⁰
CP8801	1	5 1/2 DV Tool	5970 ⁰⁰	5970 ⁰⁰
			Subtotal	32435 ⁸⁸
			-45%	14596 ¹⁵¹
			Subtotal	17839 ⁷³
			SALES TAX	1177 ⁴⁷
			ESTIMATED TOTAL	419,017 ²⁰

AUTHORIZATION [Signature] TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

~~6791~~
6791
6690

TICKET NUMBER **51595**
LOCATION Oakley Ks
FOREMAN Jerry Y

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice # 808763 Ks

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY	
10-1-16	2777	Sowers 1-5	5	15s	34w	Logan	
CUSTOMER <u>Culbreath</u>		Russell Sp		TRUCK #	DRIVER	TRUCK #	DRIVER
MAILING ADDRESS <u>3501 South Yale Avenue</u>		S to Gold		<u>731</u>	<u>Cory D</u>		
CITY <u>TULSA</u>		E to head of		<u>479</u>			
STATE <u>OK</u>		S & E		<u>639</u>			
ZIP CODE <u>74135</u>		into					

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 265 CASING SIZE & WEIGHT 8 5/8 234
 CASING DEPTH 265 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT _____ SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 20
 DISPLACEMENT 15 1/2 bbl DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting & rig up on Southwind 8 break circulation with rig free
m.x 180 SKs surface blend II wash up & displace with 15 1/2 bbl H₂O & shut in
Circulated a couple bbl to pit

Cement did
circulate

Thank you
Jerry & crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE 0450	1	PUMP CHARGE	1500.00	1500.00
CE 0002	30	MILEAGE	7.15	214.50
CE 0711	8.7	for mileage delivery	660.00	660.00
CC 5871	180 SKs	Surface blend II	23.00	4140.00
			Subtotal	6514.50
			-45%	2931.53
			Subtotal	3582.97
			SALES TAX	182.17
			ESTIMATED TOTAL	3765.14

Ravin 3737

AUTHORIZATION [Signature] TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.