

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

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
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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) (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	VOTH 2-4
Doc ID	1354965

Tops

Name	Top	Datum
Anhy	2594	+466
Base Anhy	2640	+2618
Topeka	3809	-749
Heebner	4035	-975
Lansing	4080	-1080
BKC	4365	-1305
Pawnee	4509	-1449
Cherokee Sh	4587	-1527
Johnson Zone	4623	-1563
Mississippi	4681	-1621



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

**FIELD TICKET & TREATMENT REPORT
CEMENT**

TICKET NUMBER 51804
LOCATION Oakley, KS
FOREMAN Walt Dinkel

Invoice # 810160

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
4-26-17	2777	Voth 1-4	4	12 ^s	32 ^w	Logan
CUSTOMER			TRUCK #	DRIVER	TRUCK #	DRIVER
Colbreath Oil & Gas			731	Cory Davis		
MAILING ADDRESS			479	Walt Dinkel		
3501 South Yale Avenue						
CITY	STATE	ZIP CODE				
Tulsa	OK	74135				

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 278' CASING SIZE & WEIGHT 8 5/8 - 23#
 CASING DEPTH 278 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 15.2 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 15' to 20'
 DISPLACEMENT 16 1/2 DISPLACEMENT PSI _____ MIX PSI _____ RATE 4 BPM

REMARKS: Safety Meeting, rig up on Southward #8, Give casing on bottom
Mix 190 SKS com, 3% CC - 2% bel, Displace BBL H₂O, Shut in
CEMENT DID CIRCULATE

Thank You
Walt & Crew

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
Co0471	1	PUMP CHARGE	1,150 ⁰⁰	1,150 ⁰⁰
Co0002	5	MILEAGE	7 ¹⁵	35 ⁷⁵
Co0711	8.93		1 ⁷⁵	660 ⁰⁰
CC5871	190 SKS	Surface Blend II	23 ⁰⁰	4,370 ⁰⁰
				6,215 ⁷⁵
		Less 30% Disc		1,864 ⁷⁵
				4,351 ⁰²
			SALES TAX	244.73
			ESTIMATED TOTAL	4595.76

William Dinkel
 AUTHORIZATION William Dinkel TITLE TP DATE 4-26-17

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Culbreath Oil & Gas

4-12-32 Logan, Ks

3501 S Yale Ave.
Tulsa, Ok 74135

Voth 2-4

ATTN: Larry Nicholson

Job Ticket: 63798

DST#: 1

Test Start: 2017.05.03 @ 08:33:17

GENERAL INFORMATION:

Formation: **H**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:49:47
 Time Test Ended: 16:21:47
 Interval: **4206.00 ft (KB) To 4255.00 ft (KB) (TVD)**
 Total Depth: 4255.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Brandon Turley
 Unit No: 79
 Reference Elevations: 3060.00 ft (KB)
 3050.00 ft (CF)
 KB to GR/CF: 10.00 ft

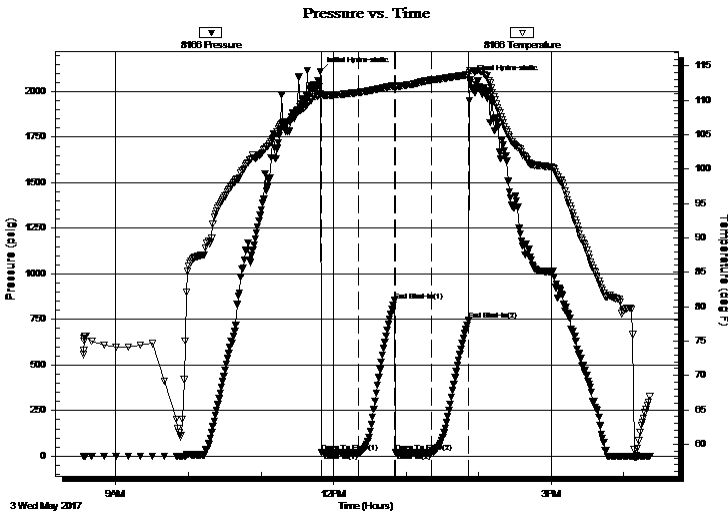
Serial #: 8166

Outside

Press@RunDepth: 18.87 psig @ 4207.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.05.03 End Date: 2017.05.03 Last Calib.: 2017.05.03
 Start Time: 08:33:22 End Time: 16:21:46 Time On Btm: 2017.05.03 @ 11:49:17
 Time Off Btm: 2017.05.03 @ 13:52:47

TEST COMMENT: IF: Weak Surface blow died in 4 min.
 IS: No return.
 FF: No blow.
 FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2108.84	110.98	Initial Hydro-static
1	20.55	110.49	Open To Flow (1)
31	18.29	111.14	Shut-In(1)
61	853.78	112.11	End Shut-In(1)
62	19.23	111.93	Open To Flow (2)
92	18.87	112.95	Shut-In(2)
122	744.08	113.70	End Shut-In(2)
124	2065.00	114.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud 100% m	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Culbreath Oil & Gas

4-12-32 Logan, Ks

3501 S Yale Ave.
Tulsa, Ok 74135

Voth 2-4

Job Ticket: 63798

DST#: 1

ATTN: Larry Nicholson

Test Start: 2017.05.03 @ 08:33:17

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: 67.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud 100%m	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

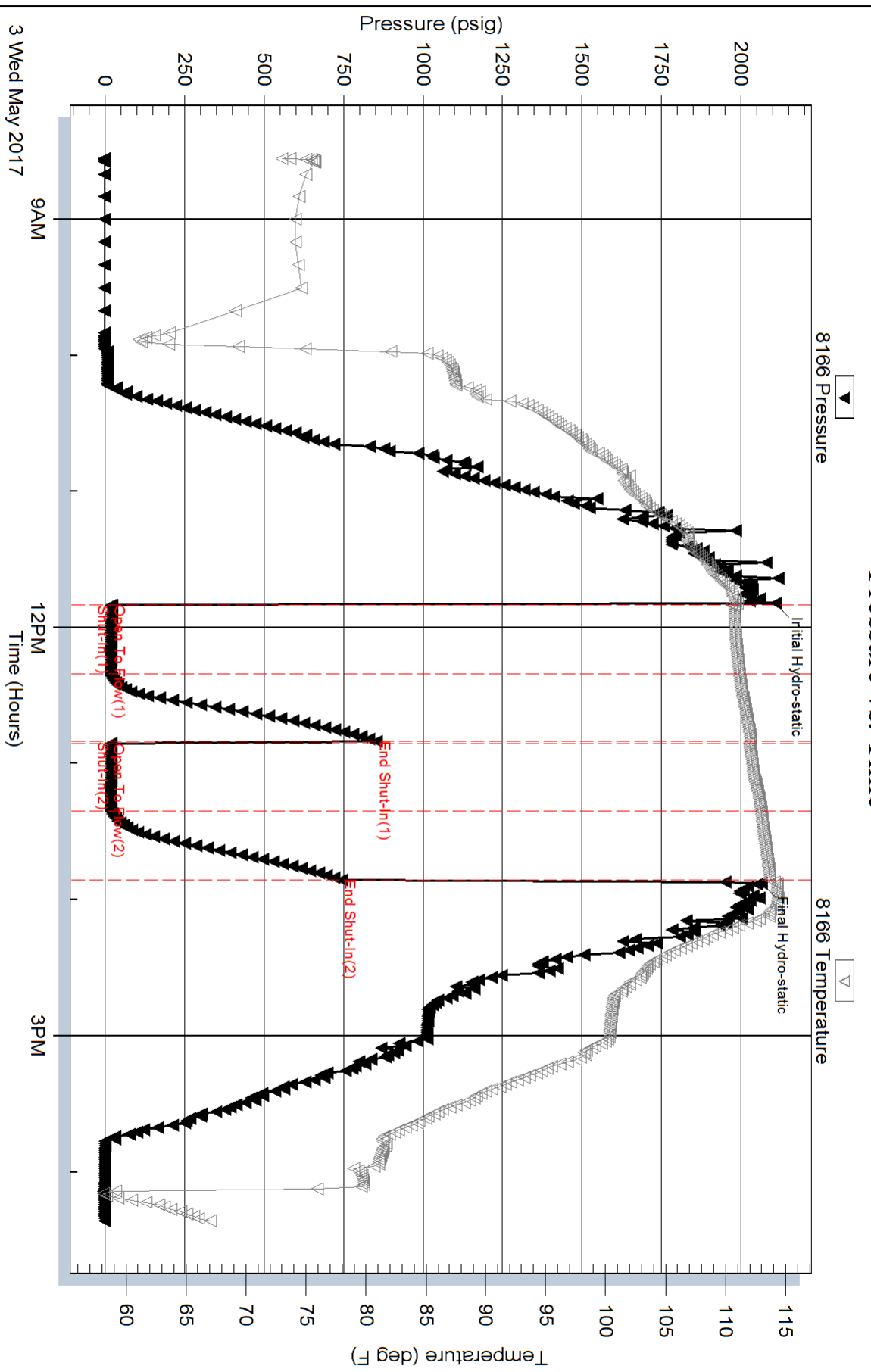
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



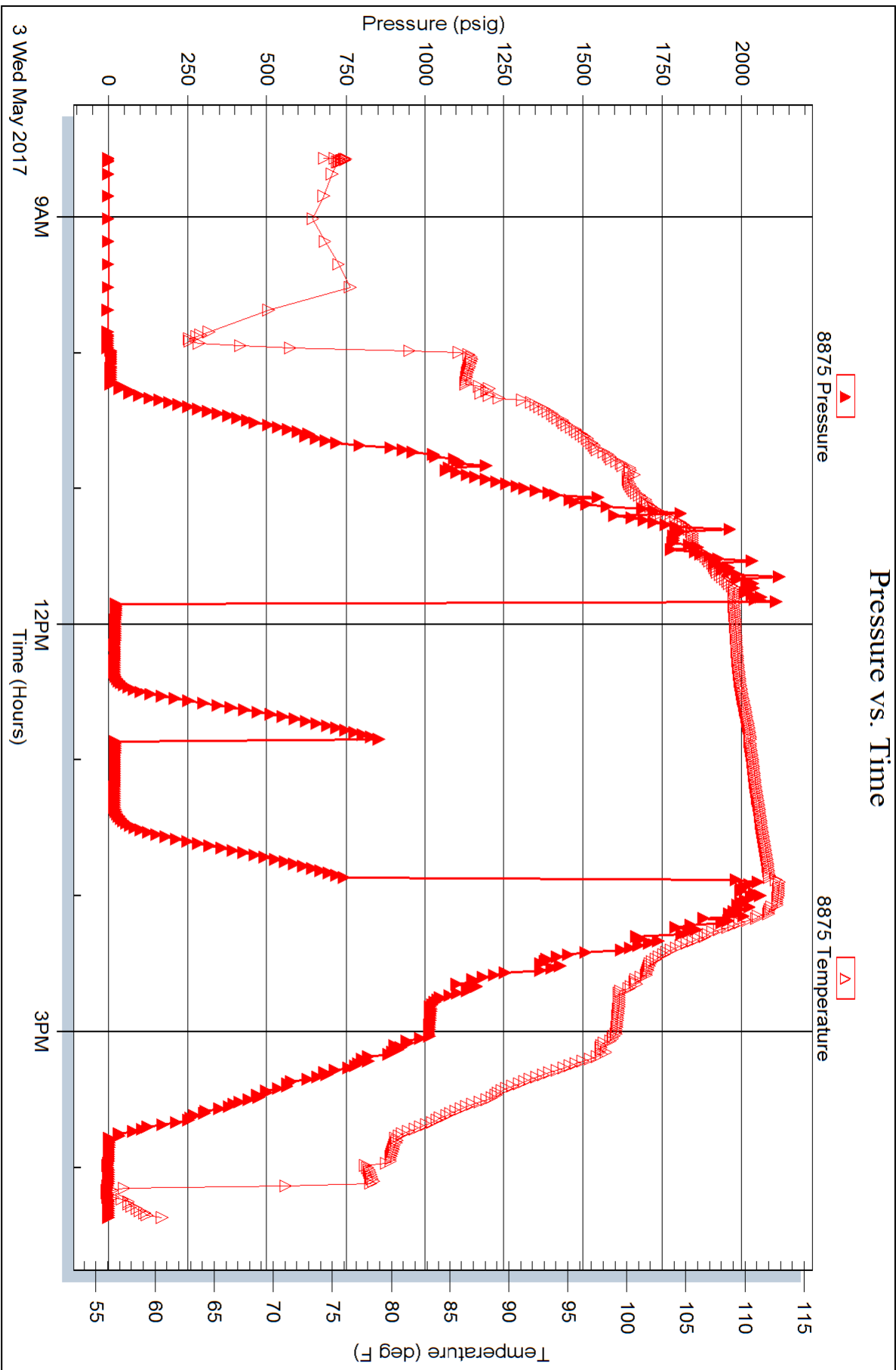
Serial #: 8875

Inside

Culbreath Oil & Gas

Voith 2-4

DST Test Number: 1





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Culbreath Oil & Gas

4-12-32 Logan, Ks

3501 S Yale Ave.
Tulsa, Ok 74135

Voth 2-4

ATTN: Larry Nicholson

Job Ticket: 63799

DST#: 2

Test Start: 2017.05.04 @ 05:30:22

GENERAL INFORMATION:

Formation: **J**
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole (Reset)**
 Time Tool Opened: 07:31:22 Tester: **Brandon Turley**
 Time Test Ended: 11:28:22 Unit No: **79**

Interval: 4265.00 ft (KB) To 4305.00 ft (KB) (TVD) Reference Elevations: **3060.00 ft (KB)**
 Total Depth: **4305.00 ft (KB) (TVD)** **3050.00 ft (CF)**
 Hole Diameter: **7.88 inches** Hole Condition: **Good** KB to GR/CF: **10.00 ft**

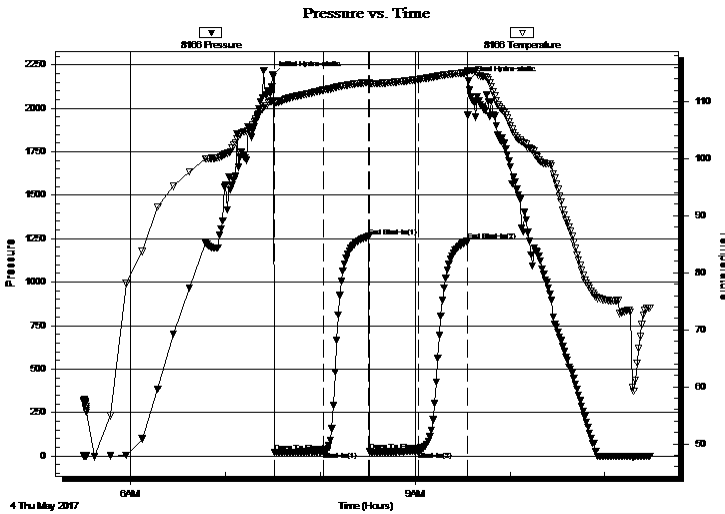
Serial #: 8166

Outside

Press@RunDepth: 26.60 psig @ 4266.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.05.04 End Date: 2017.05.04 Last Calib.: 2017.05.04
 Start Time: 05:30:27 End Time: 11:28:21 Time On Btm: 2017.05.04 @ 07:29:52
 Time Off Btm: 2017.05.04 @ 09:33:52

TEST COMMENT: IF: Weak surface blow died in 3 min.
 IS: No return.
 FF: No blow.
 FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2190.05	110.16	Initial Hydro-static
2	20.79	109.76	Open To Flow (1)
32	26.69	112.02	Shut-In(1)
61	1262.66	113.37	End Shut-In(1)
62	25.31	113.06	Open To Flow (2)
92	26.60	113.90	Shut-In(2)
123	1234.39	115.07	End Shut-In(2)
124	2156.91	115.47	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1.00	free oil 100%o	0.01
10.00	mud 100%m	0.14

* 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

4-12-32 Logan, Ks

3501 S Yale Ave.
Tulsa, Ok 74135

Voth 2-4

Job Ticket: 63799

DST#: 2

ATTN: Larry Nicholson

Test Start: 2017.05.04 @ 05:30:22

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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1.00	free oil 100%o	0.014
10.00	mud 100%m	0.140

Total Length: 11.00 ft Total Volume: 0.154 bbl

Num Fluid Samples: 0

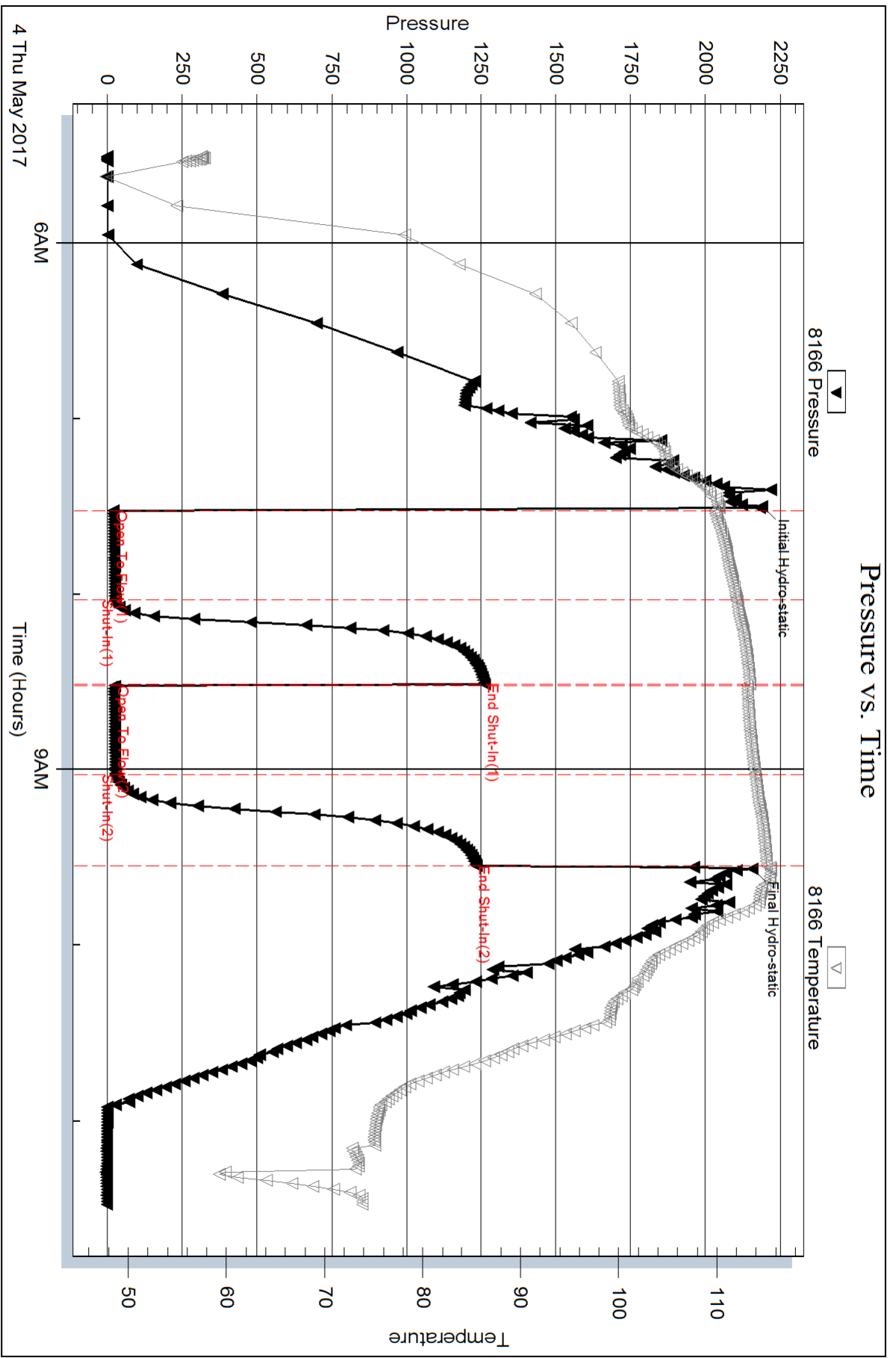
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



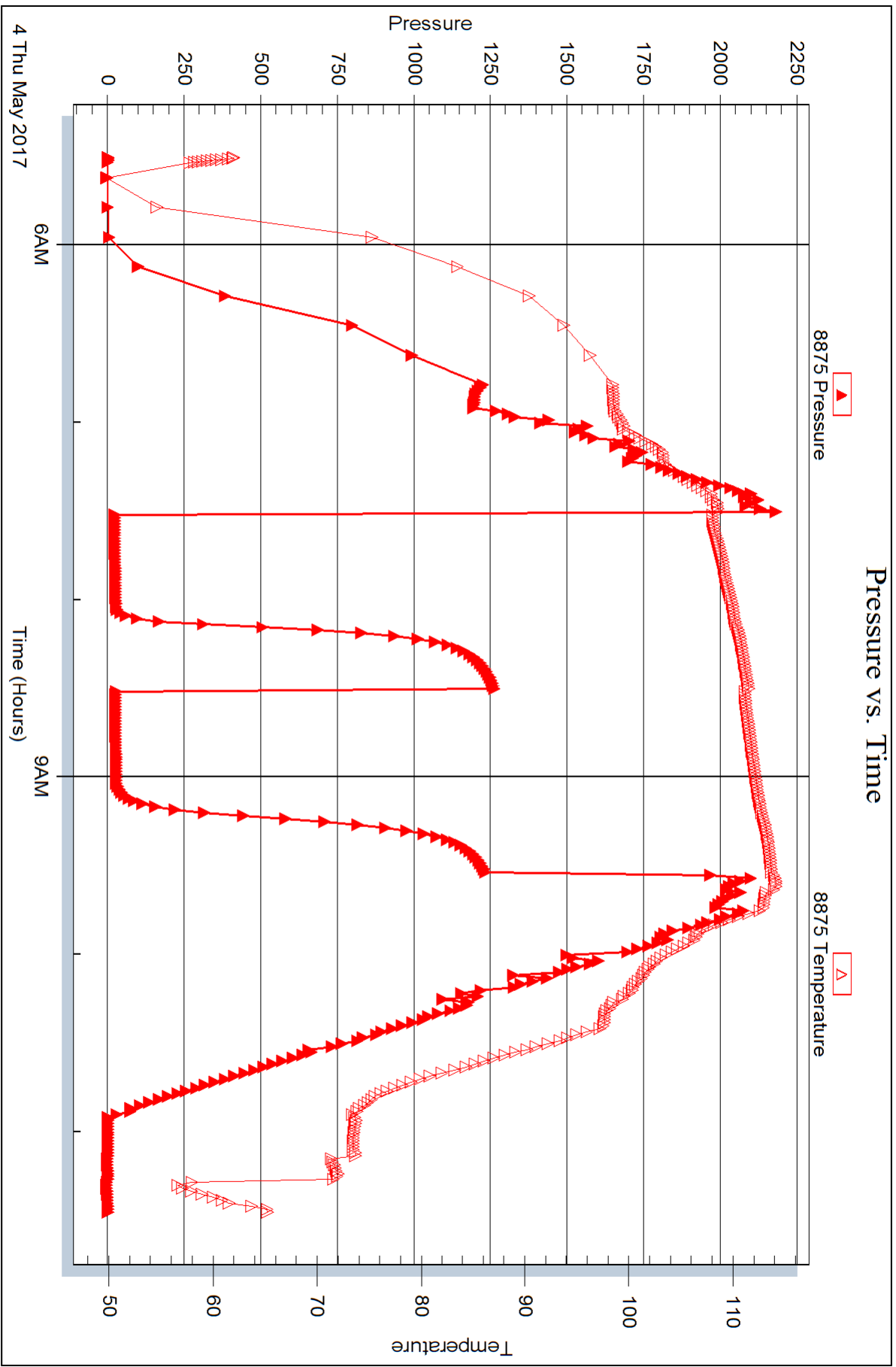
Serial #: 8875

Inside

Culbreath Oil & Gas

Voith 2-4

DST Test Number: 2





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Culbreath Oil & Gas

4-12-32 Logan, Ks

3501 S Yale Ave.
Tulsa, Ok 74135

Voth 2-4

ATTN: Larry Nicholson

Job Ticket: 63800

DST#: 3

Test Start: 2017.05.06 @ 04:15:07

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:45:37

Time Test Ended: 12:26:07

Test Type: Conventional Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: 4594.00 ft (KB) To 4650.00 ft (KB) (TVD)

Reference Elevations: 3060.00 ft (KB)

Total Depth: 4650.00 ft (KB) (TVD)

3050.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8166 Outside

Press@RunDepth: 663.57 psig @ 4595.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.05.06

End Date: 2017.05.06

Last Calib.: 2017.05.06

Start Time: 04:15:12

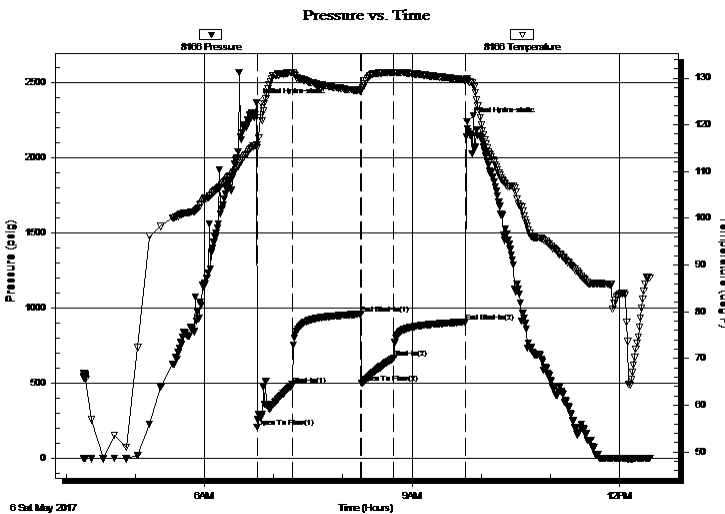
End Time: 12:26:06

Time On Btm: 2017.05.06 @ 06:45:07

Time Off Btm: 2017.05.06 @ 09:47:37

TEST COMMENT: IF: BOB in 3 min.
IS: No return.
FF: BOB in 4 1/2 min.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2365.49	115.81	Initial Hydro-static
1	205.89	115.07	Open To Flow (1)
31	488.34	131.19	Shut-In(1)
91	958.61	127.31	End Shut-In(1)
91	501.08	127.45	Open To Flow (2)
119	663.57	131.15	Shut-In(2)
181	907.06	129.59	End Shut-In(2)
183	2238.09	129.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
819.00	mcw 90%w 10%m	11.49
252.00	w cm 40%w 60%m	3.53
346.00	w cm oil spots 20%w 80%m	4.85

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

4-12-32 Logan, Ks

3501 S Yale Ave.
Tulsa, Ok 74135

Voth 2-4

Job Ticket: 63800

DST#: 3

ATTN: Larry Nicholson

Test Start: 2017.05.06 @ 04:15:07

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:

24000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
819.00	mcw 90%w 10%m	11.488
252.00	w cm 40%w 60%m	3.535
346.00	w cm oil spots 20%w 80%m	4.853

Total Length: 1417.00 ft Total Volume: 19.876 bbl

Num Fluid Samples: 0

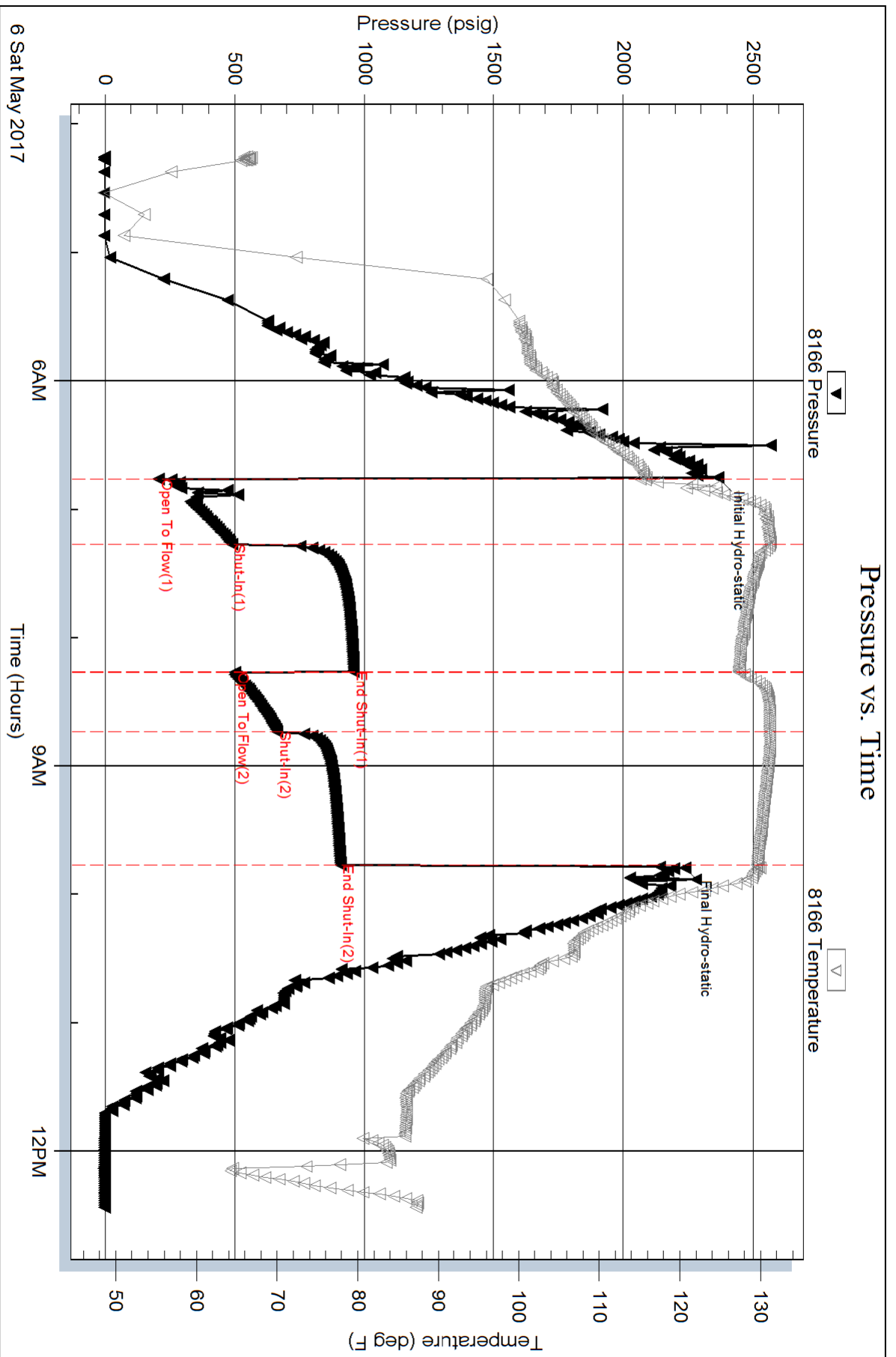
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .26@78=24000



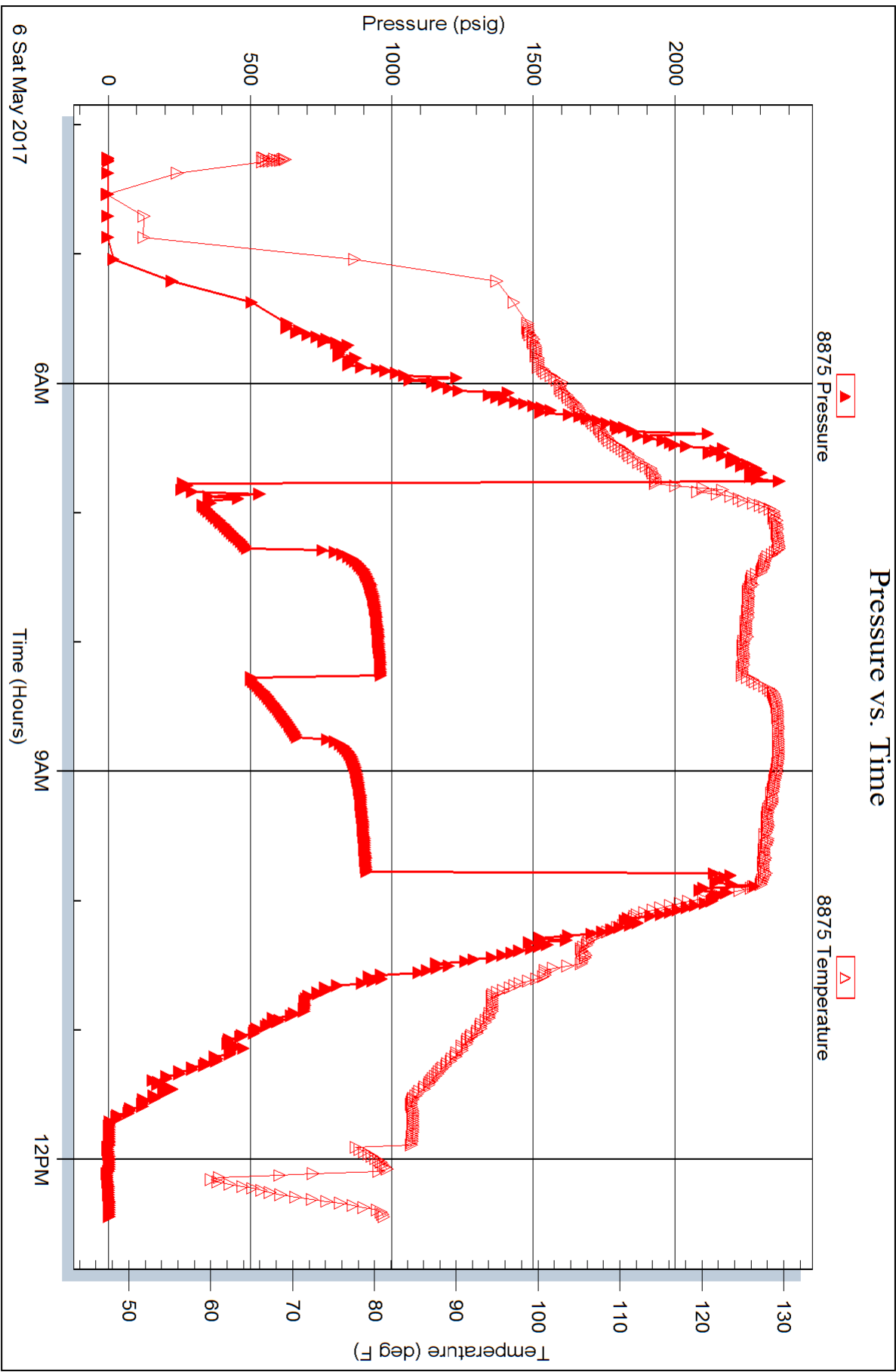
Serial #: 8875

Inside

Culbreath Oil & Gas

Voith 2-4

DST Test Number: 3



GEOLOGICAL REPORT

Larry A. Nicholson

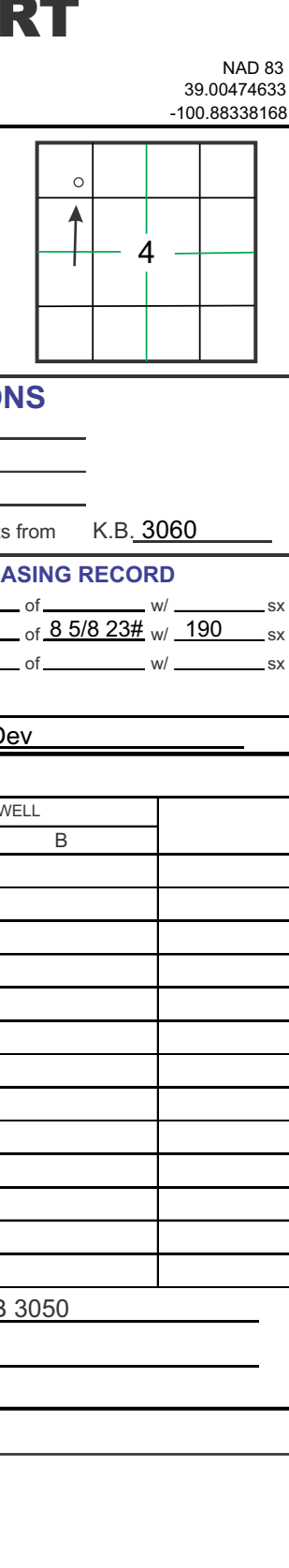
NAD 83
39.00474633
100.88381668

COMPANY & WELL: **Culbreath Oil & Gas Co. Inc. Voith #2-4**
LOCATION: **750' FNL 1200' FWL NE SE NW NW**
SEC: **4** TWP: **12S** RGE: **32W**
COUNTY: **Logan** STATE: **Ks**

COMPANY: **Culbreath Oil & Gas Company Inc.**
API #: **15-109-21501**
LEASE: **Voith**
LOCATION: **NE SE NW NW**
SURVEY: **750' FNL 1200' FWL**
SECTION: **4** TWP: **12S** RGE: **32W**
COUNTY: **Logan** STATE: **Kansas**

CONTRACTOR: **Southwind** Rig # **8**
SPUD: **04-26-17 4:00 pm** COIMP: **K.B. 3060**
RTD: **4790'** LTD: **4787'** D.F.: **3050**
MUD UP AT: **3365'-3385' 480 bbls** G.L.: **3050**
MUD TYPE: **Chemical Andy's Mud, Airon/Blew** All measurements from **K.B. 3060**

SAMPLES SAVED: FROM **3600** TO **RTD** CASING RECORD
DRILLING TIME: FROM **3600** TO **RTD** Surface **277'** of **8.58 23# w/ 190** sx
SAMPLES EXAMINED: FROM **3600** TO **RTD** Production **277'** of **8.58 23# w/ 190** sx
GEOLOGICAL SUPERVISION: **LARRY A. NICHOLSON**
WELL SITE GEOLOGIST: **LARRY A. NICHOLSON**

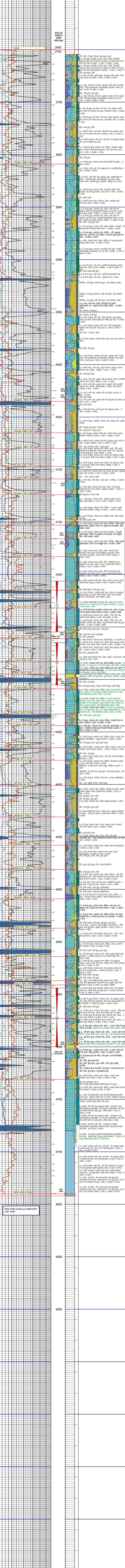
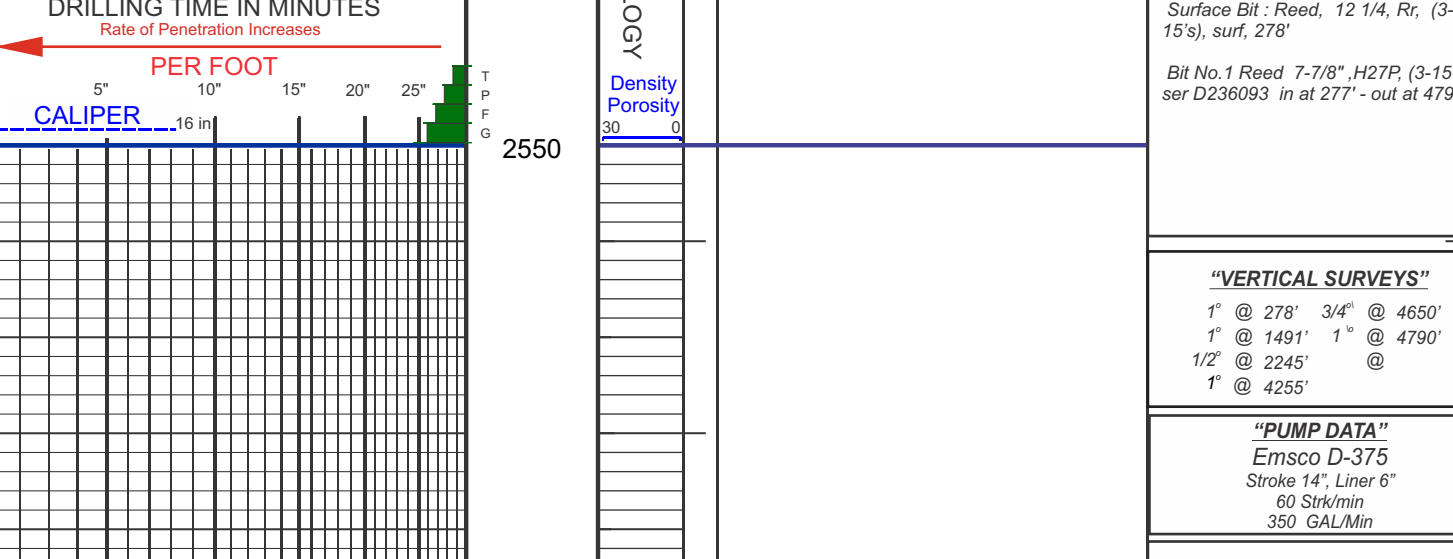


FORMATION	SAMPL. TOOLS	SURSEA DATUM	ELEC LOG TOOLS	SURSEA DATUM	REFERENCE WELL
Anhydrite	2597	+463	2594	+466	2578 +472 -9
Bu/Am	2620	+440	2618	+442	2602 +448 -8
Hoebner	3809	-749	3804	-744	3792 -742 -7
Hoebner	4035	-975	4030	-970	4016 -968 -9
Lansling	4080	-1020	4075	-1015	4060 -1010 -10
Stark	4265	-1235	4260	-1230	4279 -1229 -5
BKC	4365	-1305	4360	-1300	4350 -1300 -5
Pawnee	4509	-1449	4504	-1444	4488 -1438 -11
Cherokee	4587	-1527	4582	-1522	4567 -1517 -10
Johnson	4623	-1563	4618	-1558	4600 -1550 -13
Miss	4681	-1621	4676	-1616	4660 -1610 -11
RTD	4780		4780		4770 -1720
LTD	4787		4785		4771 -1721

REMARKS & RECOMMENDATIONS:
Based on weak sample shows and dt results the well was P&A
Note Drill Time is 5' lower than Electric logs. Log curves were move down 5' on Georeport.
The Anhydrite was 5' low on drilling time vs logs.
Base on pipestap difference of .03 ft on first dst and general harder drilling, the drilling time depth appears correct.

LAN 7/92, Modified 5/05, 11/11, 4/12 Hanover, KS 66845 1inch = 25.4mm 8.5 x 9.5 216 mm x 2460 mm

LEGEND



Spud 07:00 AM 04-26-2017
RTD 03:06 AM 05-07-2017

"BIT RECORD"
Surf. Bit Read: 12 1/4, Rr: (3-15), surf, 278'
Bit No: 1 Read: 7-78' H2P7 (3-15), dt: 238093 in at 277' - out at 4790'

"VERTICAL SURVEYS"
1' @ 278' 34' @ 490'
1' @ 149' 1' @ 4790'
1/2' @ 2245' 1' @ 4295'

"PUMP DATA"
Emasco D-375
Stroke 14" Liner 6"
60 Stk/Wr
350 GAL/Min

"DAILY REPORT"
04-26-2017 - 4:00 PM
Spud
Drig to 12 1/4' to 278'
Set new 7 1/2" 238 8-5/8" set @ 277'
190 sx Common 3%CC, 2% Gel
Consolidated, did circ to pits
Plug down 10:45 am 04-26-17
Drig plug 01:00 pm 04-27-17

04-27-2017 - 7:00 AM
Drig @ 1627'

04-28-2017 - 7:00 AM
Drig @ 1905'

04-29-2017 - 7:00 AM
Drig @ 2185'

04-30-2017 - 7:00 AM
Drig @ 2470'

05-01-2017 - 7:00 AM
Drig @ 2790'

05-02-2017 - 7:00 AM
Drig @ 4004'

05-03-2017 - 7:00 AM
Dst#1 @ 4255'

05-04-2017 - 7:00 AM
Dst#2 @ 4305'

05-05-2017 - 7:00 AM
Drig @ 4470'

05-06-2017 - 7:00 AM
Drig @ 4450'

05-07-2017 - 03:06 AM
RTD @ 4790'

05-07-2017 - 6:45 AM
Rig up Halliburton LTD @ 4,787
12:01 PM
P&A

Mud Check 4 at 3,859
vis: 47 wt 8.8 Chlor 3500
LCM: 1.5# Ph: 10.5 WL: 8.0

Mud Check 5 at 4,083
vis: 47 wt 8.8 Chlor 3500
LCM: 1.5# Ph: 10.5 WL: 8.0

Mud Check 6 at 4,255
vis: 47 wt 9.1 Chlor 3000
LCM: 1.5# Ph: 10.0 WL: 8.4

Mud Check 7 at 4,305
vis: 47 wt 9.1 Chlor 3000
LCM: 1.5# Ph: 10.0 WL: 8.4

DST (1) 4206-4255
Lansing H
30-30-30-30
IP: wk surf bleed 4 min
IS: n return
FF: n blow
FS: n return
Temp 113 F

Total Rec: 1' FO, 10' Mud
FP: 20-28 FFP: 19-18
SIP: 853 FSP: 744
HP: 2108 FHP: 2065

Mud Check 8 at 4,587
vis: 47 wt 9.1 Chlor 3000
LCM: 1.5# Ph: 10.0 WL: 8.6

DST (2) 4265-4306
K3C J
30-30-30-30
IP: wk surf bleed 3 min
IS: n return
FF: n blow
FS: n return
Temp 113 F

Total Rec: 1' FO, 10' Mud
FP: 20-28 FFP: 25-26
SIP: 1262 FSP: 1234
HP: 2190 FHP: 2156

Mud Check 9 at 4,681
vis: 47 wt 9.3 Chlor 3000
LCM: 1.5# Ph: 10.0 WL: 8.4

DST (3) 4594-4650
Johnson
30-30-30-30
IP: BOB in 3 min
IS: n return blow
FF: BOB in 4 1/2 min
FS: n return blow
Temp 129 F
Gravity 40 API
RW: 26 @ 78 F
Chlorides 24,000 ppm

Mud Check 10 at 4,681
vis: 47 wt 9.3 Chlor 3000
LCM: 1.5# Ph: 10.0 WL: 8.4

COMPANY: **Culbreath Oil & Gas Company Inc.** ELEVATIONS: **K.B. 3060**
LEASE: **Voith #2-4 NE SE NW NW** D.F.: **3050**
LOCATION: **750' FNL 1200' FWL** SEC: **4** TWP: **12S** RGE: **32W** G.L.: **3050**
COUNTY: **Logan** STATE: **Ks** All measurements from **K.B. 3060**