

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	Farmer, John O., Inc.
Well Name	CLACK UNIT 1
Doc ID	1668752

All Electric Logs Run

Compensated Density Neutron Log
Dual Induction Log
Micro Resistivity Log
Cement Bond Log

Form	ACO1 - Well Completion
Operator	Farmer, John O., Inc.
Well Name	CLACK UNIT 1
Doc ID	1668752

Tops

Name	Top	Datum
Anhydrite	1706'	(+529)
Topeka	3179'	(-944)
Heebner	3386'	(-1151)
Toronto	3409'	(-1174)
Lansing	3426'	(-1191)
Base/KC	3637'	(-1402)
Arbuckle	3728'	(-1493)
L.T.D.	3814'	(-1579)



Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

DRILLER'S LOG

Operator: John O. Farmer, Inc. Lic# 5135 Contractor: Discovery Drilling Co., Inc. LIC#31548
370 West Wichita Avenue - P.O. Box 352 PO Box 763
Russell, KS 67665 + 0352 Hays, KS 67601

Lease: Clack Unit # 1 Location: 245 FNL - 4290 FEL
N/2/NE/NW/NW
Section 16/ 9S/ 21W
Graham County, KS

Loggers Total Depth: 3814' API#15- 065-24,218-00-00
Rotary Total Depth: 3810' Elevation: 2227 GL - 2235 KB
Commenced: 6/22/2022 Completed: 6/28/2022
Casing: 8 5/8" @ 223' W/150sks Status: Oil Well
5 1/2" @ 3808.92'KB W/150sks
Port Collar @ 1706'

DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shales	<u>0'</u>	Shale	<u>1739'</u>
Dakota Sand	<u>879'</u>	Shale & Lime	<u>2093'</u>
Shale	<u>940'</u>	Shale	<u>2240'</u>
Cader Hill Sand	<u>1156'</u>	Shale & Lime	<u>2827'</u>
Red Bed Shale	<u>1388'</u>	Lime & Shale	<u>3383'</u>
Anhydrite	<u>1705'</u>	RTD	<u>3810'</u>
Base Anhydrite	<u>1739'</u>		

STATE OF KANSAS))
) ss
COUNTY OF ELLIS)

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

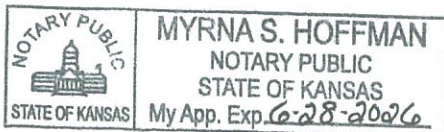
Thomas H. Alm

Subscribed and sworn to before me on 6-30-2022

My Commission expires: 6-28-2026

(Place stamp or seal below)

Notary Public





AUSTIN B. KLAUS



Cell 785.650.3629
Work 785.483.3145
Ext 225

PO BOX 352
Russell, KS 67665
austin.klaus@johnofarmer.com

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Clack Unit #1
API: 15-065-24218-0000
Location: Graham County
License Number:
Spud Date: 6/22/2022
Surface Coordinates: Section 16, Township 9 South, Range 21 West
245' FNL & 4,290' FEL
Bottom Hole Coordinates: Vertical well w/ minimal deviation, same as above
Ground Elevation (ft): 2,227
Logged Interval (ft): 3,100
Formation: Topeka - Arbuckle
Type of Drilling Fluid: Chemical (Andy's Mud & Chemical Co.)

Region: Kansas
Drilling Completed: 6/28/2022
K.B. Elevation (ft): 2,235
Total Depth (ft): 3,810'

Printed by StripLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: John O. Farmer, Inc.
Address: P.O. Box 352
Russell, KS 67665

Comments

The Clack Unit #1 well was drilled by Discovery Drilling Rig #4 (Tool Pusher: Ryan Gaschler).

The location for the Clack Unit #1 was discovered via 3D seismic survey. Drill time was recorded and rock samples were gathered and evaluated from 3,150' - 3,810'. Oil shows were encountered in the Lansing A,F,I,J,K and Arbuckle. Structurally, the Lansing top was picked 3' low to the comparison well, Clack A #1 (970' FNL & 890' FWL). Structure thinned and the Arbuckle top was picked 6' high to the comparison well. Upon completion of electric logs, a straddle test was run to evaluate the top 17' of the Arbuckle. This test recovered 1,575' clean oil (see complete results below). After comprehensive evaluation of all oil shows, drill stem test results, & electric logs, the decision was made to set 5-1/2" production casing to further evaluate the Clack Unit #1 on 6/28/2022.

ROCK TYPES

Anhy
Bent
Brec
Cht

Clyst
Coal
Congl
Dol

Gyp
Igne
Lmst
Meta

Mrlst
Salt
Shale
Shcol

Shgy
Sltst
Ss
Till

OTHER SYMBOLS

POROSITY
E Earthy
F Fenest
F Fracture
X Inter
M Moldic
O Organic
P Pinpoint

Vuggy
SORTING
W Well
M Moderate
P Poor

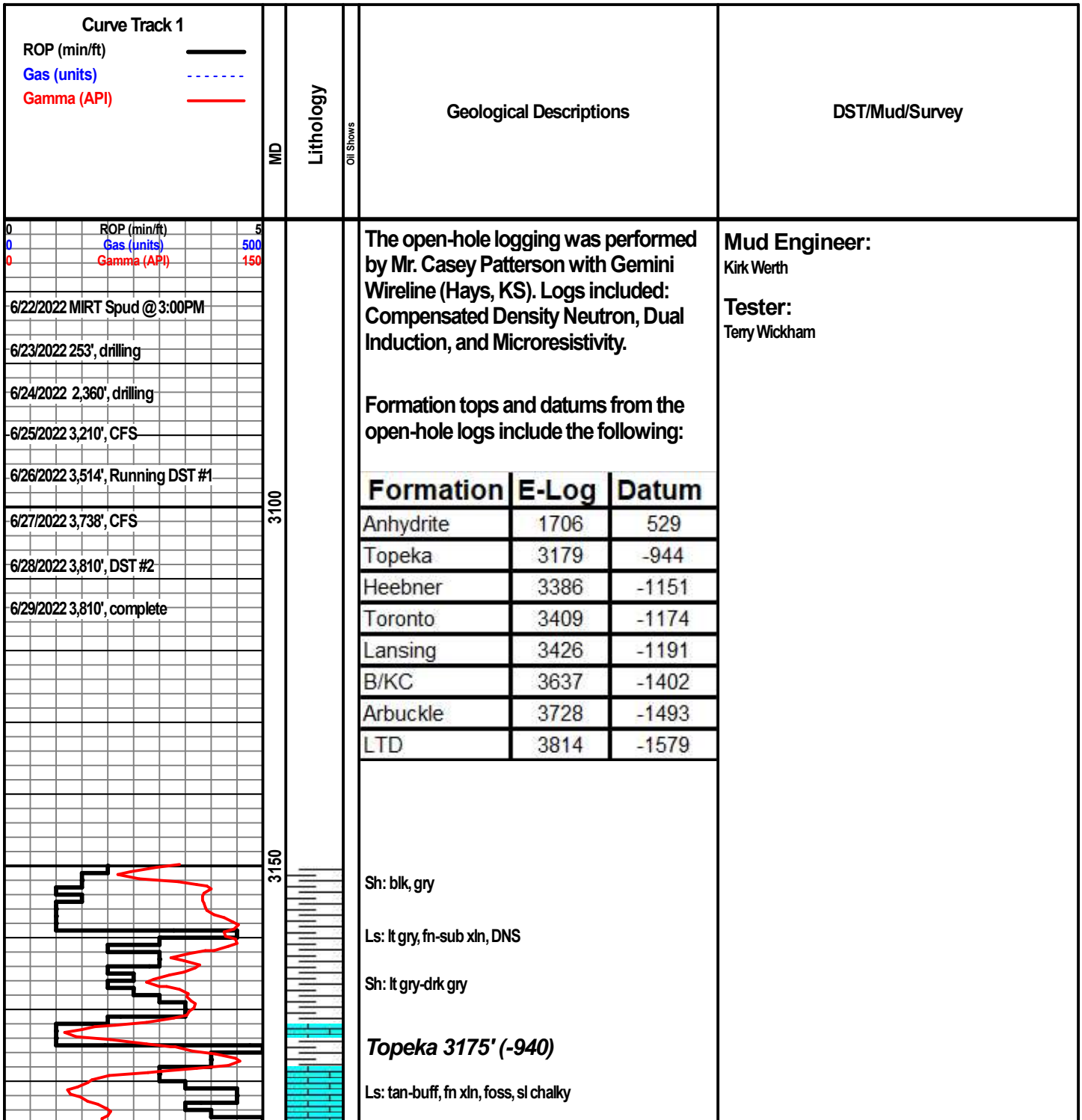
ROUNDING
R Rounded
r Subrnd
a Subang
A Angular

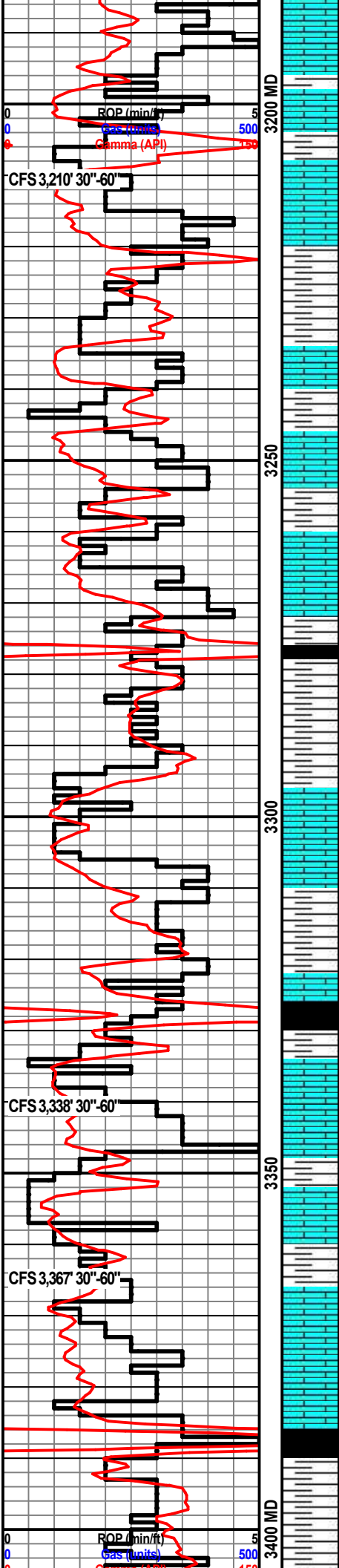
Spotted
 Ques
 Dead

EVENT
 Rft
 Sidewall

INTERVAL
■ Core
□ Dst

OIL SHOW
◆ Even





Ls: tan-gry, fn xln, foss, no visible porosity, sl chalky

Sh: drk gry

Ls: off wh-tan, fn xln, poor-fair pp vuggy porosity, scat oil stn, VSSFO, sl odor, scat chalk

Ls: tan-gry, fn-sub xln, DNS, foss

Sh: lt gry

Ls: tan-gry, fn-sub xln, poor int xln porosity, scat foss

Sh: lt gry

Ls: tan-lt gry, fn xln, foss, poor int xln porosity, NSFO, chalky

Sh: drk gry-blk

Sh: lt-drk gry

Ls: off wh-tan, fn xln, fair int part porosity, scat dead oil stn, NSFO

Sh: lt-drk gry

Sh: drk gry-blk

Ls: off wh-tan, fn xln, fair-good int part porosity, mostly barren, scat chert

Ls: tan-gry, fn-sub xln, DNS

Ls: buff, fn xln, scat foss, fair-good int part porosity, barren

Ls: off wh-tan, fn xln, poor pp porosity, NSFO, scat foss

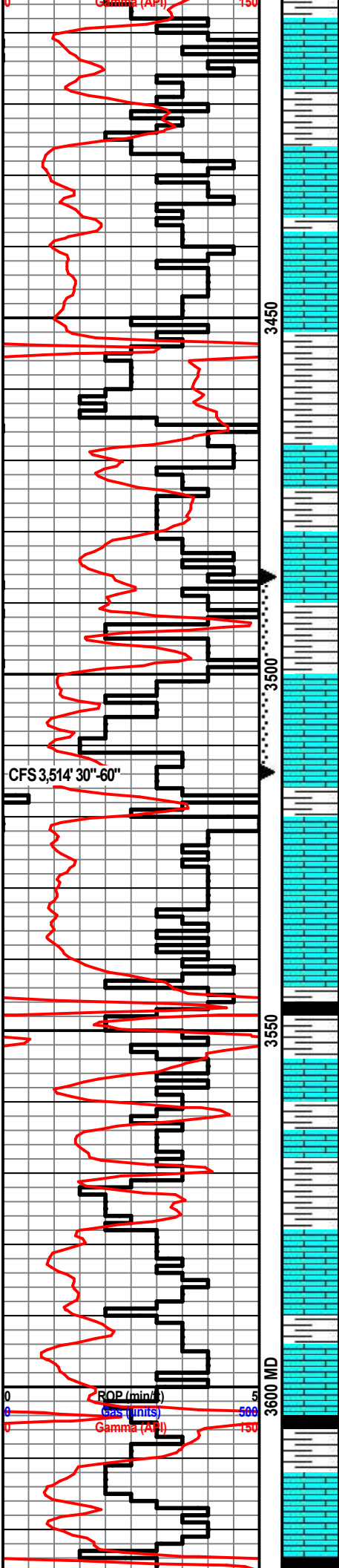
Heebner 3381' (-1146)

Sh: blk, carb, fissile

Sh: lt-drk gry

Toronto 3404' (-1160)

Wt: 8.8
Vis: 52



Ls: off wh-tan, fn xln, poor-fair int part porosity, scat edge stn, NSFO, scat chert

Sh: lt-drk gry

Lansing 3421' (-1186)

Ls: off wh-tan, fn xln, foss, fair-good int foss & int part porosity, fair stn in porosity, SSFO, sl odor

Sh: lt gry

Ls: off wh, fn xln, no visible porosity, chalky, scat chert

Sh: lt-drk gry

Ls: off wh-tan, fn xln, fair int xln porosity, lt oil stn in porosity, sl odor

Sh: lt-drk gry, scat red

Ls: off wh-tan, fn xln, poor int xln porosity, scat chert

Sh: lt-drk gry

Ls: off wh-tan, fn xln, poor-fair int part porosity, scat edge stn

Ls: off wh-tan, fn xln, foss, good int foss porosity, good oil sat, FSFO in cup, fair-good odor

CFS 3,514' 30"-60"

Sh: drk gry-brm-gm

Ls: off wh, fn xln, poor int xln porosity, chalky

Ls: ala

Sh: drk gry-blk

Ls: off wh-tan, fn xln, foss, poor-fair int part porosity, scat edge stn, NSFO, scat chert

Ls: off wh-tan, fn-sub xln, DNS

Sh: drk gry

Ls: off wh-tan, fn xln, foss, poor-fair int foss & int part porosity, fair oil stn, SSFO, sl odor

Ls: off wh-tan, fn xln, foss, poor int xln porosity, scat vuggy porosity, scat stn in porosity, VSSFO, sl odor

Sh: drk gry-blk

Ls: off wh-tan, fn xln, foss, fair int foss & int part porosity, fair oil stn, SSFO, sl-fair odor

Sh: drk gry-blk

DST #1 3,486-3,514' (Lansing E & F)

30"-60"-30"-60"

IF: weak blow built to 8", no blow back on SI

FF: weak blow built to 3", no blow back on SI

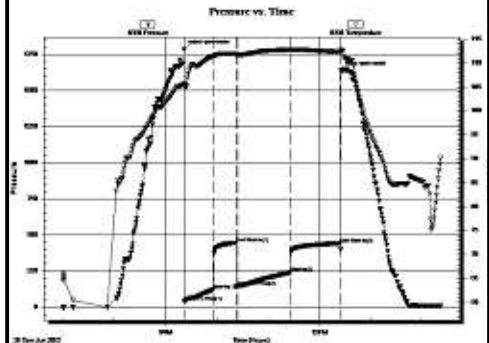
Rec: 485' Muddy Water (10% M, 90% W)

FP: 36-121, 145-240#

SIP: 443-442#

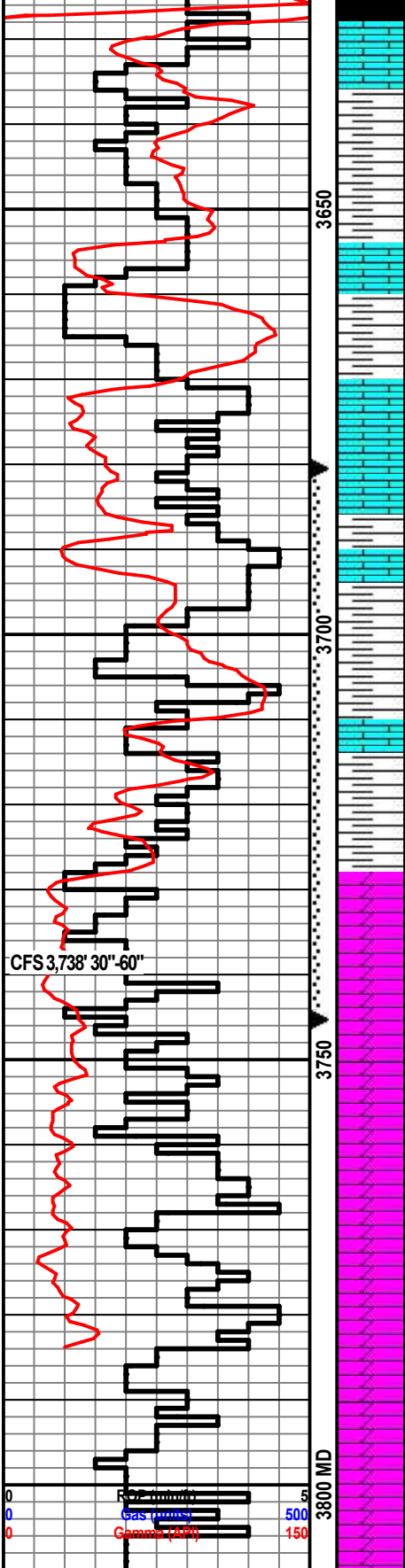
HP: 1,782-1,633#

BHT: 113



Wt: 9.1

Vis: 50



Sh: drk gry-bm
 Ls: off wh-tan, fn xln, poor int xln porosity, scat stn in porosity, NSFQ, chalky

B/KC 3633' (-1398)

Sh: lt-drk gry-bm-gm

Sh: lt-drk gry-bm, scat sltst

Ls: off wh-tan-lt gry, fn xln, DNS, scat chert

Sh: drk gry-bm

Ls: off wh-tan, fn xln, poor-fair int xln porosity, fair stn-sat, SSFO, fair odor

Sh: drk gry-bm-gm

Sh: lt-drk gry, sltst

Ls: off wh-tan, fn xln, DNS, chalky

Sh: drk gry-gm

Arbuckle 3731' (-1496)

● Dolo: tan-bm, md-crs rhom xln in 30", tmg sm rhombs in 60", all good int xln & vug porosity, vry gd-tot sat, VGSFO, good strong odor, scum free oil in cup

● Dolo: tmg lt tan, fn suc xln & DNS, w/ pr show, then incr amt md-lrg rhombs w/ good lrg vugs, fr sat w/ FSFO, good odor, scat sndy dolo w/ NS

● Dolo: tan, md rhomb xln, mostly pr porosity DNS w/ pr show, scat fr vug porosity, w/ fr-gd SFO in porosity, many tite rx, some yel org hugh, good odor

● Dolo: tan-bm, tmg fn xus xln w/ scat rhombs, fr-gd int xln porosity, w/ few sml vugs, good sat w/ F-GSFO, fr-good odor, tmg wh-tan, fn suc xln, then md rhomb xln, pr porosity & DNS, tite, pr stn, barren

● Dolo: tan-lt tan, md rhomb xln w/ fr-god vug por, fr lt bm stn w/ spttd SFO, few sml gil flakes, fr amt ool cht & some ool dolo, 1-2 rx w/ stn in vugy por, fr odor

○ Dolo: tan, mostly fn suc xln w/ scat sml rhombs, some ool dolo ala w/ fr vug porosity, pr-gr stn & spttd SFO, tmg mostly tite & DNS, many barren rx, lt odor, fr amt shp ool chert

DST #2 3,680-3,745' (Top 17' of Arbuckle)

10"-30"-10"-30"

IF: BOB in 30 sec., surface blow back on SI

FF: BOB in 30 sec., surface blow back on SI

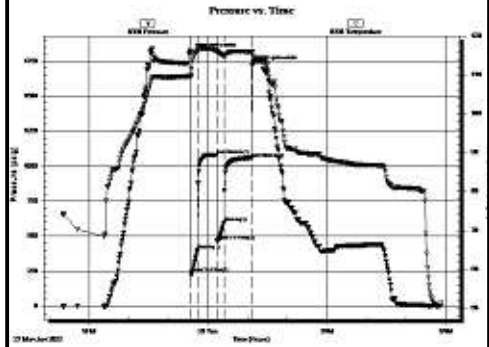
Rec: 1,575' Clean Oil (25 API)

FP: 239-402, 467-599#

SIP: 1,080-1,058#

HP: 1,812-1,720#

BHT: 116



Marc Downing relieved Austin Klaus at 8:00am 6-27-22 @ 3,738'.



DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

370 W Wichita Ave
Russell KS 67665 - 0352

ATTN: Austin Klaus

Clack Unit #1

16-9s-21w Graham,KS

Start Date: 2022.06.26 @ 07:00:00

End Date: 2022.06.26 @ 14:21:45

Job Ticket #: 59514 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.06.30 @ 10:08:51

John O Farmer
16-9s-21w Graham,KS
Clack Unit #1
DST # 1
L/KG E - F
2022.06.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

John O Farmer
370 W Wichita Ave
Russell KS 67665 - 0352
ATTN: Austin Klaus

16-9s-21w Graham,KS
Clack Unit #1
Job Ticket: 59514 **DST#: 1**
Test Start: 2022.06.26 @ 07:00:00

GENERAL INFORMATION:

Formation: **L/KC E - F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:22:00
Time Test Ended: 14:21:45
Interval: **3486.00 ft (KB) To 3514.00 ft (KB) (TVD)**
Total Depth: 3514.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Terrance
Unit No: 75
Reference Elevations: 2237.00 ft (KB)
2227.00 ft (CF)
KB to GR/CF: 10.00 ft

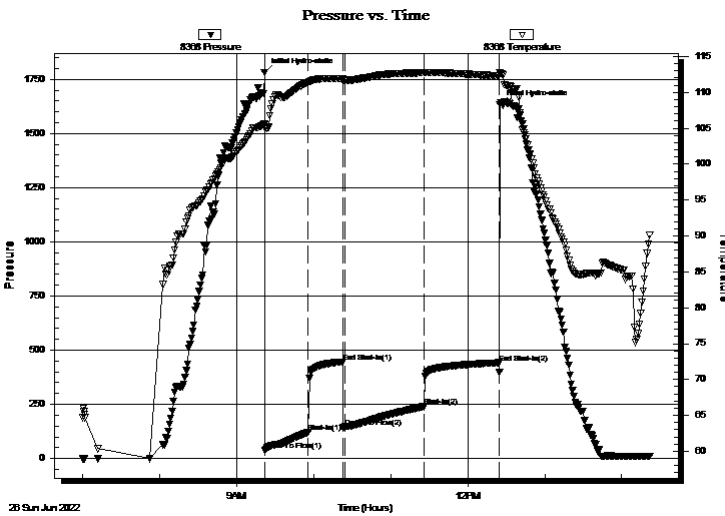
Serial #: 8368

Inside

Press@RunDepth: 239.57 psig @ 3492.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2022.06.26 End Date: 2022.06.26 Last Calib.: 2022.06.26
Start Time: 07:00:05 End Time: 14:21:44 Time On Btm: 2022.06.26 @ 09:21:45
Time Off Btm: 2022.06.26 @ 12:25:00

TEST COMMENT: IF-30-8 Inches
IS-30-No return
FF-60-3 Inches
FS-60-No return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1781.88	105.56	Initial Hydro-static
1	36.19	105.05	Open To Flow (1)
34	121.44	111.39	Shut-In(1)
61	443.19	111.85	End Shut-In(1)
63	145.37	111.71	Open To Flow (2)
124	239.57	112.72	Shut-In(2)
183	442.02	112.29	End Shut-In(2)
184	1632.67	112.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
485.00	90% water 10% mud	6.49

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

16-9s-21w Graham,KS

370 W Wichita Ave
Russell KS 67665 - 0352

Clack Unit #1

Job Ticket: 59514

DST#: 1

ATTN: Austin Klaus

Test Start: 2022.06.26 @ 07:00:00

Tool Information

Drill Pipe:	Length: 3444.00 ft	Diameter: 3.79 inches	Volume: 48.06 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 48.21 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3486.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.88 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3464.00	
Shut In Tool	5.00			3469.00	
Hydraulic tool	5.00			3474.00	
Safety Joint	3.00			3477.00	
Packer	5.00			3482.00	23.00 Bottom Of Top Packer
Packer	4.00			3486.00	
Stubb	1.00			3487.00	
Perforations	5.00			3492.00	
Recorder	0.00	8368	Inside	3492.00	
Recorder	0.00	8320	Outside	3492.00	
Perforations	19.00			3511.00	
Bullnose	3.00			3514.00	28.00 Bottom Packers & Anchor

Total Tool Length: 51.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

16-9s-21w Graham,KS

370 W Wichita Ave
Russell KS 67665 - 0352

Clack Unit #1

Job Ticket: 59514

DST#: 1

ATTN: Austin Klaus

Test Start: 2022.06.26 @ 07:00:00

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:

6000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
485.00	90% water 10% mud	6.487

Total Length: 485.00 ft

Total Volume: 6.768 bbl

Num Fluid Samples: 0

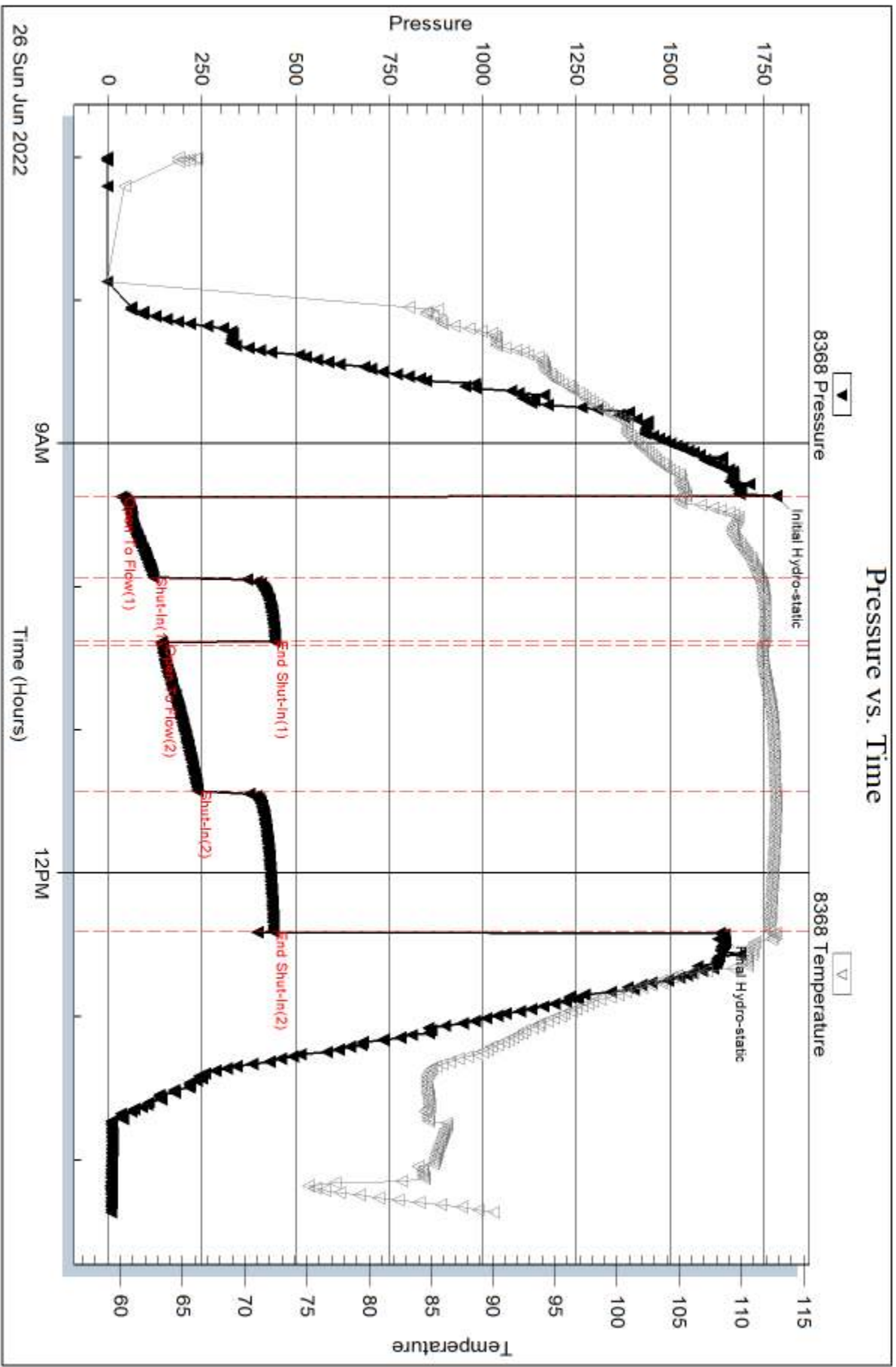
Num Gas Bombs: 0

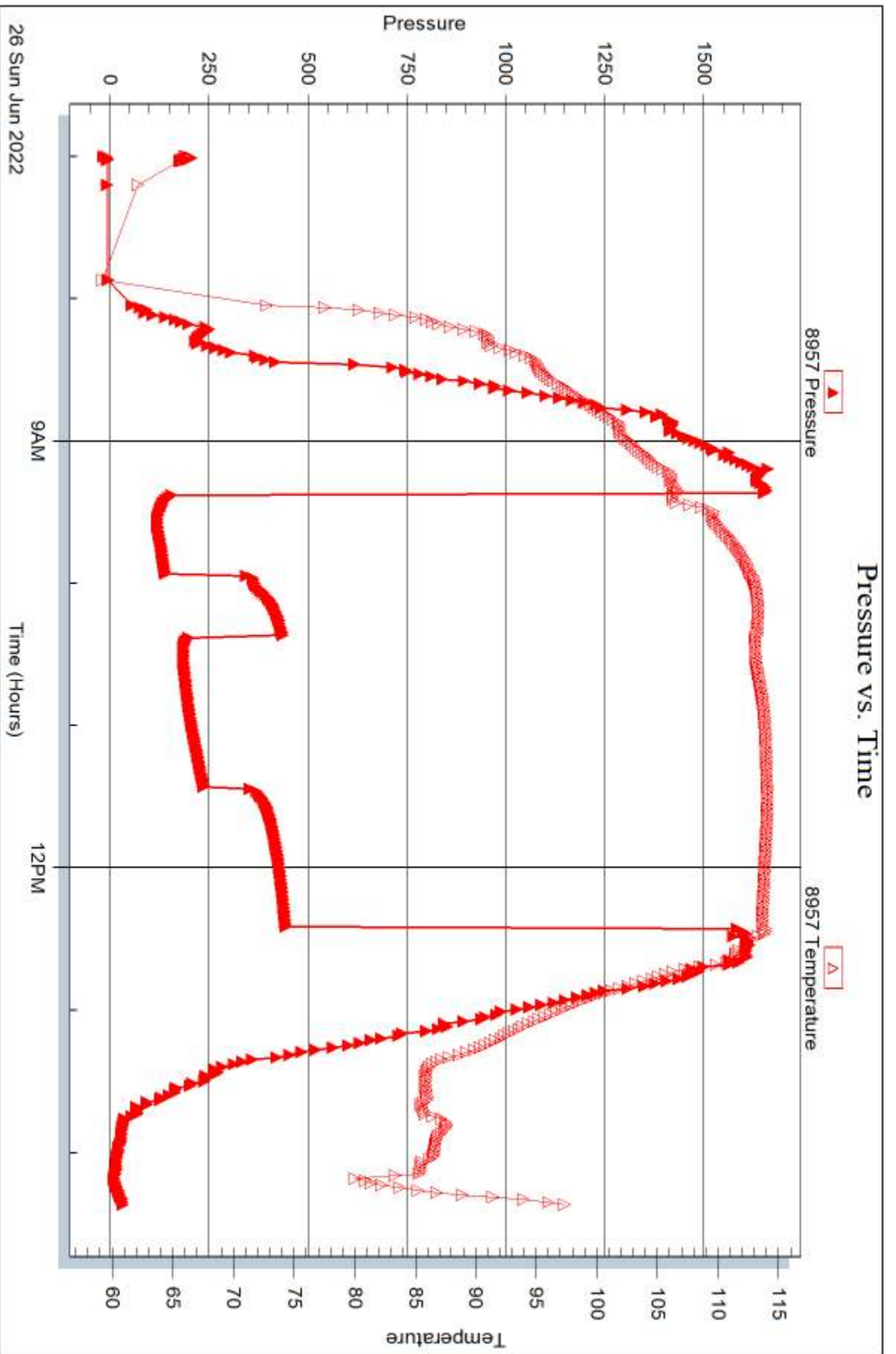
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

370 W Wichita Ave
Russell KS 67665 - 0352

ATTN: Austin Klaus

Clack Unit #1

16-9s-21w Graham,KS

Start Date: 2022.06.27 @ 20:20:00

End Date: 2022.06.28 @ 05:52:45

Job Ticket #: 59515 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.06.30 @ 10:08:20



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer
370 W Wichita Ave
Russell KS 67665 - 0352
ATTN: Austin Klaus

16-9s-21w Graham,KS
Clack Unit #1
Job Ticket: 59515 **DST#: 2**
Test Start: 2022.06.27 @ 20:20:00

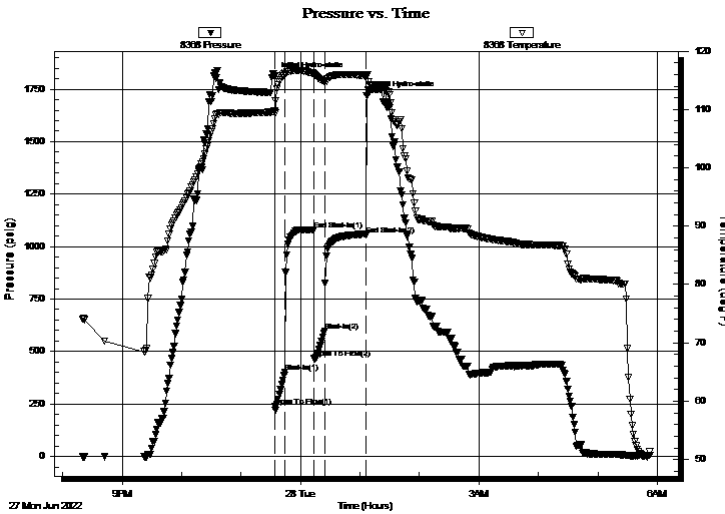
GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:34:15
Time Test Ended: 05:52:45
Interval: **3680.00 ft (KB) To 3745.00 ft (KB) (TVD)**
Total Depth: 3514.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Reset)
Tester: Terrance
Unit No: 75
Reference Elevations: 2237.00 ft (KB)
2227.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 8368 Inside
Press@RunDepth: 598.97 psig @ 3687.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2022.06.27 End Date: 2022.06.28 Last Calib.: 2022.06.28
Start Time: 20:20:05 End Time: 05:52:45 Time On Btm: 2022.06.27 @ 23:33:45
Time Off Btm: 2022.06.28 @ 01:06:30

TEST COMMENT: IF-10-BOB In 30 seconds
IS-30-Surface blow
FF-10-BOB In 30 seconds
FS-30-Surface blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1811.67	109.71	Initial Hydro-static
1	238.89	109.36	Open To Flow (1)
11	402.13	115.94	Shut-In(1)
40	1079.67	116.18	End Shut-In(1)
40	466.56	115.89	Open To Flow (2)
51	598.97	114.82	Shut-In(2)
93	1057.72	115.79	End Shut-In(2)
93	1720.15	116.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1575.00	100% oil	21.70

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer
370 W Wichita Ave
Russell KS 67665 - 0352
ATTN: Austin Klaus

16-9s-21w Graham,KS
Clack Unit #1
Job Ticket: 59515 **DST#: 2**
Test Start: 2022.06.27 @ 20:20:00

Tool Information

Drill Pipe:	Length: 3655.00 ft	Diameter: 3.79 inches	Volume: 51.00 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 31.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 51.15 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3680.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	3741.00 ft			
Interval between Packers:	61.00 ft			
Tool Length:	153.00 ft			
Number of Packers:	3	Diameter: 6.88 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3658.00	
Shut In Tool	5.00			3663.00	
Hydraulic tool	5.00			3668.00	
Safety Joint	3.00			3671.00	
Packer	5.00			3676.00	23.00 Bottom Of Top Packer
Packer	4.00			3680.00	
Stubb	1.00			3681.00	
Perforations	5.00			3686.00	
Change Over Sub	1.00			3687.00	
Recorder	0.00	8368	Inside	3687.00	
Recorder	0.00	8320	Outside	3687.00	
Drill Pipe	32.00			3719.00	
Change Over Sub	1.00			3720.00	
Perforations	20.00			3740.00	
Blank Off Sub	1.00			3741.00	
Drill Pipe	0.00			3741.00	61.00 Tool Interval
Packer	4.00			3745.00	
Stubb	1.00			3746.00	
Change Over Sub	1.00			3747.00	
Recorder	0.00	8957	Below	3747.00	
Drill Pipe	63.00			3810.00	69.00 Bottom Packers & Anchor

Total Tool Length: 153.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

16-9s-21w Graham,KS

370 W Wichita Ave
Russell KS 67665 - 0352

Clack Unit #1

Job Ticket: 59515

DST#: 2

ATTN: Austin Klaus

Test Start: 2022.06.27 @ 20:20:00

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:

ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1575.00	100% oil	21.697

Total Length: 1575.00 ft Total Volume: 21.697 bbl

Num Fluid Samples: 0

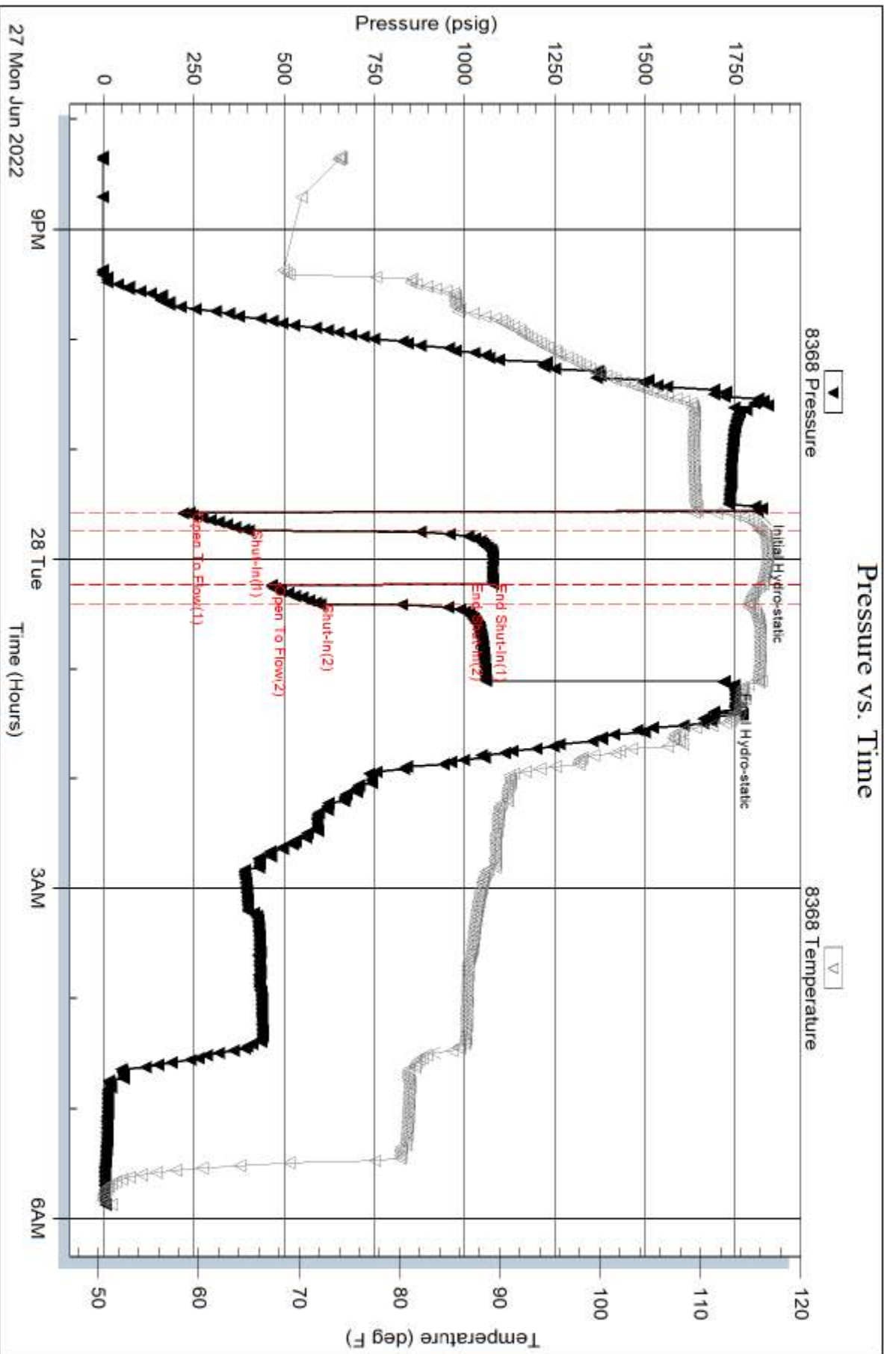
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

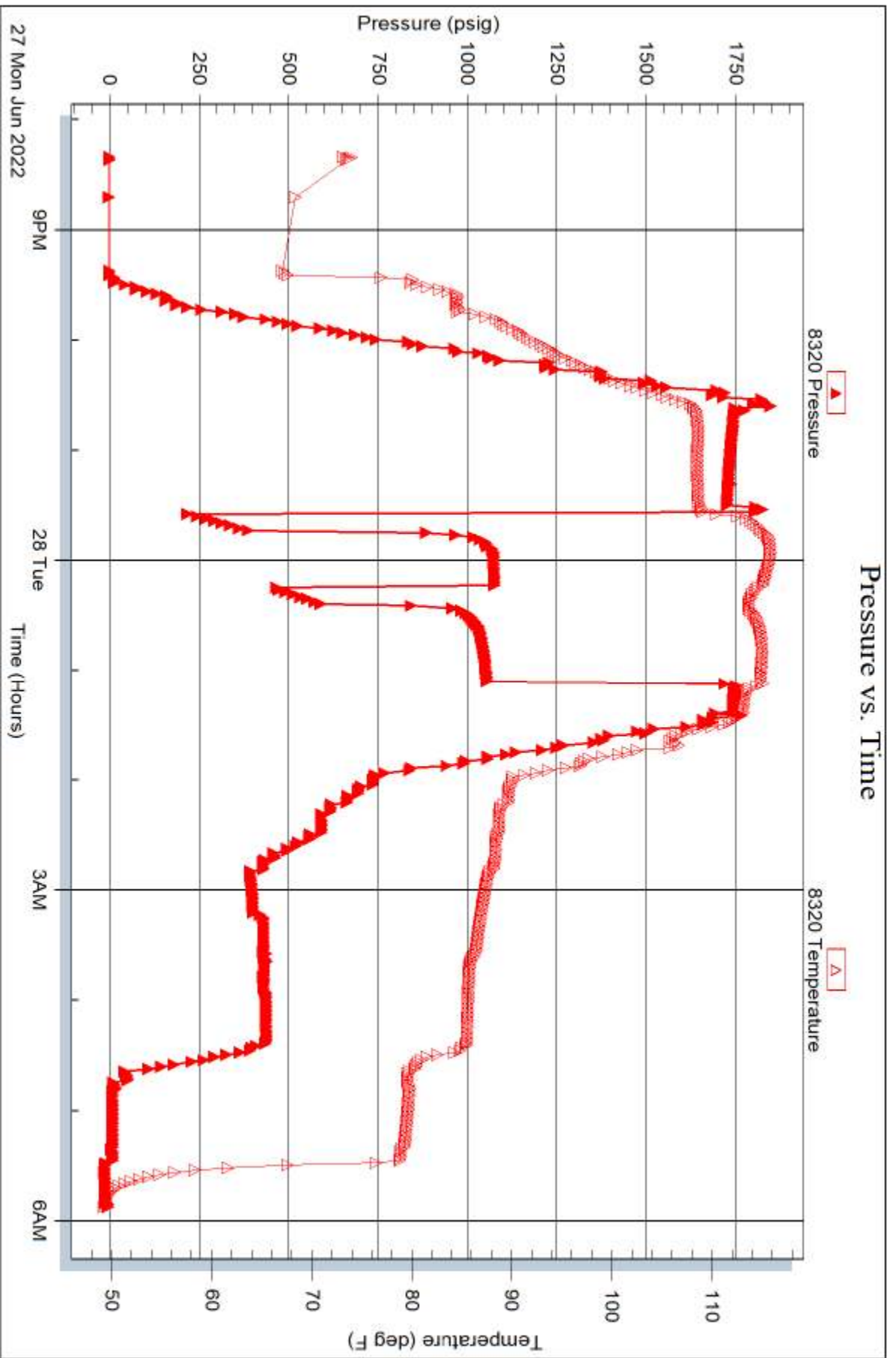


Serial #: 8320

Outside John O Farmer

Check Unit #1

DST Test Number: 2

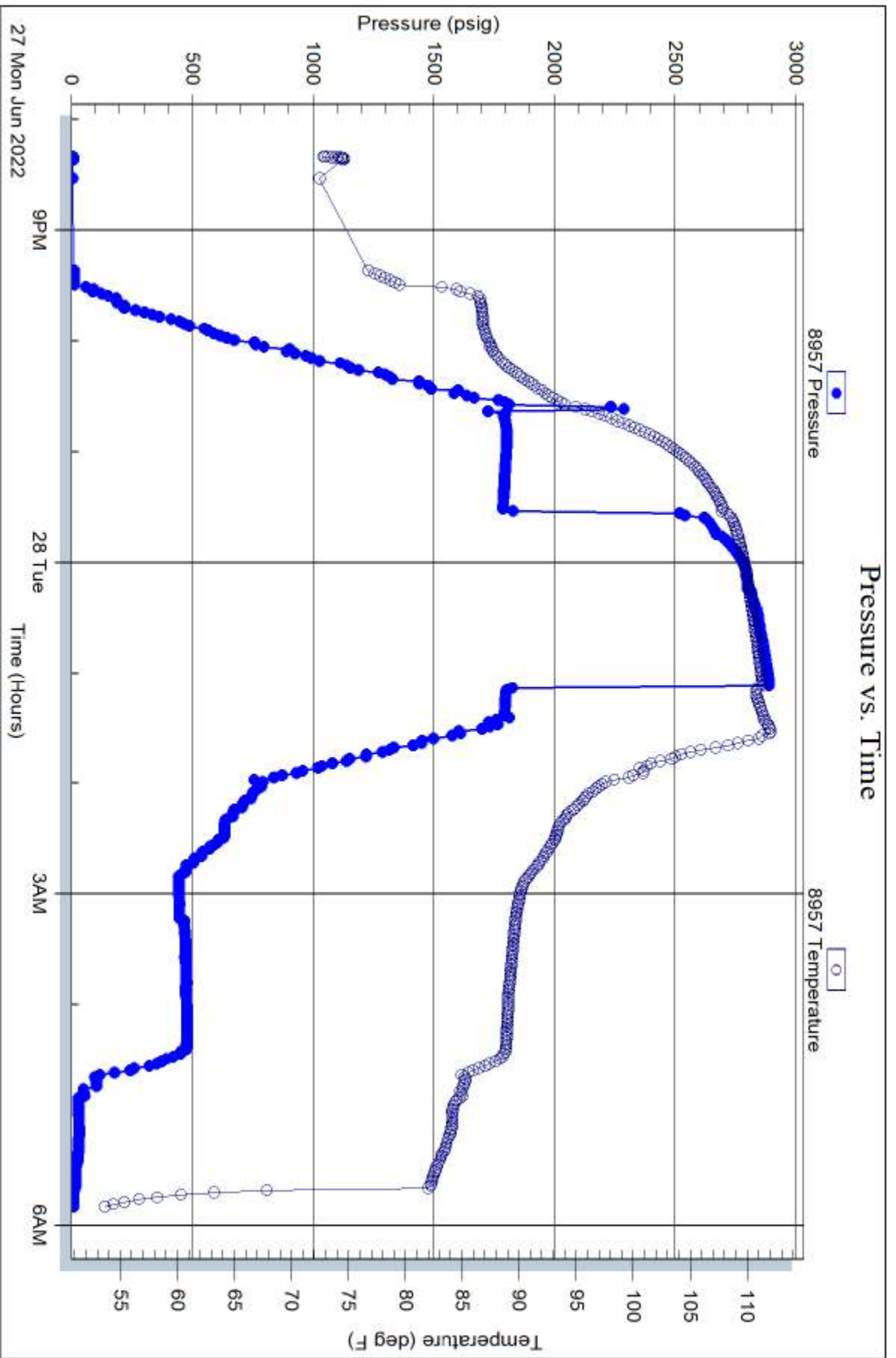


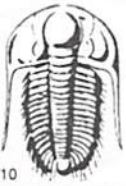
Serial #: 8957

Below (Straddled) Farmer

Block Unit #1

DST Test Number: 2





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59514

4/10

Well Name & No. Clack Unit #1 Test No. 1 Date 6-26-22
 Company John O Farmer, Inc. Elevation 2237 KB 2227 GL
 Address 370 W. Wichita Ave Russell, KS 67665 + 0352
 Co. Rep / Geo. Austin Klaus Rig Discovery 4
 Location: Sec. 16 Twp. 9S Rge. 2W Co. Graham State KS

Interval Tested 3484 = 3514 Zone Tested L/KC E-F
 Anchor Length 28 Drill Pipe Run 3444 Mud Wt. 8.8
 Top Packer Depth 3481 Drill Collars Run _____ Vis 5.2
 Bottom Packer Depth 4486 Wt. Pipe Run 31 WL 8
 Total Depth 3514 Chlorides 1000 ppm System LCM 1.5
 Blow Description IF-30-8"
ISI-30- No Return
FF-60-3"
FSI-60- No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>485</u>				<u>90%</u>	<u>10</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 485 BHT _____ Gravity _____ API RW 1.0 @ 78° F Chlorides 6,000 ppm
 (A) Initial Hydrostatic 1782 Test 1800 T-On Location 5:00
 (B) First Initial Flow 36 Jars _____ T-Started 7:00 AM
 (C) First Final Flow 121 Safety Joint _____ T-Open 9:42
 (D) Initial Shut-In 443 Circ Sub _____ T-Pulled 12:42
 (E) Second Initial Flow 145 Hourly Standby _____ T-Out 2:30
 (F) Second Final Flow 240 Mileage 36x2 108 Comments _____
 (G) Final Shut-In 442 Sampler _____ EM Tool
 (H) Final Hydrostatic 1632 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1908
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1908

Approved By _____ Our Representative Terrance Wickham
 Trilobite Testing Inc. shall not be liable for damaged of any kind of 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 statements or opinion concerning the results 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.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 59515

Well Name & No. Clack Unit 1 Test No. 2 Date 6-27-22
 Company John O. Farmer, Inc. Elevation 2237 KB 2227 GL
 Address 370 W. Wichita Ave Russell, KS 67665
 Co. Rep / Geo. Marc Downing Rig Discovery 4
 Location: Sec. 14 Twp. 9S Rge. 21W Co. Graham State KS

Interval Tested 3680 - 3745 Zone Tested Arbuckle
 Anchor Length 65' 65' tail Drill Pipe Run 3718 Mud Wt. 9.2
 Top Packer Depth 3675 Drill Collars Run _____ Vis 57
 Bottom Packer Depth 3680 Wt. Pipe Run 31 WL 8.0
 Total Depth 3810 Chlorides 3000 ppm System LCM 3#

Blow Description IF - 10 - Bob 30 seconds
ISI - 30 - Surface blow
FF - 10 - Bob 30 seconds
FSI - 30 - Surface blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>1575</u>		<u>100</u>			
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1575 BHT 115 Gravity 25 API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1812</u>	<input checked="" type="checkbox"/> Test <u>1800</u>	T-On Location <u>10:30</u>
(B) First Initial Flow <u>239</u>	<input type="checkbox"/> Jars _____	T-Started <u>8:20</u>
(C) First Final Flow <u>402</u>	<input checked="" type="checkbox"/> Safety Joint _____	T-Open _____
(D) Initial Shut-In <u>1079</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled _____
(E) Second Initial Flow <u>467</u>	<input type="checkbox"/> Hourly Standby _____	T-Out _____
(F) Second Final Flow <u>599</u>	<input type="checkbox"/> Mileage <u>36 x 2</u> 108	Comments _____
(G) Final Shut-In <u>1058</u>	<input type="checkbox"/> Sampler _____	<u>EM Tool</u>
(H) Final Hydrostatic <u>1720</u>	<input checked="" type="checkbox"/> Straddle <u>600</u>	<input type="checkbox"/> Ruined Shale Packer <u>-350</u>
Initial Open <u>10</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>10</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>-350</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>2408</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>2758</u>	

Approved By _____ Our Representative Terrance Wickham

Trilobite Testing Inc. shall not be liable for damaged of any kind of 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 statements or opinion concerning the results 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.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 2864

Date	Sec.	Twp.	Range	County	State	On Location	Finish
6-22-22	16	9	21	Graham	Ks		8:30pm

Location PAICO SW 2 W

Lease	Well No.	Owner
<u>CLACK Unit</u>	<u>1</u>	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.
Contractor		
<u>Discovery</u>		
Type Job		
<u>SURFACE</u>		
Hole Size	T.D.	Charge To
<u>12 1/4</u>	<u>223</u>	<u>J. O. FARMER</u>
Csg.	Depth	Street
<u>8 3/8</u>		
Tbg. Size	Depth	City
		State
Tool	Depth	The above was done to satisfaction and supervision of owner agent or contractor.
Cement Left in Csg.	Shoe Joint	Cement Amount Ordered
<u>15</u>		<u>150M 80/20 3-2</u>
Meas Line	Displace	
	<u>13 1/4</u>	

EQUIPMENT

Pumptrk	No.	Cementor	Common
<u>17</u>		<u>Bill</u>	<u>120</u>
		<u>Nick</u>	
Bulktrk	No.	Driver	Poz. Mix
			<u>30</u>
Bulktrk	No.	Driver	Gel.
		<u>Tim</u>	<u>3</u>
Bulktrk	No.	Driver	Calcium
			<u>6</u>

JOB SERVICES & REMARKS

Remarks:	Hulls
	Salt
Rat Hole	Flowseal
Mouse Hole	Kol-Seal
Centralizers	Mud CLR 48
Baskets	CFL-117 or CD110 CAF 38
D/V or Port Collar	Sand
<u>RAN 5 ITS 8 3/8 ret c223</u>	Handling <u>159</u>
<u>Cemt w/ 150M</u>	Mileage

FLOAT EQUIPMENT

<u>pump plug w/ 13 1/4 bbls</u>	Guide Shoe
<u>Cemt did cure</u>	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down

Pumptrk Charge Surface
Mileage 47

Signature	Tax
<u>Ryan J. [Signature]</u>	Discount
	Total Charge

Thanks

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071

Home Office P.O. Box 32 Russell, KS 67665

No. 2870

Cell 785-324-1041

Date	6-28-77	Sec.	16	Twp.	9	Range	21	County	Graham	State	KS	On Location		Finish	6:00pm
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Location PALCO SW 34

Lease	CLARK Unit	Well No.	1	Owner	To Quality Oilwell Cementing, Inc.
Contractor	Discovery	You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Type Job	Long string	Charge To	John O. Farmer		
Hole Size	7 7/8	T.D.	3810	Street	
Csg.	5/2	Depth		City	
Tbg. Size		Depth		State	
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.	
Cement Left in Csg.	30	Shoe Joint	30	Cement Amount Ordered	9 BBLs KCL
Meas Line		Displace	92 1/4	500gal Flush	175 1/2 10% salt 5*6:1

EQUIPMENT

Pumptrk	17	No.		Cementer		Common	175
				Helper	Bill	Poz. Mix	
Bulktrk		No.		Driver		Gel.	
				Driver	David	Calcium	KCL 1 gal
Bulktrk		No.		Driver	Tim		
				Driver			

JOB SERVICES & REMARKS

Remarks:		Hulls	0
Rat Hole	15	Salt	14
Mouse Hole	30	Flowseal	
Centralizers		Kol-Seal	750#
Baskets		Mud CLR 48	500 gal
D/V or Port Collar	57 1706	CFL-117 or CD110 CAP	38
pipe set	e 3809	Sand	
Shoe Jt	30	Handling	196
Insert	3779	Mileage	

FLOAT EQUIPMENT

pump 500gals Flush	Guide Shoe	
Lent w/	Centralizer	- 6
pump plug w/ 92 1/2 bbl water	Baskets	- 1
Land plug e	AFU Inserts	
Float did hold	Float Shoe	1
	Latch Down	1
	Port collar	- 1

Pumptrk Charge prod string
Mileage 47

X Signature Ryan Jacob

Thanks

Tax
Discount
Total Charge

