

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](mailto: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)</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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# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 1068

Phone 785-483-2025  
Cell 785-324-1041

Date	11-14-18
Sec.	22
Twp.	11
Range	15
County	Russell
State	KS
On Location	
Finish	A. Berman

Lease: **Reyn B**  
 Contractor: **Disover #2**  
 Well No. **2**

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: **Burgard + 0.1**  
 Street: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_

Tool: \_\_\_\_\_  
 Tbg. Size: \_\_\_\_\_  
 Csg.: **8 5/8**  
 Hole Size: **12 1/4**  
 T.D. **225**  
 Depth **224**

Cement Left in Csg. **10'**  
 Shoe Joint \_\_\_\_\_  
 Displace **13 1/2 bbl**

EQUIPMENT	
No.	20
Cement	_____
Helper	_____
Driver	_____
Driver	_____
Driver	_____
Bulktrk	15

JOB SERVICES & REMARKS	
Common	120
Poz. Mix	30
Gel.	3
Calcium	6
Hulls	_____

Remarks: \_\_\_\_\_  
 Rat Hole \_\_\_\_\_  
 Mouse Hole \_\_\_\_\_  
 Centraizers \_\_\_\_\_  
 Baskets \_\_\_\_\_  
 DN or Port Collar \_\_\_\_\_

8 5/8 on bottom. Est. Condition  
 Cement (recycled)  
 Mix 150SKY DSKP

FLOWSEAL  
 Kol-Seal \_\_\_\_\_  
 Mud CLR 48 \_\_\_\_\_  
 CFL-117 or CD110 CAF 38 \_\_\_\_\_

Sand \_\_\_\_\_  
 Handling **159**  
 Mileage \_\_\_\_\_

Guide Shoe \_\_\_\_\_  
 Centralizer \_\_\_\_\_  
 Baskets \_\_\_\_\_  
 AFU Inserts \_\_\_\_\_  
 Float Shoe \_\_\_\_\_  
 Latch Down \_\_\_\_\_

Pumptrk Charge **Surface**  
 Mileage **25**

Tax \_\_\_\_\_  
 Discount \_\_\_\_\_  
 Total Charge \_\_\_\_\_

Signature: **J. W. M.**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 1158

Phone 785-483-2025  
Cell 785-324-1041

Date	12-11-18
Sec.	02
Twp.	11
Range	15
County	Russell
State	Ks
On Location	
Finish	12:00 PM

Lease: Reich  
Well No. B2  
Location: Paradise - 4 1/2 Section Block 15B

Contractor: Express Well Service  
Type Job: Port Collar

Hole Size: 5 1/2"  
T.D.:  
Csg. Depth: 278"  
Tbg. Size: 2 7/8"  
Tool: Port Collar  
Depth: 278'

Cement Left in Csg.  
Shoe Joint  
Displace: 48500

Meas Line  
Cement Amount Ordered: 80% QMIX  
Used 90  
Common 90  
POZ. Mix  
Gel. 2  
Calcium  
Hulls

Remarks: Load hole + test  
Rat Hole: test tool to 800ft + test.  
Flowseal: 50#  
Kol-Seal  
Mud CLR 48  
Baskets: Displaced with this flow  
DN or Port Collar test to 800 ft. + hold, sand  
Handing: 200  
Mileage

Equipment  
Pumptrk 16 No. Cementer Glenn  
Bulktrk 14 No. Driver Doug  
Bulktrk 14 No. Driver Doug  
Bulktrk 14 No. Driver Doug  
Bulktrk 14 No. Driver Doug

Job Services & Remarks  
Remarks: Load hole + test  
Rat Hole: test tool to 800ft + test.  
Flowseal: 50#  
Kol-Seal  
Mud CLR 48  
Baskets: Displaced with this flow  
DN or Port Collar test to 800 ft. + hold, sand  
Handing: 200  
Mileage

Mouse Hole  
Centralizers  
Baskets  
CFL-117 or CD110 CAF 38  
Mud CLR 48

Guide Shoe  
Centralizer  
Baskets  
AFU Inserts  
Float Shoe  
Latch Down

Pumptrk Charge  
Mileage  
Tax  
Discount  
Total Charge

Signature: [Handwritten Signature]

Cement 800 Circulate

Port + collar





## DRILL STEM TEST REPORT

Prepared For: **Brungardt Oil and Leasing Inc**

PO Box 871  
Russell KS 67665+1731

ATTN: Roger Fisher

### **Reich "B" #2**

#### **22-11s-15w Russell,KS**

Start Date: 2018.11.19 @ 08:58:00

End Date: 2018.11.19 @ 14:21:30

Job Ticket #: 53770                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.11.21 @ 10:29:31





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Brungardt Oil and Leasing Inc

**22-11s-15w Russell,KS**

PO Box 871  
Russell KS 67665+1731

**Reich "B" #2**

Job Ticket: 53770

**DST#: 1**

ATTN: Roger Fisher

Test Start: 2018.11.19 @ 08:58:00

## GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:20:00

Time Test Ended: 14:21:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Benny Mulligan

Unit No: 66

**Interval: 2670.00 ft (KB) To 2690.00 ft (KB) (TVD)**

Reference Elevations: 1816.00 ft (KB)

Total Depth: 2690.00 ft (KB) (TVD)

1811.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6772 Inside**

Press@RunDepth: 49.34 psig @ 2671.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.11.19

End Date: 2018.11.19

Last Calib.: 2018.11.19

Start Time: 08:58:01

End Time: 14:21:30

Time On Btm: 2018.11.19 @ 10:00:00

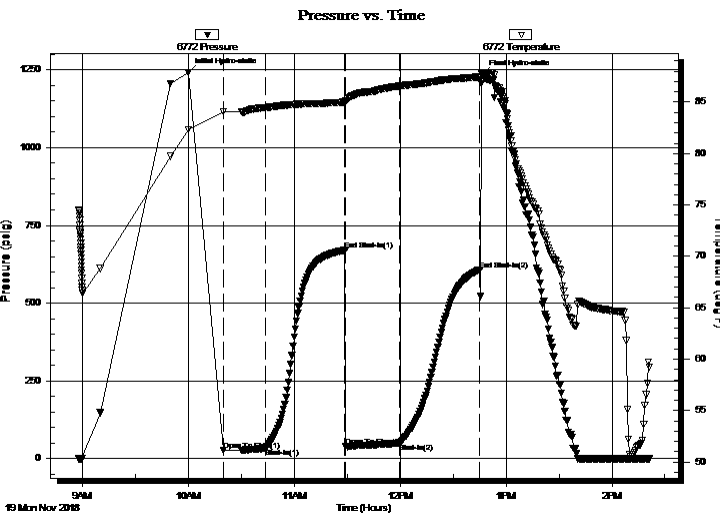
Time Off Btm: 2018.11.19 @ 12:46:30

TEST COMMENT: I.F.-30- Built to 10 "

I.S.I.-45- weak blow back

F.F.-30-BOB 29 mins total build 12"

F.S.I.-45- 1" blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1242.01	82.30	Initial Hydro-static
20	26.50	84.05	Open To Flow (1)
44	32.74	84.46	Shut-In(1)
89	670.00	84.99	End Shut-In(1)
90	38.59	85.08	Open To Flow (2)
120	49.34	86.57	Shut-In(2)
166	606.77	87.46	End Shut-In(2)
167	1236.03	87.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	GOCM 5%G 15%O 80%M	0.44
62.00	GOCWM 50%M 20%w 15%o 15%g	0.44
0.00	GIP 180'	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Brungardt Oil and Leasing Inc

**22-11s-15w Russell,KS**

PO Box 871  
Russell KS 67665+1731

**Reich "B" #2**

Job Ticket: 53770

**DST#: 1**

ATTN: Roger Fisher

Test Start: 2018.11.19 @ 08:58:00

## Tool Information

Drill Pipe:	Length: 2440.00 ft	Diameter: 3.80 inches	Volume: 34.23 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 218.00 ft	Diameter: 2.70 inches	Volume: 1.54 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 52000.00 lb
			<u>Total Volume: 35.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	2670.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	40.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2651.00	
Shut In Tool	5.00			2656.00	
Hydraulic tool	5.00			2661.00	
Packer	5.00			2666.00	20.00 Bottom Of Top Packer
Packer	4.00			2670.00	
Stubb	1.00			2671.00	
Recorder	0.00	6772	Inside	2671.00	
Recorder	0.00	6769	Outside	2671.00	
Perforations	16.00			2687.00	
Bullnose	3.00			2690.00	20.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>40.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Brungardt Oil and Leasing Inc

**22-11s-15w Russell,KS**

PO Box 871  
Russell KS 67665+1731

**Reich "B" #2**

Job Ticket: 53770

**DST#: 1**

ATTN: Roger Fisher

Test Start: 2018.11.19 @ 08:58:00

### 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:

28000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 52000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	GOCM 5%G 15%O 80%M	0.439
62.00	GOCWM 50%M 20%w 15%o 15%g	0.439
0.00	GIP 180'	0.000

Total Length: 124.00 ft      Total Volume: 0.878 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 0.31@56.5

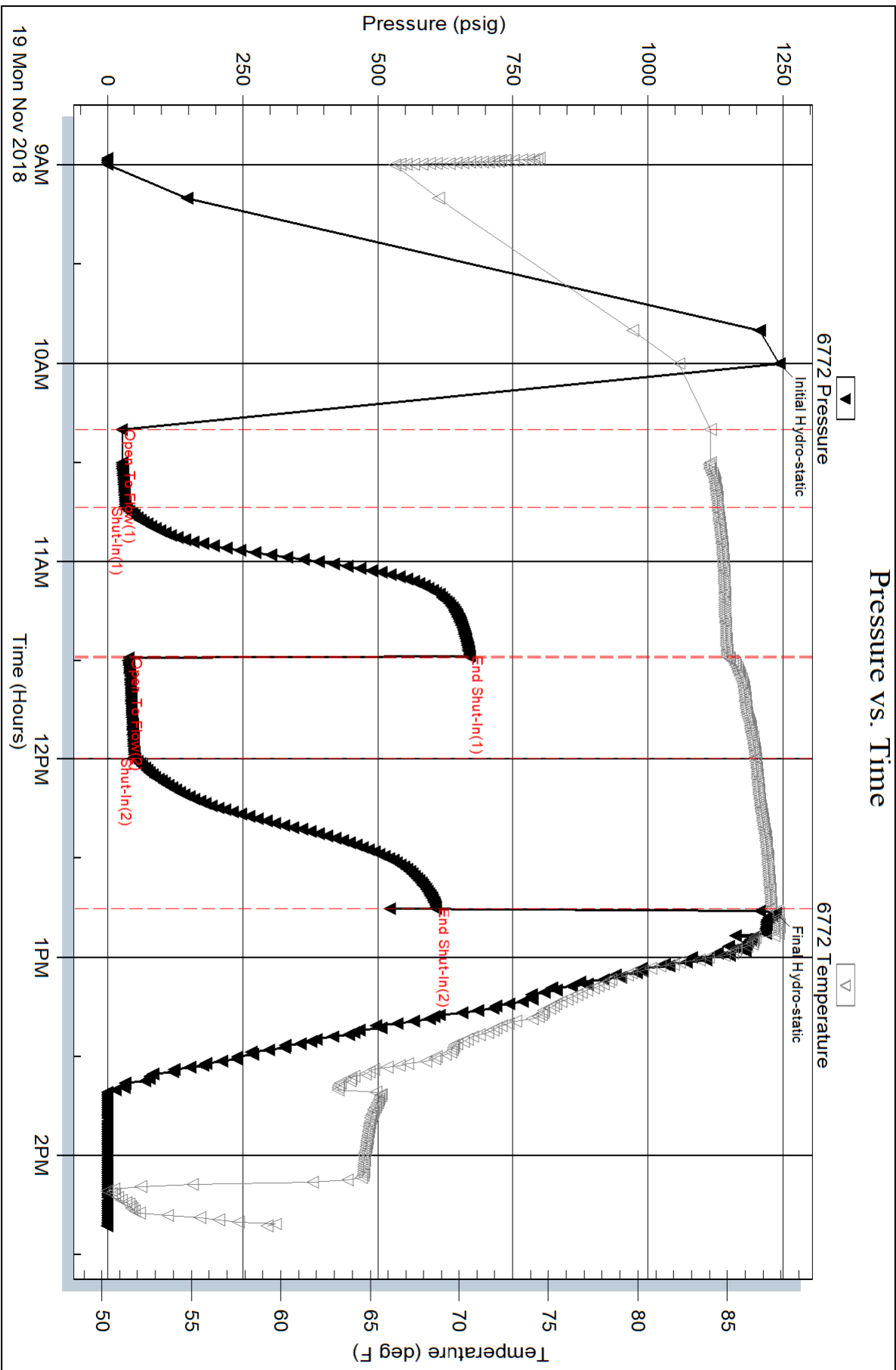
Serial #: 6772

Inside

Brungardt Oil and Leasing Inc

Reich "B" #2

DST Test Number: 1

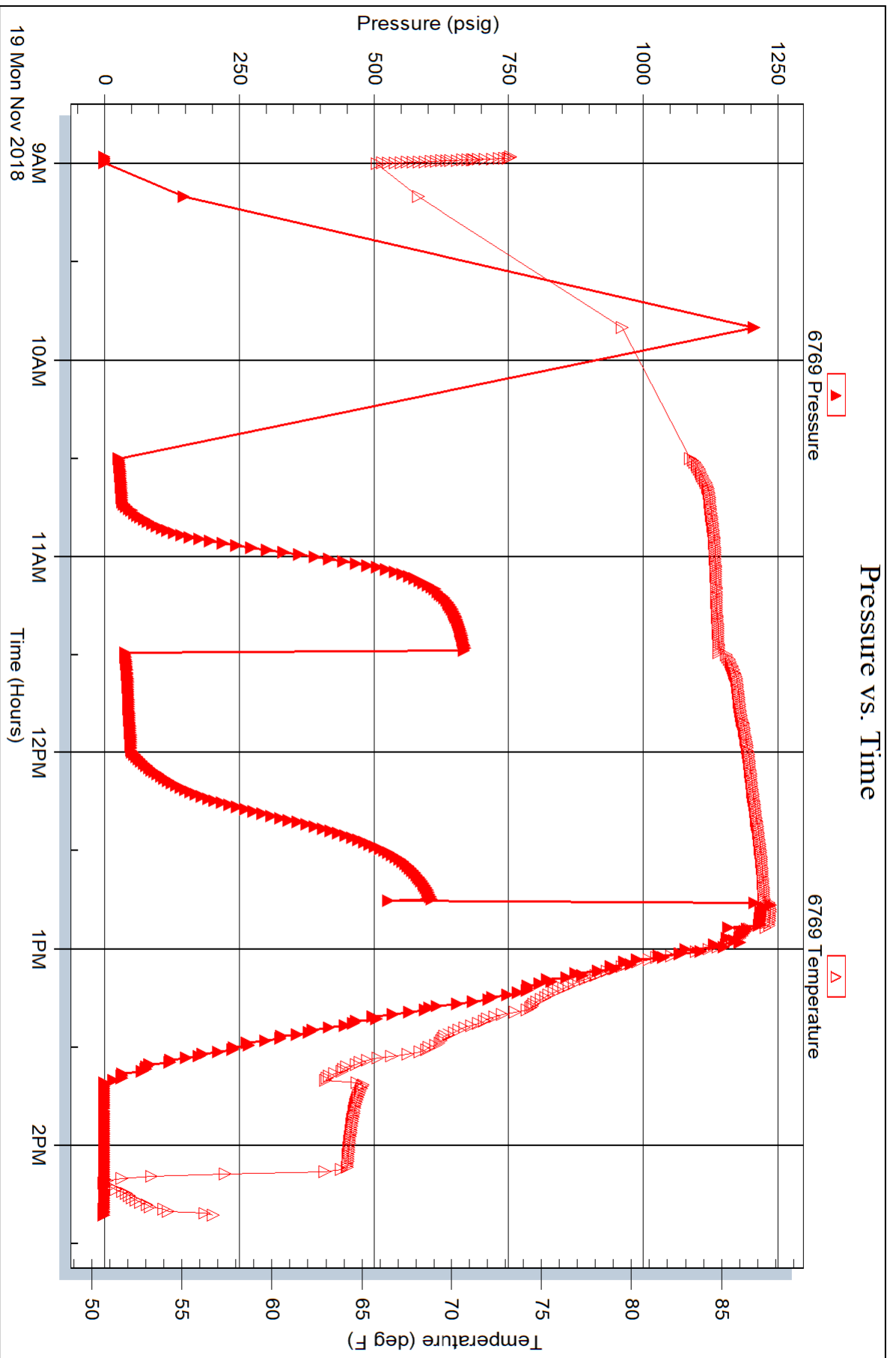


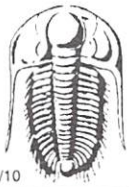
Serial #: 6769

Outside Brungardt Oil and Leasing Inc

Reich "B" #2

DST Test Number: 1





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53770

4/10

Well Name & No. Reich "B" #2 Test No. 1 Date 11-19-2018  
 Company Brungardt Oil and Leasing Inc Elevation 1816 KB 1812 GL  
 Address 213w 7th st PO Box 871 Russell KS 67665+1731  
 Co. Rep / Geo. Roger Fisher Rig DISCO #2  
 Location: Sec. 22 Twp. 11s Rge. 15w Co. Russell State KS

Interval Tested 2670-2690 Zone Tested Topeka  
 Anchor Length 20' Drill Pipe Run 2440' Mud Wt. 8.7  
 Top Packer Depth 2665 Drill Collars Run — Vis 60  
 Bottom Packer Depth 2670 Wt. Pipe Run 218' WL 6.8  
 Total Depth 2690 Chlorides 5200 ppm System LCM 2#  
 Blow Description I.F. - built to 10"  
I.S.I. - ~~weak~~ blow  
F.F. - BOB. 29 mins built to 12"  
F.S.I. - ~~12~~" blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>62</u>	<u>G.O.M</u>	<u>5</u>	<u>15</u>		<u>80</u>
<u>62</u>	<u>G.O.W.M.</u>	<u>15</u>	<u>15</u>	<u>20</u>	<u>50</u>
<u>0</u>	<u>G.I.P. 180'</u>				

Rec Total 124' BHT 87.9 Gravity — API RW 0.31 @ 56.5° F Chlorides 28,000 ppm  
 (A) Initial Hydrostatic 1242  Test 1050 T-On Location 8:20  
 (B) First Initial Flow 26  Jars — T-Started 8:58  
 (C) First Final Flow 32  Safety Joint — T-Open 10:15  
 (D) Initial Shut-In 670  Circ Sub — T-Pulled 12:45  
 (E) Second Initial Flow 38  Hourly Standby — T-Out 2:22  
 (F) Second Final Flow 49  Mileage 13266 RT x 2 Comments Loaded tool  
 (G) Final Shut-In 606  Sampler — 11-21-2018  
 (H) Final Hydrostatic 1236  Straddle —  
 Ruined Shale Packer —  
 Ruined Packer —  
 Extra Copies —  
 Initial Open 30  Shale Packer —  
 Initial Shut-In 45  Extra Packer —  
 Final Flow 30  Extra Recorder —  
 Final Shut-In 45  Day Standby —  
 Accessibility —  
 Sub Total 1182 Sub Total 0  
 Total — MP/DST Disc't —

Approved By [Signature] Our Representative Benny Mulligan  
 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.