



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1266547
OIL & GAS CONSERVATION DIVISION

Form ACO-1
August 2013

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 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: _____



1266547

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 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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR: _____ Producing Method:
 Flowing Pumping Gas Lift Other *(Explain)* _____

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

DISPOSITION OF GAS: <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> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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DRILL STEM TEST REPORT

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

PO Box 871
Russell KS 67665-1731

ATTN: Chris Brungardt, Rog

Grabbe A #1

21-15s-18w Ellis,KS

Start Date: 2015.05.17 @ 04:50:43

End Date: 2015.05.17 @ 10:54:22

Job Ticket #: 60584 DST #: 1

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

Printed: 2015.05.19 @ 09:50:49



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60584

DST#: 1

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.17 @ 04:50:43

GENERAL INFORMATION:

Formation: **Toronto - LKC C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:33:08

Time Test Ended: 10:54:22

Test Type: Conventional Bottom Hole (Initial)

Tester: Ray Schwager

Unit No: 70

Interval: 3282.00 ft (KB) To 3365.00 ft (KB) (TVD)

Reference Elevations: 2052.00 ft (KB)

Total Depth: 3365.00 ft (KB) (TVD)

2047.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8018

Inside

Press@RunDepth: 67.68 psig @ 3284.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.17

End Date:

2015.05.17

Last Calib.:

2015.05.17

Start Time:

04:50:43

End Time:

10:54:22

Time On Btm:

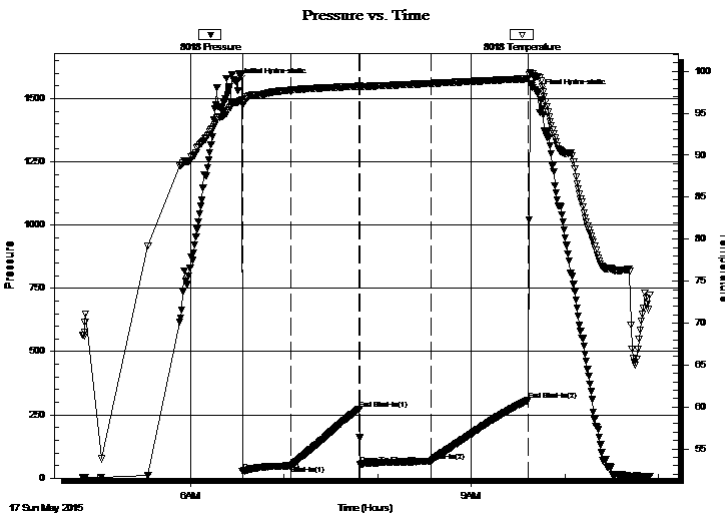
2015.05.17 @ 06:29:53

Time Off Btm:

2015.05.17 @ 09:42:52

TEST COMMENT: 30-IFP-w k to strg in 11 min
45-ISIP-no bl
45-FFP-w k to strg in 7 min
60-FSIP-no bl

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1563.51	96.30	Initial Hydro-static
4	26.61	95.99	Open To Flow (1)
35	48.92	97.76	Shut-In(1)
79	273.65	98.23	End Shut-In(1)
79	55.90	98.16	Open To Flow (2)
125	67.68	98.56	Shut-In(2)
187	307.15	99.12	End Shut-In(2)
193	1519.61	99.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	450' GIP	0.00
40.00	O&GCM 10%G10%O80%M	0.28
60.00	OCGM 30%G15%O55%M	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60584

DST#: 1

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.17 @ 04:50:43

Tool Information

Drill Pipe:	Length: 2800.00 ft	Diameter: 3.80 inches	Volume: 39.28 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 465.00 ft	Diameter: 2.70 inches	Volume: 3.29 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: 55000.00 lb
			<u>Total Volume: 42.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3282.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	83.00 ft			
Tool Length:	104.00 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			3262.00	
Shut In Tool	5.00			3267.00	
Hydraulic tool	5.00			3272.00	
Packer	5.00			3277.00	21.00 Bottom Of Top Packer
Packer	5.00			3282.00	
Stubb	1.00			3283.00	
Perforations	1.00			3284.00	
Recorder	0.00	8018	Inside	3284.00	
Recorder	0.00	8700	Outside	3284.00	
Blank Spacing	64.00			3348.00	
Perforations	14.00			3362.00	
Bullnose	3.00			3365.00	83.00 Bottom Packers & Anchor

Total Tool Length: 104.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60584

DST#: 1

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.17 @ 04:50:43

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 5.75 in³

Resistivity: ohm.m

Salinity: 5800.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	450' GIP	0.000
40.00	O&GCM 10%G10%O80%M	0.283
60.00	OCGM 30%G15%O55%M	0.425

Total Length: 100.00 ft Total Volume: 0.708 bbl

Num Fluid Samples: 0

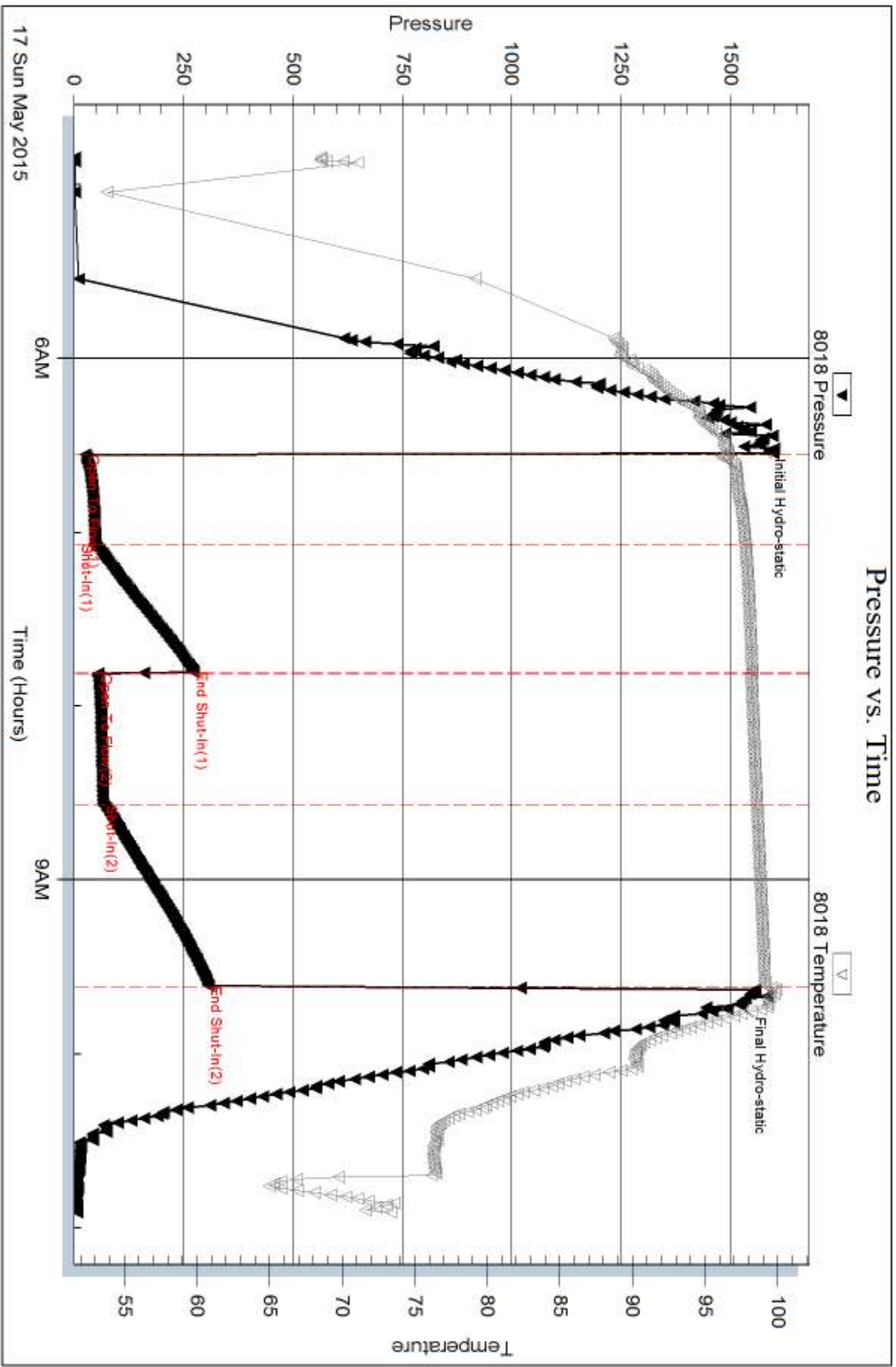
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

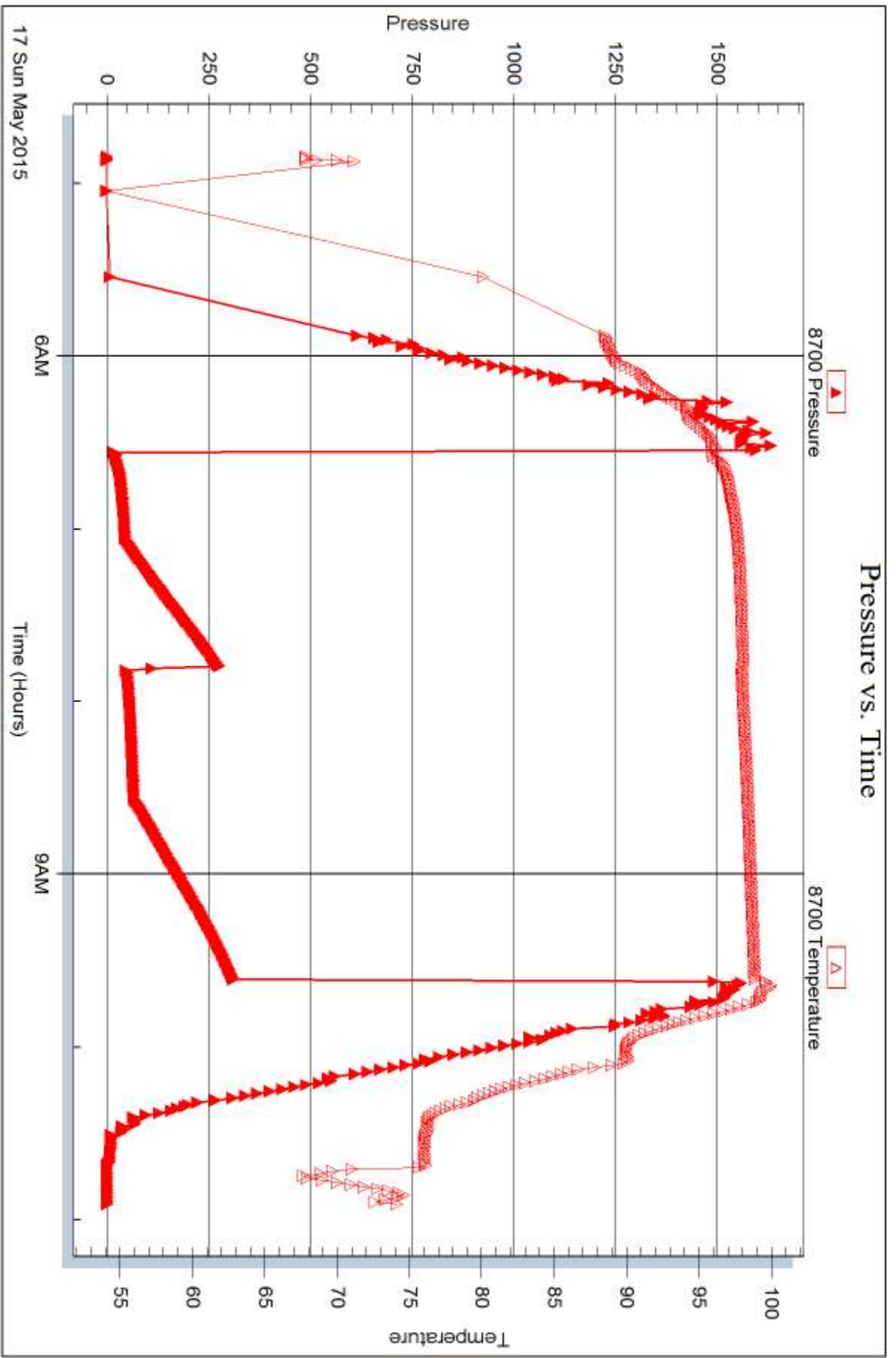


Serial #: 8700

Outside Brungardt Oil & Leasing Inc

Grabbe A #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 60584

Printed: 2015.05.19 @ 09:50:50



DRILL STEM TEST REPORT

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

PO Box 871
Russell KS 67665-1731

ATTN: Chris Brungardt, Rog

Grabbe A #1

21-15s-18w Ellis,KS

Start Date: 2015.05.18 @ 03:05:40

End Date: 2015.05.18 @ 06:54:05

Job Ticket #: 60585 DST #: 2

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

Printed: 2015.05.19 @ 09:49:21



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60585

DST#: 2

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.18 @ 03:05:40

GENERAL INFORMATION:

Formation: **LKC H-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:35:50

Time Test Ended: 06:54:05

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3447.00 ft (KB) To 3510.00 ft (KB) (TVD)

Reference Elevations: 2052.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

2047.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8018

Inside

Press@RunDepth: 21.80 psig @ 3449.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.18

End Date:

2015.05.18

Last Calib.: 2015.05.18

Start Time: 03:05:40

End Time:

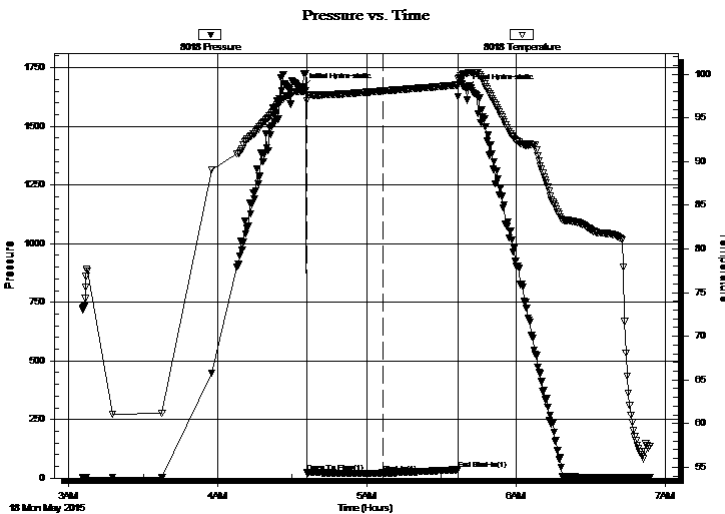
06:54:05

Time On Btm: 2015.05.18 @ 04:34:05

Time Off Btm: 2015.05.18 @ 05:39:50

TEST COMMENT: 30-IFP-vy w k bl , died in 20 min
30-ISIP-no bl
pulled tool

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1666.59	98.06	Initial Hydro-static
2	23.87	97.02	Open To Flow (1)
33	21.80	98.08	Shut-In(1)
63	36.28	98.76	End Shut-In(1)
66	1661.79	100.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w/show of oil	0.04

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60585

DST#: 2

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.18 @ 03:05:40

Tool Information

Drill Pipe:	Length: 2988.00 ft	Diameter: 3.80 inches	Volume: 41.91 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 465.00 ft	Diameter: 2.70 inches	Volume: 3.29 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: 60000.00 lb
			<u>Total Volume: 45.20 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 51000.00 lb
Depth to Top Packer:	3447.00 ft			Final 51000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	63.00 ft			
Tool Length:	84.00 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			3427.00	
Shut In Tool	5.00			3432.00	
Hydraulic tool	5.00			3437.00	
Packer	5.00			3442.00	21.00 Bottom Of Top Packer
Packer	5.00			3447.00	
Stubb	1.00			3448.00	
Perforations	1.00			3449.00	
Recorder	0.00	8018	Inside	3449.00	
Recorder	0.00	8700	Outside	3449.00	
Blank Spacing	33.00			3482.00	
Perforations	25.00			3507.00	
Bullnose	3.00			3510.00	63.00 Bottom Packers & Anchor

Total Tool Length: 84.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60585

DST#: 2

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.18 @ 03:05:40

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: ppm

Viscosity: 60.00 sec/qt

Cushion Volume: bbl

Water Loss: 5.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud w/show of oil	0.035

Total Length: 5.00 ft Total Volume: 0.035 bbl

Num Fluid Samples: 0

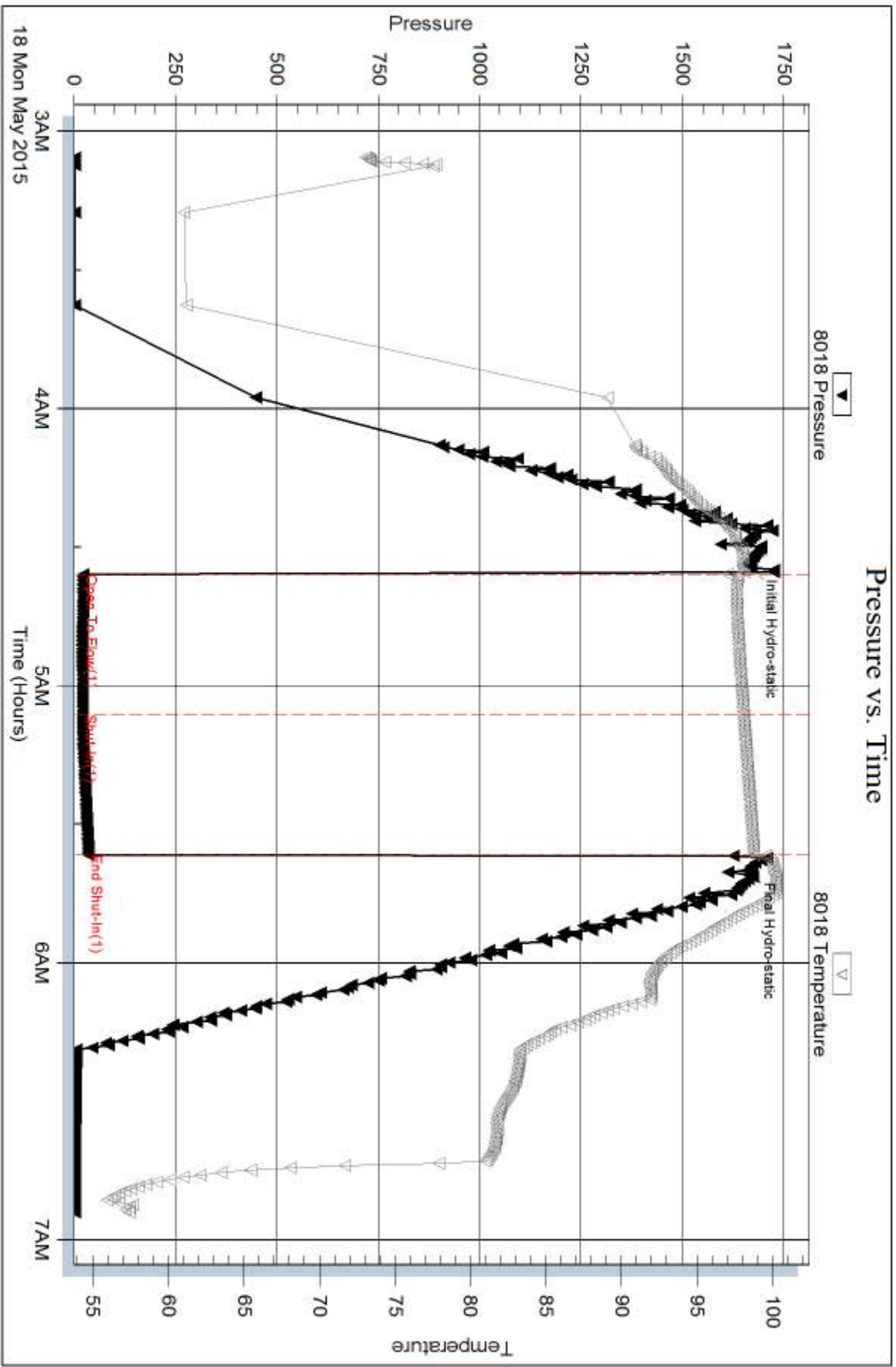
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

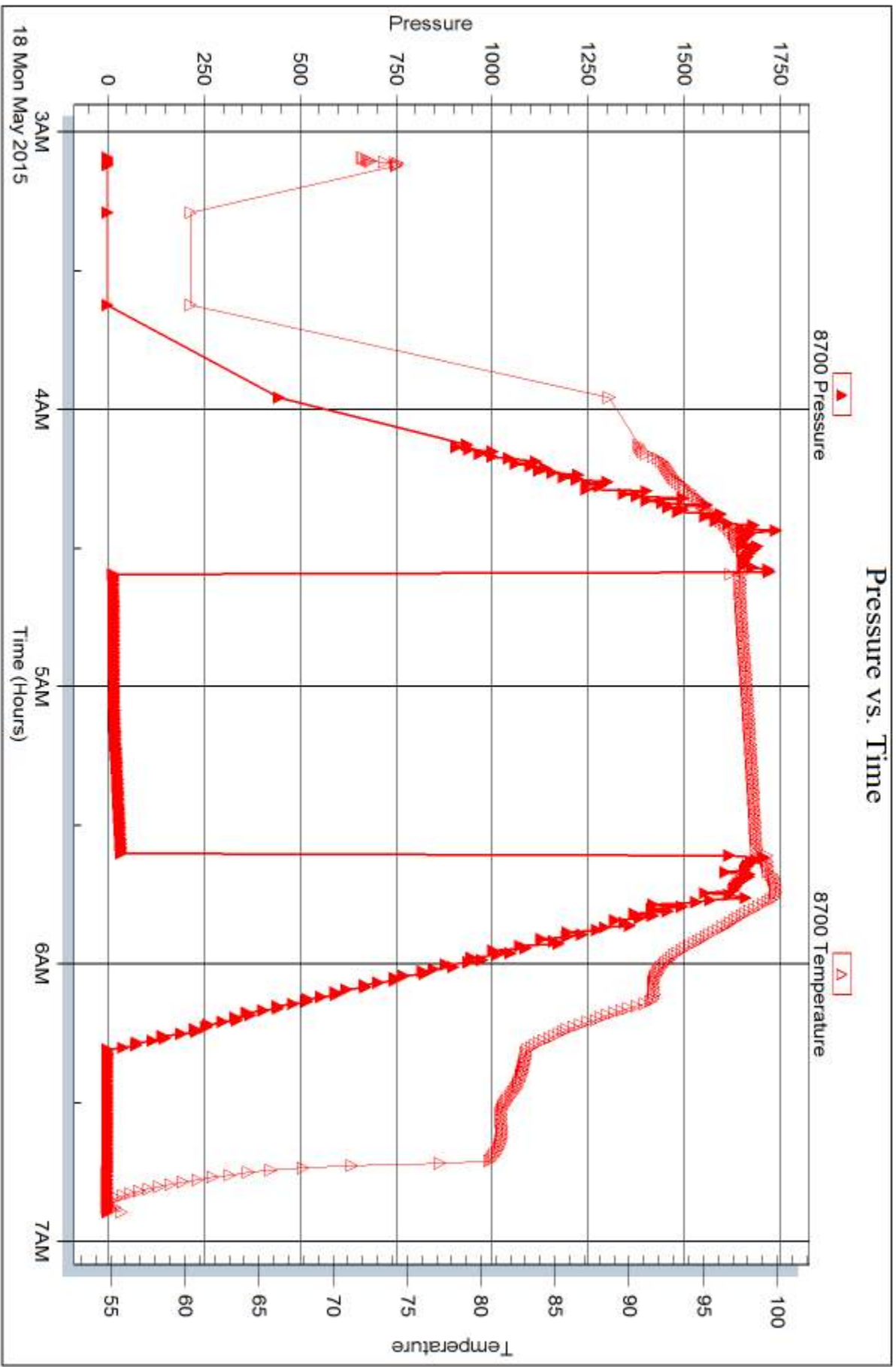


Serial #: 8700

Outside Brungardt Oil & Leasing Inc

Grabbe A #1

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 60585

Printed: 2015.05.19 @ 09:49:23



DRILL STEM TEST REPORT

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

PO Box 871
Russell KS 67665-1731

ATTN: Chris Brungardt, Rog

Grabbe A #1

21-15s-18w Ellis,KS

Start Date: 2015.05.18 @ 22:30:46

End Date: 2015.05.19 @ 04:07:40

Job Ticket #: 60586 DST #: 3

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

Printed: 2015.05.19 @ 09:14:58



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60586

DST#: 3

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.18 @ 22:30:46

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:54:41

Time Test Ended: 04:07:40

Test Type: Conventional Bottom Hole (Reset)

Tester: Ray Schwager

Unit No: 70

Interval: 3602.00 ft (KB) To 3640.00 ft (KB) (TVD)

Reference Elevations: 2052.00 ft (KB)

Total Depth: 3640.00 ft (KB) (TVD)

2047.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8018

Inside

Press@RunDepth: 208.82 psig @ 3608.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.18

End Date:

2015.05.19

Last Calib.:

2015.05.19

Start Time: 22:30:46

End Time:

04:07:40

Time On Btm:

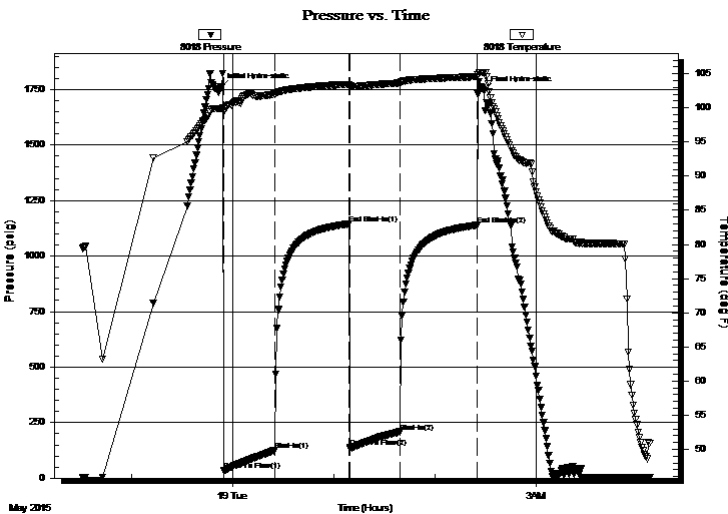
2015.05.18 @ 23:52:56

Time Off Btm:

2015.05.19 @ 02:28:56

TEST COMMENT: 30-IFP-w k to strg in 15 min
45-ISIP-no bl
30-FFP-w k to strg in 27 min
45-FSIP-surface bl bk

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1757.10	99.91	Initial Hydro-static
2	33.22	99.43	Open To Flow (1)
32	124.74	102.00	Shut-In(1)
76	1144.48	103.45	End Shut-In(1)
77	139.93	102.92	Open To Flow (2)
106	208.82	103.64	Shut-In(2)
152	1138.57	104.57	End Shut-In(2)
156	1744.34	105.19	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	124' GIP	0.00
410.00	CO	2.90
80.00	GMO 20%G30%M50%O	0.74

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60586

DST#: 3

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.18 @ 22:30:46

Tool Information

Drill Pipe:	Length: 3144.00 ft	Diameter: 3.80 inches	Volume: 44.10 bbl	Tool Weight:	2200.00 lb
Heavy Wt. Pipe:	Length: 465.00 ft	Diameter: 2.70 inches	Volume: 3.29 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:	60000.00 lb
			<u>Total Volume: 47.39 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	3602.00 ft			Final	51000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	38.00 ft				
Tool Length:	59.00 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			3582.00	
Shut In Tool	5.00			3587.00	
Hydraulic tool	5.00			3592.00	
Packer	5.00			3597.00	21.00 Bottom Of Top Packer
Packer	5.00			3602.00	
Stubb	1.00			3603.00	
Perforations	5.00			3608.00	
Recorder	0.00	8018	Inside	3608.00	
Recorder	0.00	8700	Outside	3608.00	
Perforations	29.00			3637.00	
Bullnose	3.00			3640.00	38.00 Bottom Packers & Anchor

Total Tool Length: 59.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Brungardt Oil & Leasing Inc

21-15s-18w Ellis,KS

PO Box 871
Russell KS 67665-1731

Grabbe A #1

Job Ticket: 60586

DST#: 3

ATTN: Chris Brungardt, Rog

Test Start: 2015.05.18 @ 22:30:46

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

28 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	124' GIP	0.000
410.00	CO	2.903
80.00	GMO 20%G30%M50%O	0.740

Total Length: 490.00 ft Total Volume: 3.643 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

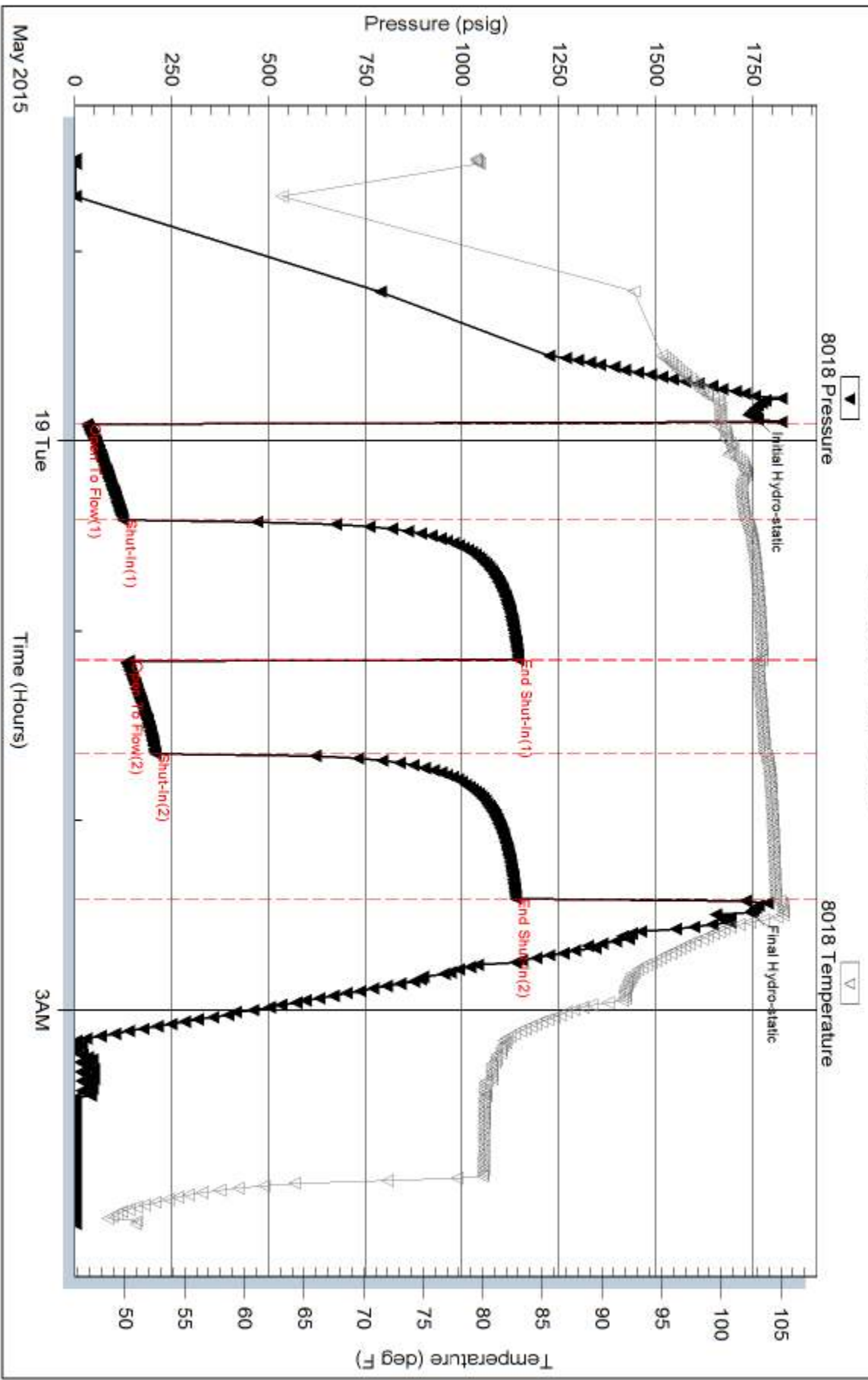
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

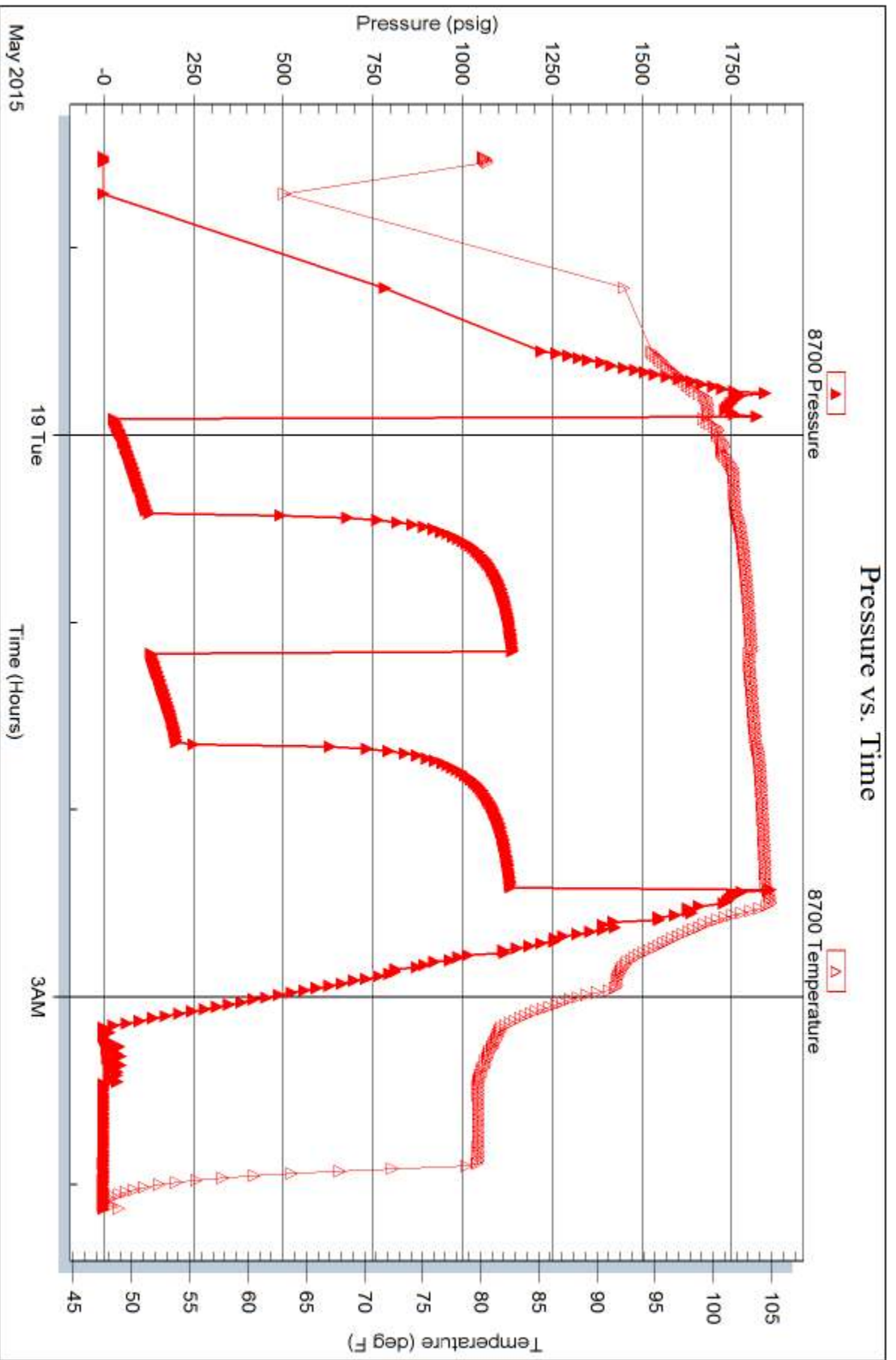


Serial #: 8700

Outside Brungardt Oil & Leasing Inc

Grabbe A #1

DST Test Number: 3





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60584

4/10

Well Name & No. Grabbe A #1 Test No. 1 Date 5-17-15
 Company BRUNGARDT OIL & LEASING INC Elevation 2052 KB 2047 GL
 Address 213 W. 7TH STREET PO Box 871 Russell, Ks 67665-1731
 Co. Rep / Geo. Roger Fisher, Chris BRUNGARDT Rig Shields rig 1
 Location: Sec. 21 Twp. 15^S Rge. 18^W Co. ELLIS State Ks

Interval Tested 3282-3365 Zone Tested Toronto - LKC "C"
 Anchor Length 83 Drill Pipe Run 2800 Mud Wt. 9.2
 Top Packer Depth 3277 Drill Collars Run - Vis 52
 Bottom Packer Depth 3282 Wt. Pipe Run 465 WL 5.8
 Total Depth 3365 Chlorides 5800 ppm System LCM 2#
 Blow Description IFP - WEAK TO STRONG IN 11 MIN
ISTP - NO BLOW
FFP - WEAK TO STRONG IN 7 MIN
FSIP - NO BLOW

Rec	Feet of	%gas	%oil	%water	%mud
<u>450</u>	<u>GTP</u>				
<u>40</u>	<u>0+6CM</u>	<u>10</u>	<u>10</u>	<u>80</u>	
<u>60</u>	<u>0CGM</u>	<u>30</u>	<u>15</u>	<u>55</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 100 BHT 99 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1563 Test 1050 T-On Location 0335
 (B) First Initial Flow 26 Jars _____ T-Started 0450
 (C) First Final Flow 48 Safety Joint _____ T-Open 0635
 (D) Initial Shut-In 273 Circ Sub _____ T-Pulled 0935
 (E) Second Initial Flow 55 Hourly Standby _____ T-Out 1054
 (F) Second Final Flow 67 Mileage 26 RT 26 Comments _____
 (G) Final Shut-In 307 Sampler _____
 (H) Final Hydrostatic 1519 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 45 Day Standby _____ Total 1076
 Final Flow 45 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1076

Approved By _____ Our Representative Ray Schwager Thank you
 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. 60585

Well Name & No. Grabbe A #1 Test No. 2 Date 5-18-15
 Company BRUNGAARDT OIL-LEASING INC Elevation 2052 KB 2047 GL
 Address 213 W. 7th STREET P.O. Box 871 Russell, Ks 67665-1731
 Co. Rep / Geo. Roger Fisher, Chris Brungardt Rig Shields rig 1
 Location: Sec. 21 Twp. 15^s Rge. 18^w Co. Ellis State Ks

Interval Tested 3447-3510 Zone Tested LKC H-J
 Anchor Length 63 Drill Pipe Run 2988 Mud Wt. 9.1
 Top Packer Depth 3442 Drill Collars Run - Vis 60
 Bottom Packer Depth 3447 Wt. Pipe Run 465 WL 6
 Total Depth 3510 Chlorides 6000 ppm System LCM 2#
 Blow Description IFP - Very Weak Blow, died in 20min
ISIP - NO Blow
FFP -
FSIP -

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud w/show foil</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 5 BHT 98 Gravity - API RW - @ - °F Chlorides - ppm
 (A) Initial Hydrostatic 1666 Test 1050 T-On Location 0230
 (B) First Initial Flow 23 Jars _____ T-Started 0305
 (C) First Final Flow 21 Safety Joint _____ T-Open 0435
 (D) Initial Shut-In 36 Circ Sub _____ T-Pulled 0535
 (E) Second Initial Flow - Hourly Standby _____ T-Out 0654
 (F) Second Final Flow - Mileage 26 Comments _____
 (G) Final Shut-In - Sampler _____
 (H) Final Hydrostatic 1661 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 1076
 Final Flow pulled Tool Accessibility _____ MP/DST Disc't _____
 Final Shut-In - Sub Total 1076

Approved By _____ Our Representative Ray Schwager Thank you

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 60586

4/10

Well Name & No. Grabbe A#1 Test No. 3 Date 5-18-15
 Company BRUNGARDT OIL LEASING INC Elevation 2052 KB 2047 GL
 Address 213 W. 7TH STREET PO Box 871 Russell, Ks 67665-1731
 Co. Rep / Geo. Roger Fisher, Chris BRUNGARDT Rig 'Shields rig'
 Location: Sec. 21 Twp. 15^S Rge. 18^W Co. ELLIS State Ks

Interval Tested 3602-3640 Zone Tested Arbuckle
 Anchor Length 38 Drill Pipe Run 3144 Mud Wt. 9.2
 Top Packer Depth 3797 Drill Collars Run - Vis 51
 Bottom Packer Depth 3602 Wt. Pipe Run 465 WL 6.8
 Total Depth 3640 Chlorides 6000 ppm System LCM 2#

Blow Description IFP - WEAK TO STRONG IN 15 MIN
ISIP - NO BLOW
FFP - WEAK TO STRONG IN 27 MIN
FSIP - SURFACE BLOW BACK

Rec	Feet of	%gas	%oil	%water	%mud
<u>124</u>	<u>GTP</u>				
<u>410</u>	<u>CO</u>				
<u>80</u>	<u>GMO</u>	<u>20</u>	<u>50</u>		<u>30</u>

Rec Total 490 BHT 104 Gravity 28 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1757 Test 1050 T-On Location 2200
 (B) First Initial Flow 33 Jars _____ T-Started 2230
 (C) First Final Flow 124 Safety Joint _____ T-Open 2355
 (D) Initial Shut-In 1144 Circ Sub _____ T-Pulled 0225
 (E) Second Initial Flow 139 Hourly Standby _____ T-Out 0407
 (F) Second Final Flow 208 Mileage 26 Comments _____
 (G) Final Shut-In 1138 Sampler _____
 (H) Final Hydrostatic 1744 Straddle _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 45 Ruined Packer _____
 Final Flow 30 Extra Copies _____
 Final Shut-In 45 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1076
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1076

Approved By _____ Our Representative RAY SCHWAGER *Thank you*

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.

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: Grabbe A #1
 API: 15-051-26776-00-00
 Location: SE-NW-NE-NW/4 Section 21-T15S-R18W
 License Number: 3956
 Spud Date: May 11, 2015
 Surface Coordinates: 430' FNL & 1850' FWL Section 21-T15S-R18W
 Region: Ellis Co, KS
 Drilling Completed: May 19, 2015

Bottom Hole Coordinates: 2047' To: TD
 Ground Elevation (ft): 2052' Total Depth (ft): 3699'
 Logged Interval (ft): NTD
 Formation:
 Type of Drilling Fluid: Chemical Displaced at 2950'

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

OPERATOR

Company: Brungardt Oil and Leasing Inc.
 Address: 213 W. 7th St.
 P.O. Box 871
 Russell, KS 67665 +1731

GEOLOGIST

Name: Roger L. Fisher
 Company: Consulting Geologist
 Address: 2610 W. Rio Vista
 Wichita Kansas, 67204

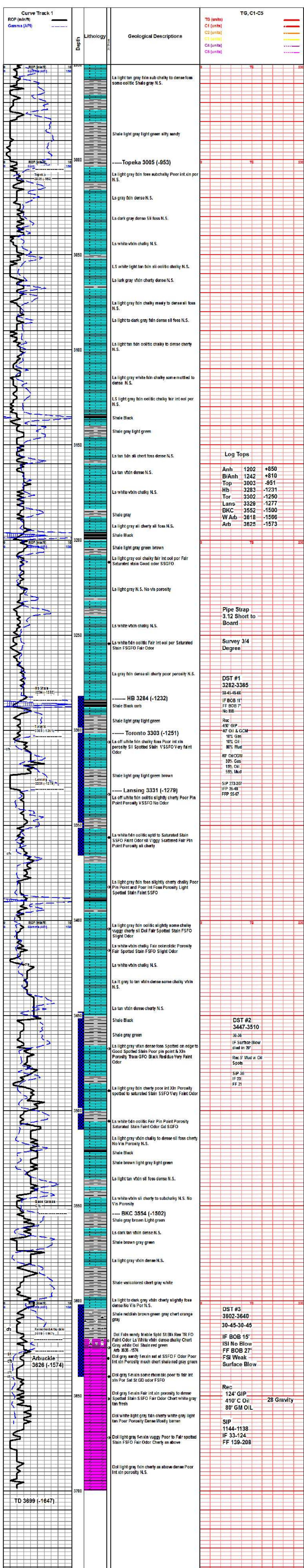
COMMENTS

Shields Rig #1
 Surface Casing: 1208' of 8 5/8"
 Mudco Mud Co
 OH Logs: Pioneer Wireline; DILL, CDL/CNL, Micro
 Triobite Testing
 Surveys:
 1208' .75 degree
 3365' .75 degree
 Strap 3.12' Short to Board at 3365'

Ran 5 1/2" Casing to test Arbuckle.

ROCK TYPES

	Anhy		Congl		Lmst		Black sh
	Bent		Sdy dolo		Mlmt		Gry sh
	Brec		Shy dolo		Salt		Shale
	Cht		Dol		Shale		Shylstst
	Clyst		Gyp		Sltst		Slysh
	Coal		Sdy lmst		Ss		



QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

Phone 785-483-2025

Cell 785-324-1041

No. 1415

Sec.	21	Twp.	15	Range	18	County	Ellis	State	KS	On Location	Finish	9:00pm
------	----	------	----	-------	----	--------	-------	-------	----	-------------	--------	--------

Date 5-13-15
 Lease Grapple A
 Contractor Shields
 Type Job surface
 Hole Size 12 1/4
 T.D. 1210
 Depth 1208
 Street To Charge Brungardt
 City State
 The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. Shoe joint 21
 Displace 75.4661
 Cement Amount Ordered 450 sx 60% no. 3 acc. 2% gel

EQUIPMENT	
No.	Cement
No.	Helper Loanit
No.	Driver Billy
No.	Driver Travis
JOB SERVICES & REMARKS	
Remarks: cement did circulate	
Rat Hole	
Mouse Hole	
Centralizers	
Baskets	
DV or Port Collar	
Sand	
Handling	
Mileage	
Guide Shoe	
Centralizer 3	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
1 Baffle plate	
1 Rubber plug	
Pumptrk Charge	
Mileage	
Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	

No.	Cement
No.	Helper Loanit
No.	Driver Billy
No.	Driver Travis

JOB SERVICES & REMARKS	
Remarks: cement did circulate	
Rat Hole	
Mouse Hole	
Centralizers	
Baskets	
DV or Port Collar	
Sand	
Handling	
Mileage	
Guide Shoe	
Centralizer 3	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
1 Baffle plate	
1 Rubber plug	
Pumptrk Charge	
Mileage	
Common	
Poz. Mix	
Gel.	
Calcium	
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	

Signature	
George Boggs	
Total Charge	
Discount	
Tax	
Mileage	
Pumptrk Charge	
1 Rubber plug	
1 Baffle plate	
Latch Down	
Float Shoe	
AFU Inserts	
Baskets	
Centralizer 3	
Guide Shoe	
FLOAT EQUIPMENT	
Mileage	
Handling	
Sand	
CFL-117 or CD110 CAF 38	
Mud CLR 48	
Kol-Seal	
Flowseal	
Salt	
Hulls	
Calcium	
Gel.	
Poz. Mix	
Common	

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

No. 1418

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

Date	5-20-15
Sec.	21
Twp.	15
Range	18
County	Ellis
State	K5
On Location	
Finish	1:30 AM

Location Hays 5 to Hays Mack, 1/8 W, 5 N 2

Well No. 1

Owner

Lease Gabbe A

Contractor 5H1D's

Type Job long string

Hole Size 7 7/8

Csg. 5 1/2 #14

Depth 3700.12

Charge To

Brungardt Oil

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

Tool	Depth	City	State
Cement Left in Csg.	Shoe Joint	Displace	Meas Line
42.94	89 1/2 661		
Cement Amount Ordered	1905x for 10% salt		
The above was done to satisfaction and supervision of owner agent or contractor.			

EQUIPMENT

No.	18	Cement
Helper	Dilly	
No.	3	Driver Chad
No.	4	Driver Travis

JOB SERVICES & REMARKS

Remarks:	
Rat Hole	30
Mouse Hole	15
Centralizers	1,2,8,9
Mud CLR 48	500 gal
CFL-117 or CD110 CAF 38	
DV or Port Collar	
Sand	
Handling	
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	4 Furkos
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
Pumptrk Charge	
Mileage	

Signature	Thomas W. Fisher
Tax	
Discount	
Total Charge	