



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1198523  
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: \_\_\_\_\_

1198523

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
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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				

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: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 7863

Date	9-19-13	Sec.	30	Twp.	7	Range	19	County	ROCKS	State	KS	On Location	5:00 PM	Finish	6:30 PM	
Lease	Griebe							Well No.	1	Location Webster dam W to 8111						
Contractor	Derran 4							Owner	3/4 N Wink etc							
Type Job	Surface							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.								
Hole Size	12 1/4							T.D.	221							
Csg.	8 3/5							Depth	Production Drilling							
Tbg. Size								Street								
Tool								City	State							
Cement Left in Csg.	20 FT							Shoe Joint	20 FT							
Meas Line								Displace	12.3/4							
<b>EQUIPMENT</b>								Common								
Pumptrk	5	No.		Cementer				Poz. Mix								
				Helper				Gel								
Bulktrk	14	No.		Driver				Calcium								
				Driver				Hulls								
Bulktrk	DU	No.		Driver				Salt								
				Driver				Flowseal								
<b>JOB SERVICES &amp; REMARKS</b>								Kol-Seal								
Remarks:								Mud CLR 48								
Rat Hole								CFL-117 or CD110 CAF 38								
Mouse Hole								Sand								
Centralizers								Handling								
Baskets								Mileage								
D/V or Port Collar								<b>FLOAT EQUIPMENT</b>								
	Cement did							Guide Shoe								
	Circulate							Centralizer								
								Baskets								
								AFU Inserts								
								Float Shoe								
								Latch Down								
								Pumptrk Charge								
								Mileage								
								Tax								
								Discount								
								Total Charge								
X Signature	[Signature]															

Quality Oilwell Cementing

# QUALITY OILWELL CEMENTING, INC.

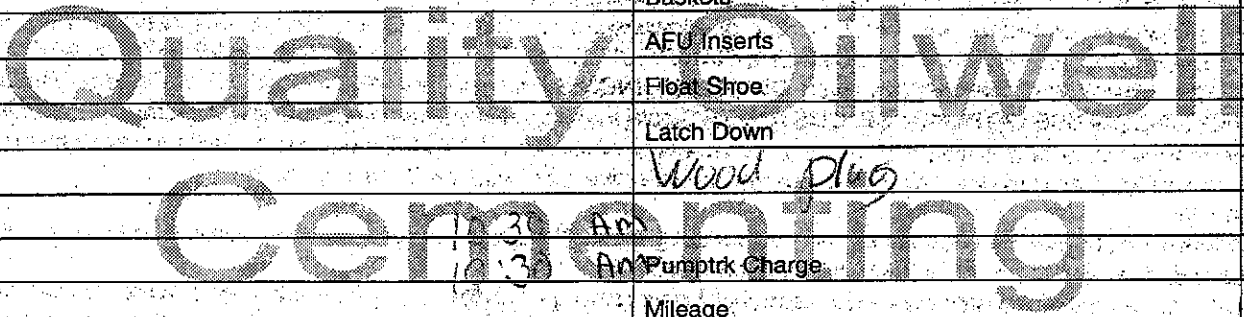
Federal Tax I.D.# 20-2886107

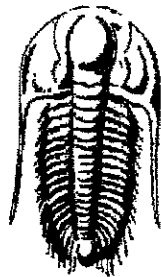
Phone 785-483-2025  
Cell 785-324-1041

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

No. 7867

Date	9-24-13	Sec.	30	Twp.	7	Range	19	County	ROOKS	State	KS	On Location	6:20 AM	Finish	10:30 AM	
Lease	Griebel							Well No.	1	Location	Stockton W to 5 RD 34N					
Contractor	Piscorady 4							Owner	West into							
Type Job	plug SOB							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.								
Hole Size	7 7/8							T.D.	3500							
Csg. Drill pipe								Charge To	Production Drilling							
Tbg. Size								Depth								
Tool								Street								
Cement Left in Csg.								City	State							
Meas Line								Depth	The above was done to satisfaction and supervision of owner agent or contractor.							
							Shoe Joint	Cement Amount Ordered 270 60/40 4% <del>20</del>								
							Displace	Yd flow								
<b>EQUIPMENT</b>																
Pumptrk	5	No.	Cementer		Helper		Common									
Bulktrk	1	No.	Driver		Driver		Poz. Mix									
Bulktrk	pu	No.	Driver		Driver		Gel.									
							Calcium									
<b>JOB SERVICES &amp; REMARKS</b>																
Remarks:							Hulls									
Rat Hole 30 SWS							Salt									
Mouse Hole 15 SWS							Flowseal									
Centralizers							Kol-Seal									
Baskets							Mud CLR 48									
D/V or Port Collar							CFL-117 or CD110 CAF 38									
1st 3435 ft 50 SWS							Sand									
2nd 1500 ft 25 SWS							Handling									
3rd 900 ft 100 SWS							Mileage									
4th 275 ft 40 SWS							<b>FLOAT EQUIPMENT</b>									
5th 40 ft 10 SWS							Guide Shoe									
							Centralizer									
							Baskets									
							AFU Inserts									
							Float Shoe									
							Latch Down									
							Wood Plug									
							Mileage									
							Pumptrk Charge									
							Mileage									
							Tax									
							Discount									
							Total Charge									
Signature Mike Marshall																





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Production Drilling Inc**

1023 Reservation Rd  
Hays KS 67601

ATTN: Cliff Ottaway

**Greibel #1**

**30-7a-10w Rooks,KS**

Start Date: 2013.09.23 @ 11:18:36

End Date: 2013.09.23 @ 16:48:15

Job Ticket #: 54827                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2013.09.24 @ 10:30:35

Production Drilling Inc  
30-7a-10w Rooks,KS  
Greibel #1  
DST # 1  
Arbuckle  
2013.09.23



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Production Drilling Inc

30-7s-19w Rooks, KS

1023 Reservation Rd  
Hays KS 67601

**Greibel #1**

Job Ticket: 54827

DST#: 1

ATTN: Cliff Ottaway

Test Start: 2013.09.23 @ 11:18:36

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:34:36

Time Test Ended: 16:48:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang/ Tim Phill

Unit No: 49

Interval: **3412.00 ft (KB) To 3443.00 ft (KB) (TVD)**

Total Depth: 3443.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1986.00 ft (KB)

1978.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8898

Outside

Press@RunDepth: 14.03 psig @ 3415.00 ft (KB)

Start Date: 2013.09.23

End Date:

2013.09.23

Start Time: 11:18:37

End Time:

16:48:16

Capacity: 8000.00 psig

Last Cellb.: 2013.09.23

Time On Btm: 2013.09.23 @ 13:34:26

Time Off Btm: 2013.09.23 @ 15:35:06

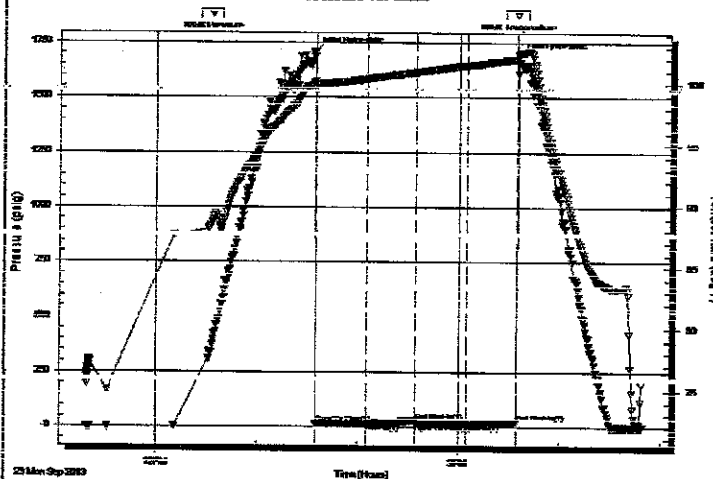
TEST COMMENT: IFP-30-weak blow built to 1/4"

FSI-30-no blow

FF-30-no blow

FSI-30-no blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1711.28	100.16	Initial Hydro-static
1	12.66	99.37	Open To Flow (1)
31	13.44	100.38	Shut-in(1)
60	28.73	100.93	End Shut-in(1)
60	14.24	100.93	Open To Flow (2)
90	14.03	101.50	Shut-in(2)
120	21.66	101.99	End Shut-in(2)
121	1588.86	102.44	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud with oil spots	0.02

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Production Drilling Inc  
1023 Reservation Rd  
Hays KS 67601  
ATTN: Cliff Ottaway

**30-7s-19w Rooks,KS**  
**Greibel #1**  
Job Ticket: 54827      DST#: 1  
Test Start: 2013.09.23 @ 11:18:36

**Tool Information**

Drill Pipe:	Length: 3378.00 ft	Diameter: 3.80 inches	Volume: 47.38 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: lb
			<b>Total Volume: 47.53 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3412.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

**Tool Description**

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut in Tool	5.00			3397.00	
Hydraulic tool	5.00			3402.00	
Packer	5.00			3407.00	20.00 Bottom Of Top Packer
Packer	5.00			3412.00	
Stub	1.00			3413.00	
Perforations	2.00			3415.00	
Recorder	0.00	8807	Inside	3415.00	
Recorder	0.00	8898	Outside	3415.00	
Perforations	25.00			3440.00	
Bullnose	3.00			3443.00	31.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>51.00</b>				





**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Production Drilling Inc  
1023 Reservation Rd  
Hays KS 67601  
ATTN: Cliff Ottaway

**30-7s-19w Rooks,KS**  
**Greibel #1**  
Job Ticket: 54827      DST#: 1  
Test Start: 2013.09.23 @ 11:19:36

**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: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 1.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
5.00	mud with oil spots	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

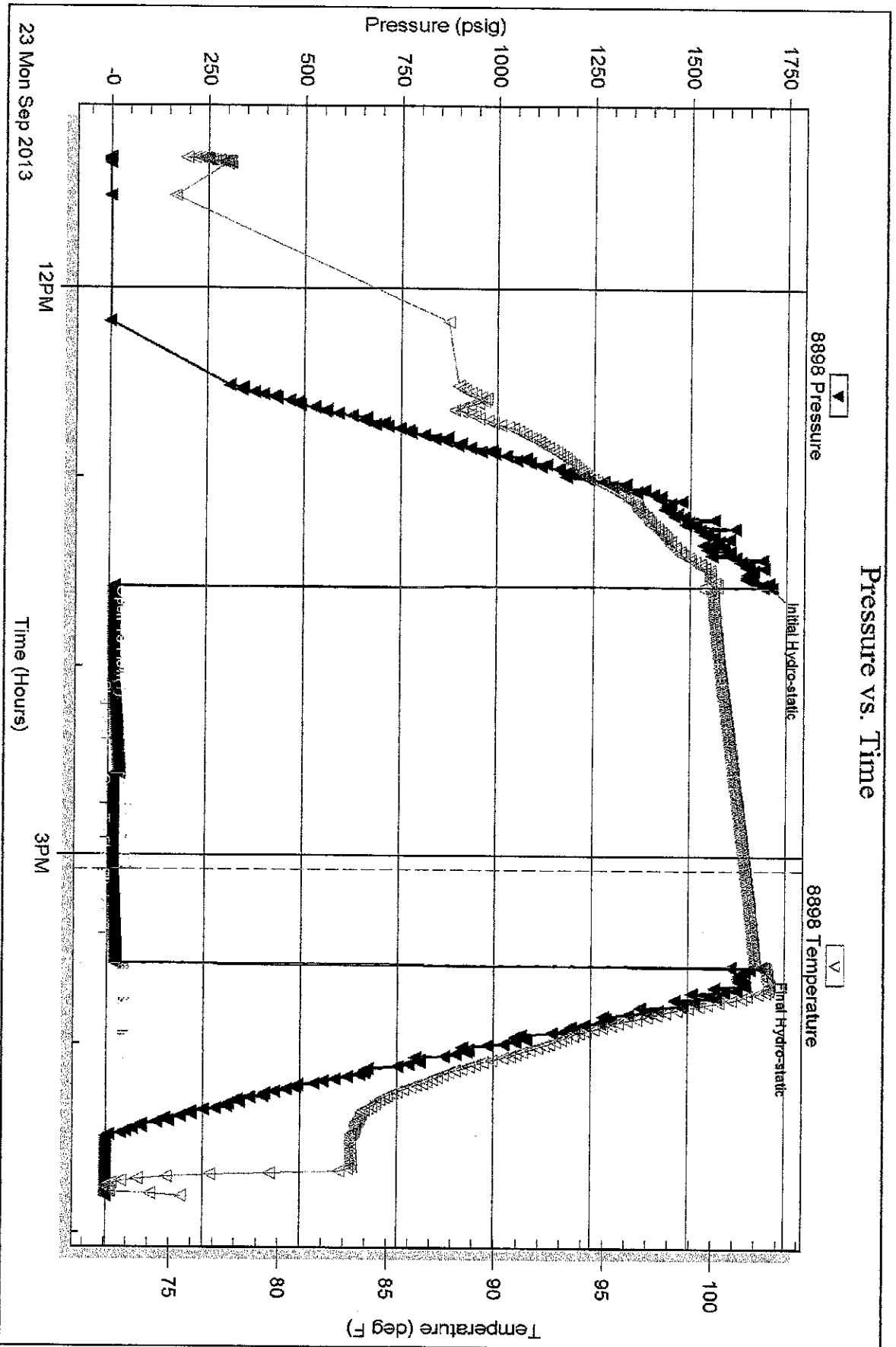
Serial #: 8898

Outside

Production Drilling Inc

Grebel #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 54827

Printed: 2013.09.24 @ 10:30:37

Serial #: 8897

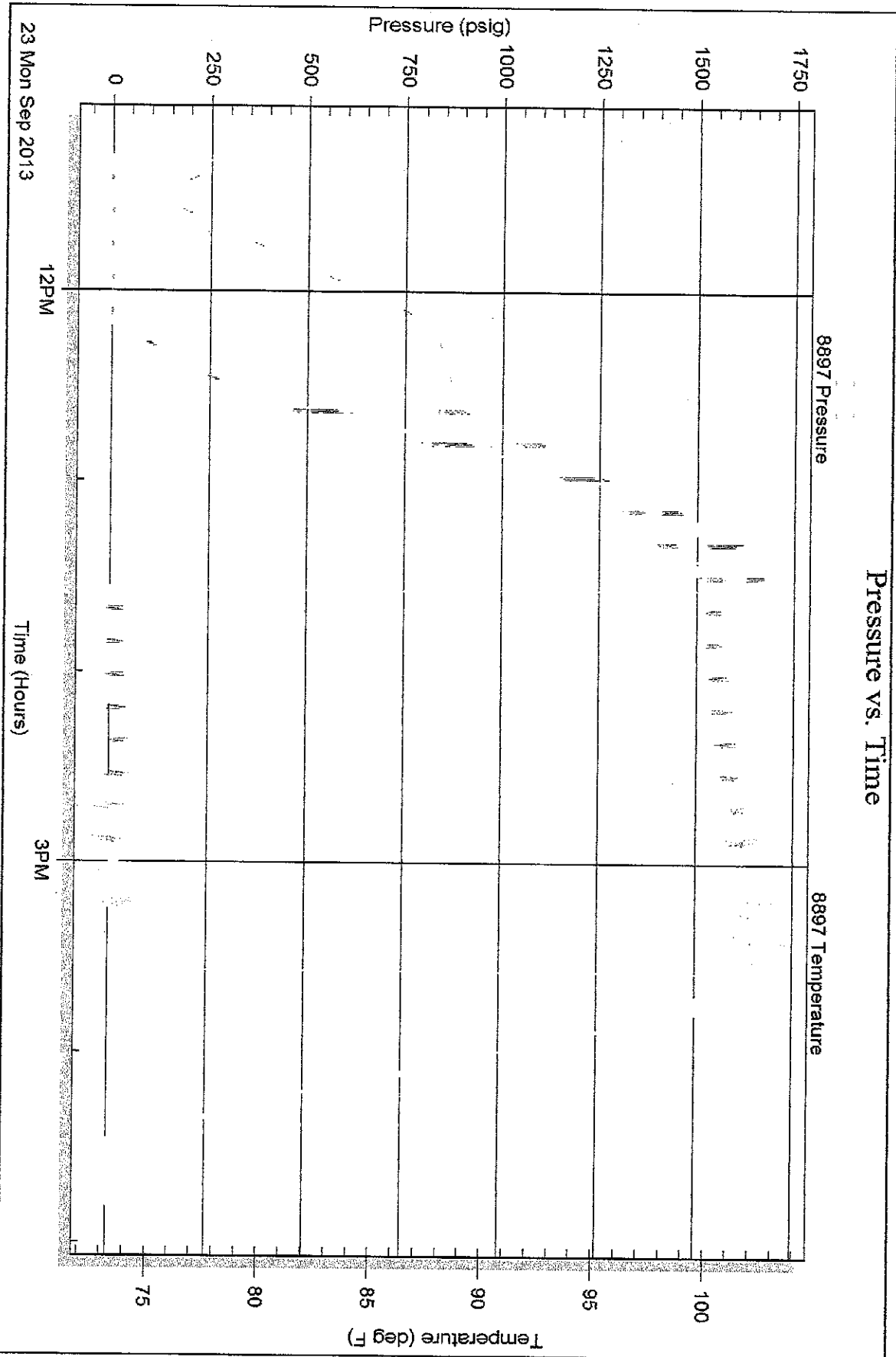
Inside

Production Drilling Inc

Grelbel #1

DST Test Number: 1

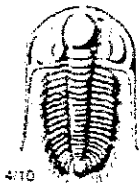
### Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 54827

Printed: 2013.09.24 @ 10:30:37



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 3452

Well Name & No. Greibel # 1 Test No. 1 Date 09/23/2013  
 Company Production Drilling Inc Elevation 1978 KB 1986 GL  
 Address 1023 Reservation Rd Hays KS 67601  
 Co. Rep / Geo. CLIFF O'BRAWAY Rig Discovery Rig # 4  
 Location: Sec. 36 Twp. 7 S Rge. 19 W Co. Rooks State KS

Interval Tested 3412 - 3443 Zone Tested Arkuckle  
 Anchor Length 31 Drill Pipe Run \_\_\_\_\_ Mud Wt. 8.8  
 Top Packer Depth 3408 Drill Collars Run 30 ft Vis 54  
 Bottom Packer Depth 3412 Wt. Pipe Run \_\_\_\_\_ WL 8.8  
 Total Depth 3443 Chlorides 2000 ppm System LCM 2\*

Blow Description 20 IFP  
20 - weak blow built to 1/4"  
ISI - no blow  
FF - no blow  
FSI - no blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud with oil spots</u>			<u>100</u>	
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Rec Total 5 SHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 1711  Test 1150 T-On Location \_\_\_\_\_  
 (B) First Initial Flow 13  Jars \_\_\_\_\_ T-Started 1118  
 (C) First Final Flow 29 13  Safety Joint \_\_\_\_\_ T-Open 1335  
 (D) Initial Shut-In 14 29  Circ Sub \_\_\_\_\_ T-Pulled 1535  
 (E) Second Initial Flow 14 14  Hourly Standby \_\_\_\_\_ T-Out 1649  
 (F) Second Final Flow 14  Mileage 11.5 X2 Comments Loaded tools  
 (G) Final Shut-In 22  Sampler 325.50 @ 4:30 A.M. 07  
 (H) Final Hydrostatic 1689  Straddle \_\_\_\_\_ 09/24/13

Initial Open 30  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 30  Ruined Packer \_\_\_\_\_  
 Final Flow 30  Extra Packer \_\_\_\_\_  
 Final Shut-In 30  Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_ Sub Total 0  
 Accessibility \_\_\_\_\_ Total 1475.50  
 Sub Total 1475.50 MP/DST Disc't \_\_\_\_\_

Approved By [Signature] Our Representative [Signature]  
 Trilobite Testing Inc. shall not be liable for damages 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 opinions concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost of the party for whom the test is made.