

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

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	Darrah Oil Company, LLC
Well Name	GAUNT 28C 1
Doc ID	1486420

All Electric Logs Run

Dual Induction
Dual Comp Porosity
Micro Resistivity
Sonic

Form	ACO1 - Well Completion
Operator	Darrah Oil Company, LLC
Well Name	GAUNT 28C 1
Doc ID	1486420

Tops

Name	Top	Datum
Anhydrite	762	+1130
Oread	3050	-1158
Heebner	3144	-1252
Brown Lm	3264	-1372
Lansing	3276	-1384
G zone	3354	-1462
Muncie Creek	3395	-1503
J zone	3434	-1542
BKC	3495	-1603
Arbuckle	3578	-1686





# HURRICANE SERVICES INC

Remit To: Hurricane Services, Inc.  
250 N. Water, Suite 200  
Wichita, KS 67202  
316-303-9515

Customer:  
DARRAH OIL  
C/O JOHN JAY DARRAH JR  
PO BOX 2786  
WICHITA, KS 67201-2786

Invoice Date: 9/6/2019  
Invoice #: 0343580  
Lease Name: Gaunt  
Well #: 28C-1 (New)  
County: Barton  
Job Number: ICT2353

Date/Description	HRS/QTY	Rate	Total
Surface-New well	0.000	0.000	0.00
Cement pump #265	1.000	637.500	637.50
Heavy Eq Mileage	5.000	3.400	17.00
Light Eq Mileage	5.000	1.700	8.50
H-325	180.000	17.000	3,060.00
Ton Mileage-Minimum	1.000	255.000	255.00
Cement Class A	82.000	14.450	1,184.90

V56011

82300/800

<b>PAID</b>	
CK. NO 12081	DATE 11/20/19

**Total** 5,162.90

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 1/2% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

**SALES TAX:** Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

**WE APPRECIATE YOUR BUSINESS!**

250 N. Water St., Suite #200  
Wichita, KS 67202



HURRICANE SERVICES INC

Customer	Darrah Oil Company, LLC		Lease & Well #	Gaunt #28C-1		Date	9/6/2019		
Service District	El Dorado, KS		County & State	Barton, KS		Legals S/T/R	28-20s-13w		
Job Type	Surface	<input checked="" type="checkbox"/> PROD	<input type="checkbox"/> NI	<input type="checkbox"/> SWD	New Well?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> No	Ticket #	
Job #								ICT 2353	
Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures							
265	Kevin	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging				
241	Justin	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection				
77	Jake H	<input checked="" type="checkbox"/> Safety Footwear	<input checked="" type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations				
242	Kale	<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations				
		<input checked="" type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below					
Comments									
Product/Service Code      Description      Unit of Measure      Quantity      Net Amount									
c010	Cement Pump		ea	1.00				\$637.50	
m010	Heavy Equipment Mileage		mi	5.00				\$17.00	
m015	Light Equipment Mileage		mi	5.00				\$0.50	
cp015	H-325		sack	180.00				\$3,060.00	
m025	Ton Mileage - Minimum		each	1.00				\$255.00	
cp010	Class A Cement		sack	82.00				\$1,184.90	
Customer Section: On the following scale how would you rate Hurricane Services Inc.?									
Based on this job, how likely is it you would recommend HSI to a colleague?						Total Taxable	\$ -	Tax Rate:	
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <small>Unlikely      Exceedingly Likely</small>						State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.		Sale Tax:	\$ -
						Total:	\$	5,162.90	
						HSI Representative: Jake Heard			

**TERMS:** Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

X \_\_\_\_\_ CUSTOMER AUTHORIZATION SIGNATURE







**HURRICANE SERVICES INC**

Remit To: Hurricane Services, Inc.  
250 N. Water, Suite 200  
Wichita, KS 67202  
316-303-9515

*V56083*

Customer:  
DARRAH OIL  
C/O JOHN JAY DARRAH JR  
PO BOX 2786  
WICHITA, KS 67201-2786

Invoice Date: 9/13/2019  
Invoice #: 0343837  
Lease Name: Gaunt  
Well #: 28C-1  
County: Barton  
Job Number: ICT2401

Date/Description	HRS/QTY	Rate	Total
Plug to Abandon-Eldorado Dist	0.000	0.000	0.00
Cement pump #265	1.000	637.500	637.50
Heavy Eq Mileage	5.000	3.400	17.00
Light Eq Mileage	5.000	1.700	8.50
H-Plug	300.000	11.050	3,315.00
Ton Mileage-Minimum	1.000	255.000	255.00
Wooden plug 8 5/8"	1.000	127.500	127.50

*83900/300*

Net Invoice	4,360.50
Sales Tax:	179.87
<b>Total</b>	<b>4,540.37</b>

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**WE APPRECIATE YOUR BUSINESS!**

250 N. Water St., Suite #200  
Wichita, KS 67202



**HURRICANE SERVICES INC**

Customer	Darrah Oil Company, LLC	Lease & Well #	Gaunt #28C-1	Date	9/13/2019
Service District	El Dorado, KS	County & State	Barton, KS	Legal's S/T/R	28-20s-13w
Job Type	PTA	<input type="checkbox"/> PROD <input type="checkbox"/> NI <input type="checkbox"/> SWD	Legals S/T/R New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No	Job # Ticket #
Equipment #	Driver				

Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures			
285	Kevin	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging
77	Justin	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection
77	Jake H	<input checked="" type="checkbox"/> Safety Footwear	<input checked="" type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations
194/254	John P	<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations
		<input checked="" type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below	

Comments

Product/Service Code	Description	Unit of Measure	Quantity	Net Amount
c010	Cement Pump	ea	1.00	\$637.50
m010	Heavy Equipment Mileage	mi	5.00	\$17.00
m015	Light Equipment Mileage	mi	5.00	\$8.50
cp055	H-Plug	sack	300.00	\$3,315.00
m025	Ton Mileage- Minimum	each	1.00	\$255.00
fe290	8 5/8" Wooden Plug	ea	1.00	\$127.50

Customer Section: On the following scale how would you rate Hurricane Services Inc?

Based on this job, how likely is it you would recommend HSI to a colleague?

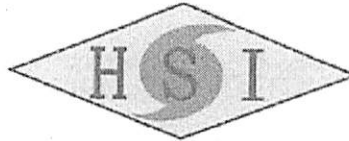
Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely

Total Taxable	\$ -	Tax Rate:		Net:	\$4,360.50
State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.				Sale Tax:	\$ -
				Total:	\$ 4,360.50

HSI Representative: Jake Heard

**TERMS:** Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/4% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

*[Signature]*  
CUSTOMER AUTHORIZATION SIGNATURE



**CEMENT TREATMENT REPORT**

Customer: <b>Darrah Oil Company, LLC</b>	Well: <b>Gaunt 28C-1</b>	Ticket: <b>ICT 2401</b>
City, State:	County: <b>Barton, KS</b>	Date: <b>9/13/2019</b>
Field Rep: <b>Scott Piland</b>	S-T-R: <b>28/20s/13w</b>	Service: <b>PTA</b>

Downhole Information	
Hole Size:	<b>7.875 in</b>
Hole Depth:	<b>3660 ft</b>
Casing Size:	<b>8.625 in</b>
Casing Depth:	<b>301.78 ft</b>
Tubing / Liner:	<b>in</b>
Depth:	<b>ft</b>
Tool / Packer:	
Depth:	<b>ft</b>
Displacement:	<b>bbls</b>

Slurry	
Weight:	<b>13.8 # / sx</b>
Water / Sx:	<b>6.90 gal / sx</b>
Yield:	<b>1.42 ft<sup>3</sup> / sx</b>
Bbls / Ft:	
Depth:	<b>ft</b>
Volume:	<b>bbls</b>
Excess:	<b>%</b>
Total Slurry:	<b>75.87 bbls</b>
Total Sacks:	<b>300 sx</b>

Cement Blend		
Product	%	#
Class A	<b>60.0</b>	<b>16920</b>
Gel	<b>4.0</b>	<b>1032</b>
CaCl		
Metso		
KoISeal		
PhenoSeal		
Salt		
Flyash	<b>40.0</b>	<b>8880</b>
<b>Total</b>		<b>26,832</b>

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
				On location safety meeting					
				Spot in and rig up					
				Break circulation with rig					
4:30 PM				Hook up to drill pipe @ 3559'					
	4.0	250.0	8.5	Pump 8.5 water ahead					
	3.0	150.0	12.6	Mix and pump 50 sx cement					
	3.0	100.0	3.0	Pump 3 water					
	8.3	200.0	44.3	Pump 44.33 Mud					
				Pull Drill pipe to 785'					
				Break circulation with rig					
	4.0	150.0	8.5	Pump 8.5 water ahead					
	4.0	150.0	12.6	Mix and pump 50 sx cement					
	4.0	150.0	3.0	Pump 3 water					
	8.3	150.0	4.9	Pump 4.88 Mud					
				Pull Drill pipe to 360'					
				Break circulation with rig					
	4.0	75.0	20.0	Pump 20 BBL water					
	4.0	75.0	21.5	Mix and pump 85 sx cement					
	4.0	75.0	1.0	Displace 1 BBL					
				Pull pipe to 40 feet and push plug					
	2.0	50.0	21.5	Mix and pump 85 sx cement					
				Cement did circulate					
	2.0	50.0	7.5	Plug rat hole with 30 sacks					
7:30				Done					

CREW		UNIT	SUMMARY		
Cementer:	Jake H	77	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Kevin	265	4.20615 bpm	125.00 psi	169.07 bbls
Bulk #1:	Justin	77			
Bulk #2:	John P				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**32/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 32A-1**

Job Ticket: 66291

**DST#: 1**

Test Start: 2019.09.10 @ 14:22:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:35:32

Time Test Ended: 22:32:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/ 14

**Interval: 3396.00 ft (KB) To 3450.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3450.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8365**

**Inside**

Press@RunDepth: 94.84 psig @ 3397.00 ft (KB)

Capacity: psig

Start Date: 2019.09.10

End Date: 2019.09.10

Last Calib.: 2019.09.10

Start Time: 14:22:01

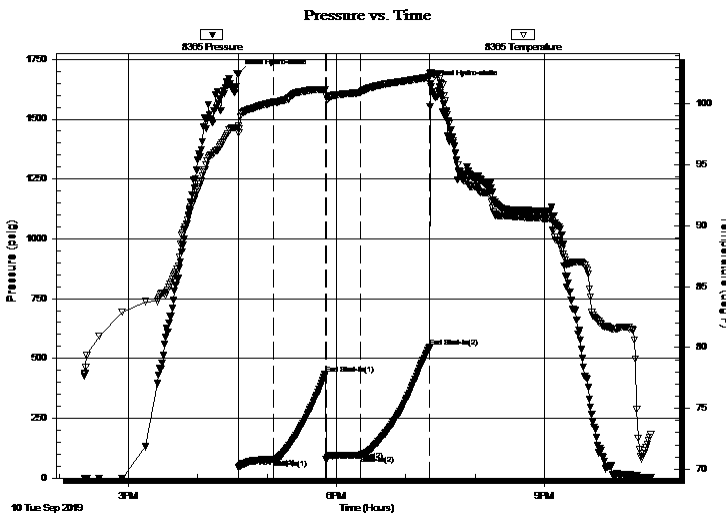
End Time: 22:32:02

Time On Btm: 2019.09.10 @ 16:35:17

Time Off Btm: 2019.09.10 @ 19:21:32

**TEST COMMENT:** IF 30 Minutes/ Blow to BOB in 7 minutes/ Total build 40 inches  
 ISI 45 Mintues/ 1/4 inch blow back  
 FF 30 Mintues/ Blow to BOB in 20 seconds/ Total build 63 inches  
 FSI 60 Minutes/ 1 3/4 inch blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1688.93	98.18	Initial Hydro-static
1	45.80	97.63	Open To Flow (1)
31	77.98	100.15	Shut-In(1)
75	435.09	101.17	End Shut-In(1)
76	76.22	100.65	Open To Flow (2)
106	94.84	100.92	Shut-In(2)
166	545.89	102.23	End Shut-In(2)
167	1646.34	102.59	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	GMO / G 10% M 30% O 60%	0.30
62.00	GMO / G 50% M 20% O 30%	0.34
67.00	GOM / G 10% O 10% M 80%	0.94
0.00	869 feet GIP	0.00

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**32/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 32A-1**

Job Ticket: 66291

**DST#: 1**

Test Start: 2019.09.10 @ 14:22:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:35:32

Time Test Ended: 22:32:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/ 14

**Interval: 3396.00 ft (KB) To 3450.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3450.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6755 Outside**

Press@RunDepth: 563.16 psig @ 3398.00 ft (KB)

Capacity: psig

Start Date: 2019.09.10

End Date: 2019.09.10

Last Calib.: 2019.09.10

Start Time: 14:22:01

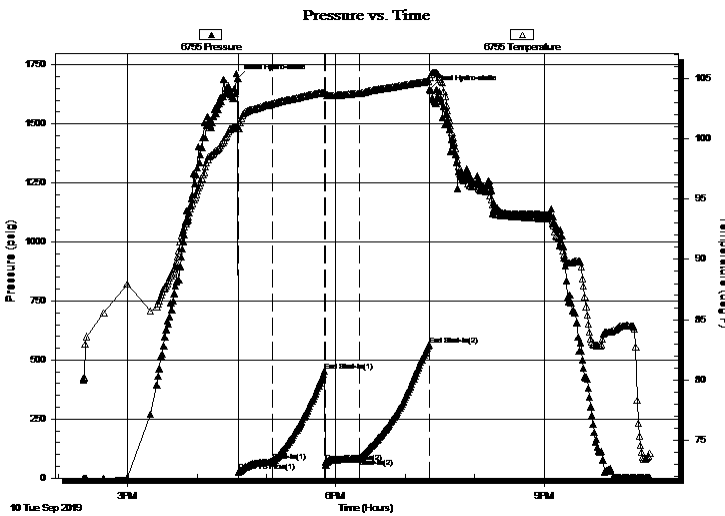
End Time: 22:32:02

Time On Btm: 2019.09.10 @ 16:35:17

Time Off Btm: 2019.09.10 @ 19:21:17

**TEST COMMENT:** IF 30 Minutes/ Blow to BOB in 7 minutes/ Total build 40 inches  
 ISI 45 Minutes/ 1/4 inch blow back  
 FF 30 Minutes/ Blow to BOB in 20 seconds/ Total build 63 inches  
 FSI 60 Minutes/ 1 3/4 inch blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1691.86	101.08	Initial Hydro-static
1	26.88	100.84	Open To Flow (1)
31	69.42	102.92	Shut-In(1)
75	453.67	103.86	End Shut-In(1)
76	67.67	103.82	Open To Flow (2)
106	82.89	103.78	Shut-In(2)
166	563.16	104.83	End Shut-In(2)
166	1644.69	105.14	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	GMO / G 10% M 30% O 60%	0.30
62.00	GMO / G 50% M 20% O 30%	0.34
67.00	GOM / G 10% O 10% M 80%	0.94
0.00	869 feet GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Darrah Oil Operations LLC

**32/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 32A-1**

Job Ticket: 66291

**DST#: 1**

Test Start: 2019.09.10 @ 14:22:00

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 8.00 lb/gal  
Viscosity: 52.00 sec/qt  
Water Loss: 8.78 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5000.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	GMO / G 10% M 30% O 60%	0.305
62.00	GMO / G 50% M 20% O 30%	0.341
67.00	GOM / G 10% O 10% M 80%	0.940
0.00	869 feet GIP	0.000

Total Length: 191.00 ft      Total Volume: 1.586 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**28/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 28C-1**

Job Ticket: 66292

**DST#: 2**

Test Start: 2019.09.11 @ 09:37:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:28:47

Time Test Ended: 16:23:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/ 14

**Interval: 3454.00 ft (KB) To 3520.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3520.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8365**

**Inside**

Press@RunDepth: 140.57 psig @ 3455.00 ft (KB)

Capacity: psig

Start Date: 2019.09.11

End Date:

2019.09.11

Last Calib.:

2019.09.11

Start Time: 09:37:01

End Time:

16:23:02

Time On Btm:

2019.09.11 @ 11:28:17

Time Off Btm:

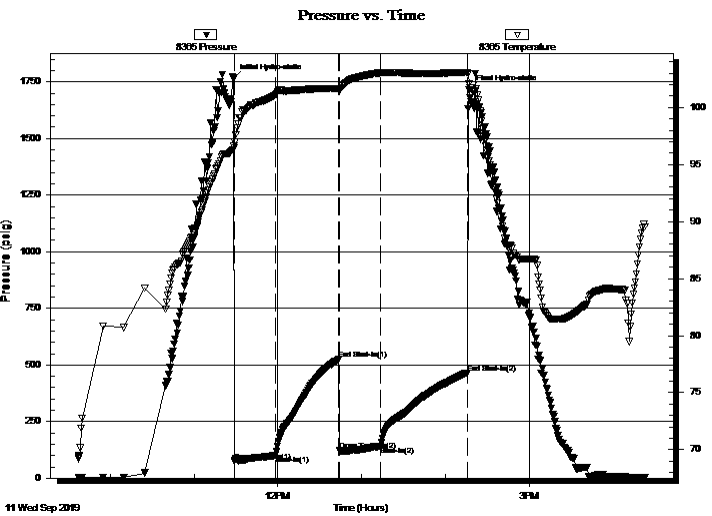
2019.09.11 @ 14:17:02

**TEST COMMENT:** IF 30 Mintues/ Blow to BOB in 10 1/2 minutes/ Total build 38 inches

ISI 45 Mintues/ 7 1/2 inch blow back

FF 30 Minutes/ Blow to BOB in 8 1/2 minutes/ Total build 30 inches

FSI 60 Minutes/ 26 inch blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1766.30	96.60	Initial Hydro-static
1	73.39	96.44	Open To Flow (1)
30	100.28	101.11	Shut-In(1)
76	524.22	101.62	End Shut-In(1)
76	121.73	101.60	Open To Flow (2)
106	140.57	103.03	Shut-In(2)
168	465.26	103.02	End Shut-In(2)
169	1713.83	102.11	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMCWO/ G 25% M 15% W 30% O 30%	0.65
154.00	GMWCO/ G 65% M 5% W 5% O 25%	2.16
35.00	GO/ G 20% O 80%	0.49
0.00	863 feet GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**28/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 28C-1**

Job Ticket: 66292

**DST#: 2**

Test Start: 2019.09.11 @ 09:37:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:28:47

Time Test Ended: 16:23:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/ 14

**Interval: 3454.00 ft (KB) To 3520.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3520.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6755 Outside**

Press@RunDepth: 466.98 psig @ 3456.00 ft (KB)

Capacity: psig

Start Date: 2019.09.11

End Date:

2019.09.11

Last Calib.:

2019.09.11

Start Time: 09:37:01

End Time:

16:23:02

Time On Btm:

2019.09.11 @ 11:28:02

Time Off Btm:

2019.09.11 @ 14:17:02

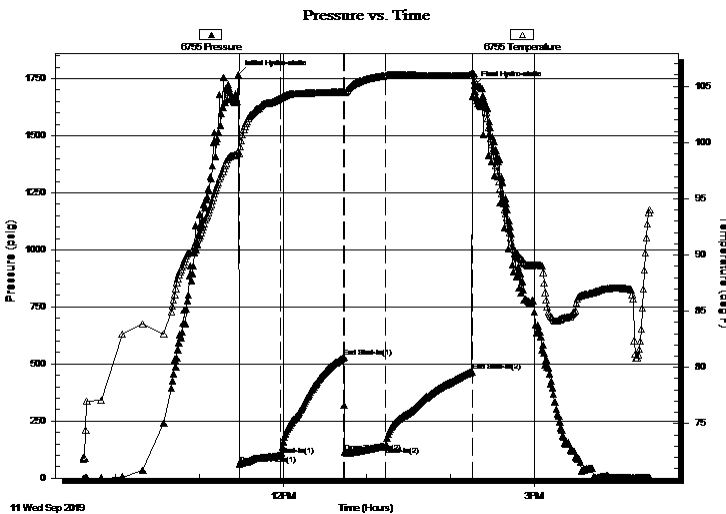
TEST COMMENT: IF 30 Mintues/ Blow to BOB in 10 1/2 minutes/ Total build 38 inches

ISI 45 Mintues/ 7 1/2 inch blow back

FF 30 Minutes/ Blow to BOB in 8 1/2 minutes/ Total build 30 inches

FSI 60 Minutes/ 26 inch blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1767.42	99.19	Initial Hydro-static
1	61.28	99.04	Open To Flow (1)
31	100.50	103.97	Shut-In(1)
76	528.81	104.48	End Shut-In(1)
77	113.09	104.49	Open To Flow (2)
106	139.63	105.97	Shut-In(2)
168	466.98	106.01	End Shut-In(2)
169	1720.63	105.97	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	GMCWO/ G 25% M 15% W 30% O 30%	0.65
154.00	GMWCO/ G 65% M 5% W 5% O 25%	2.16
35.00	GO/ G 20% O 80%	0.49
0.00	863 feet GIP	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Darrah Oil Operations LLC

**28/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 28C-1**

Job Ticket: 66292

**DST#: 2**

Test Start: 2019.09.11 @ 09:37:00

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 52.00 sec/qt  
Water Loss: 8.78 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5000.00 ppm  
Filter Cake: 1.00 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: 31 deg API  
Water Salinity: 50000 ppm

## Recovery Information

Recovery Table

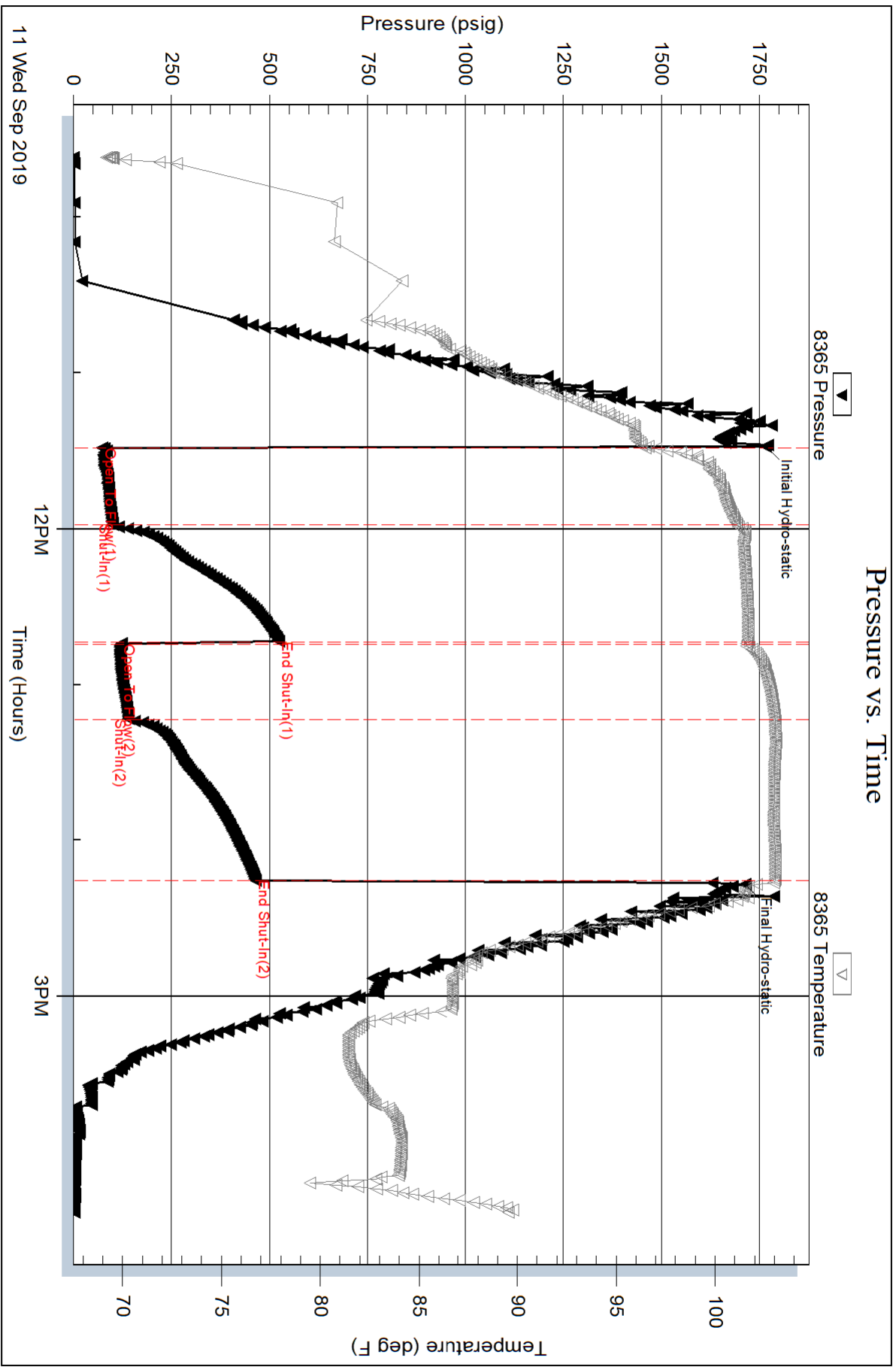
Length ft	Description	Volume bbl
124.00	GMCWO/ G 25% M 15% W 30% O 30%	0.646
154.00	GMWCO/ G 65% M 5% W 5% O 25%	2.160
35.00	GO/ G 20% O 80%	0.491
0.00	863 feet GIP	0.000

Total Length: 313.00 ft      Total Volume: 3.297 bbl

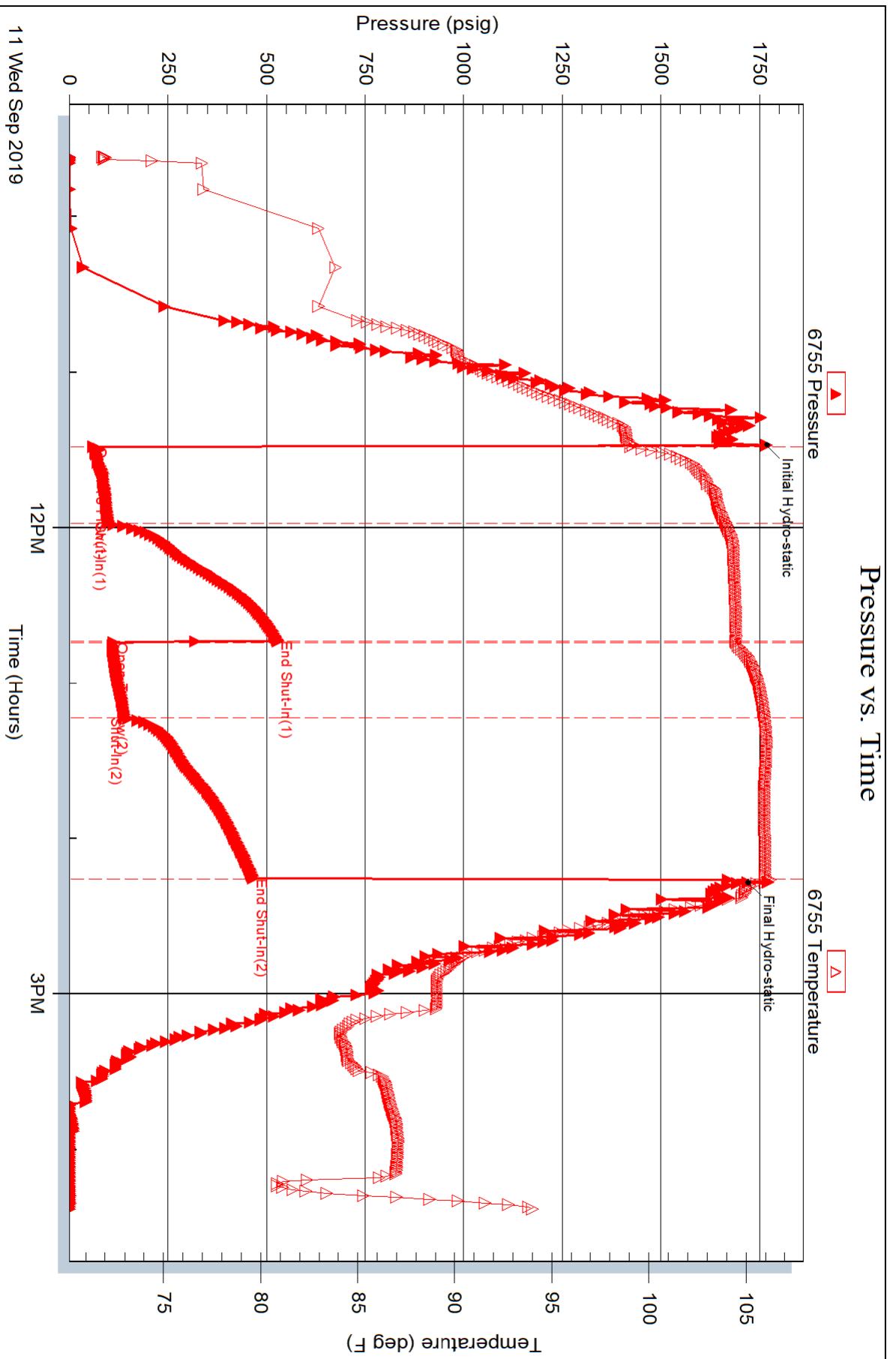
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: Recovery Resistivity .111 ohms @ 93 deg



11 Wed Sep 2019





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**28-20S-13W Barton, KS**

125 N Market Suite 1425  
Wichita KS 67202

**Gaunt #28C-1**

Job Ticket: 66293

**DST#: 3**

ATTN: Seth Evenson

Test Start: 2019.09.12 @ 06:47:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:27:02

Time Test Ended: 12:39:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/14

**Interval: 3580.00 ft (KB) To 3590.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3590.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8365**

**Inside**

Press@RunDepth: 69.59 psig @ 3581.00 ft (KB)

Capacity: psig

Start Date: 2019.09.12

End Date:

2019.09.12

Last Calib.:

2019.09.12

Start Time: 06:47:01

End Time:

12:39:02

Time On Btm:

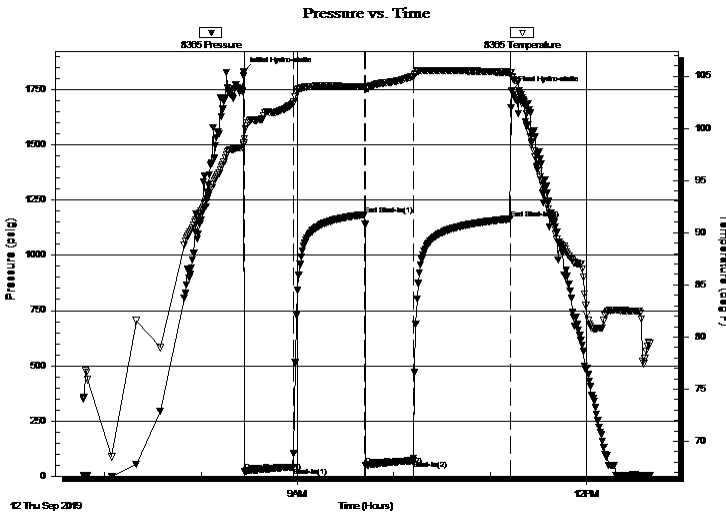
2019.09.12 @ 08:26:32

Time Off Btm:

2019.09.12 @ 11:13:17

TEST COMMENT: IF 30 Minutes/ Blow to 2 1/2 inches  
ISI 45 Minutes/ No blow back  
FF 30 Minutes/ Blow to 1 inch  
FSI 60 Minutes/ No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1833.50	98.59	Initial Hydro-static
1	22.32	99.02	Open To Flow (1)
31	41.53	102.41	Shut-In(1)
76	1184.52	103.99	End Shut-In(1)
76	50.21	103.77	Open To Flow (2)
106	69.59	104.96	Shut-In(2)
166	1165.77	105.35	End Shut-In(2)
167	1747.21	104.94	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	VSOCMW/ O 1% M 49% W 50%	0.30
65.00	VSOCMW/ O 1% M 20% W 79%	0.37

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**28-20S-13W Barton, KS**

125 N Market Suite 1425  
Wichita KS 67202

**Gaunt #28C-1**

Job Ticket: 66293

**DST#: 3**

ATTN: Seth Evenson

Test Start: 2019.09.12 @ 06:47:00

## GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:27:02

Time Test Ended: 12:39:02

Test Type: Conventional Bottom Hole (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/14

**Interval: 3580.00 ft (KB) To 3590.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3590.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6755 Outside**

Press@RunDepth: 1164.42 psig @ 3582.00 ft (KB)

Capacity: psig

Start Date: 2019.09.12

End Date: 2019.09.12

Last Calib.: 2019.09.12

Start Time: 06:47:01

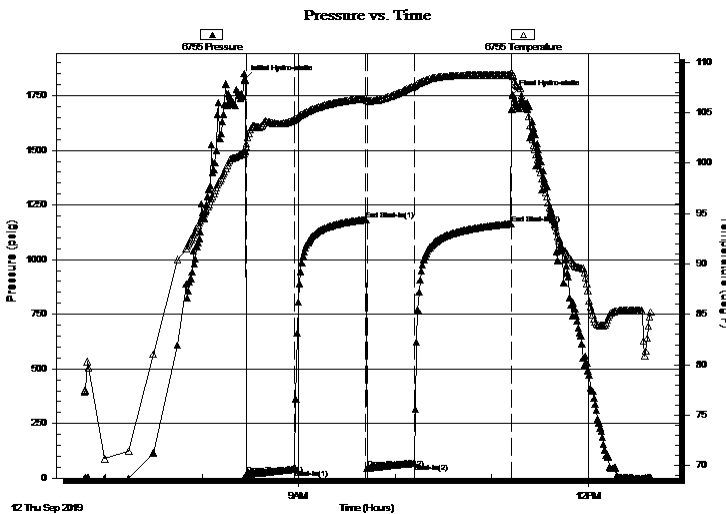
End Time: 12:39:02

Time On Btm: 2019.09.12 @ 08:26:32

Time Off Btm: 2019.09.12 @ 11:13:02

**TEST COMMENT:** IF 30 Minutes/ Blow to 2 1/2 inches  
 ISI 45 Minutes/ No blow back  
 FF 30 Minutes/ Blow to 1 inch  
 FSI 60 Minutes/ No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1823.63	101.10	Initial Hydro-static
1	16.92	101.59	Open To Flow (1)
31	41.54	104.30	Shut-In(1)
76	1183.42	106.38	End Shut-In(1)
76	45.46	106.17	Open To Flow (2)
106	67.58	107.61	Shut-In(2)
166	1164.42	108.72	End Shut-In(2)
167	1755.32	108.75	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	VSOCMW/ O 1% M 49% W 50%	0.30
65.00	VSOCMW/ O 1% M 20% W 79%	0.37

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Darrah Oil Operations LLC

**28-20S-13W Barton,KS**

125 N Market Suite 1425  
Wichita KS 67202

**Gaunt #28C-1**

Job Ticket: 66293

**DST#: 3**

ATTN: Seth Evenson

Test Start: 2019.09.12 @ 06:47:00

## 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:

23000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	VSOCMM/ O 1% M49% W 50%	0.295
65.00	VSOCMM/ O 1% M20% W 79%	0.365

Total Length: 125.00 ft      Total Volume: 0.660 bbl

Num Fluid Samples: 0

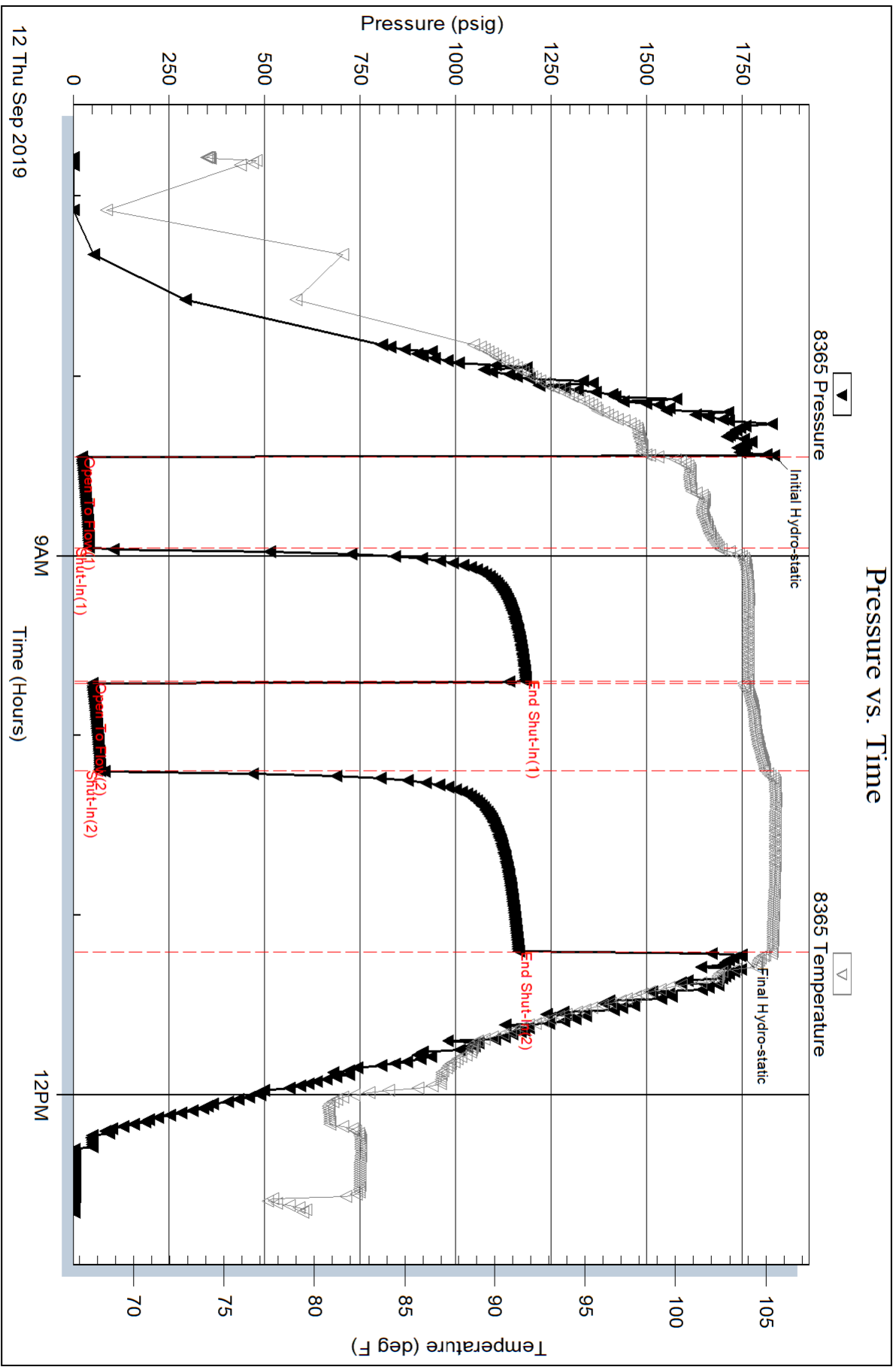
Num Gas Bombs: 0

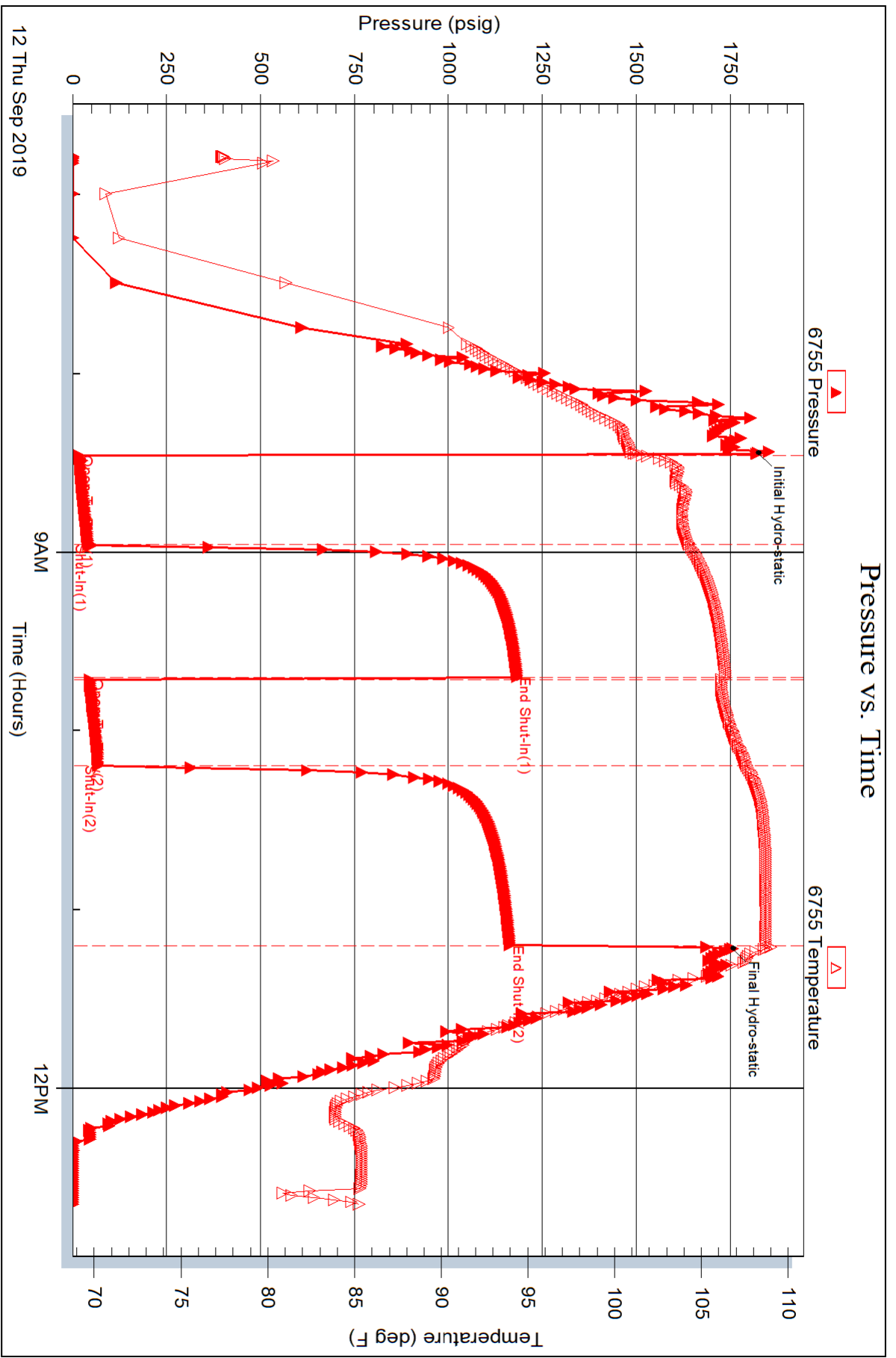
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Recovery Resistivity .243 ohms @ 82 deg.









**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**28/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 28C-1**

Job Ticket: 66294

**DST#: 4**

Test Start: 2019.09.13 @ 03:51:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:33:47

Time Test Ended: 10:07:02

Test Type: Conventional Straddle (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/ 14

**Interval: 3306.00 ft (KB) To 3357.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3660.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8365**

**Inside**

Press@RunDepth: 152.69 psig @ 3342.24 ft (KB)

Capacity: psig

Start Date: 2019.09.13

End Date: 2019.09.13

Last Calib.: 2019.09.13

Start Time: 03:51:01

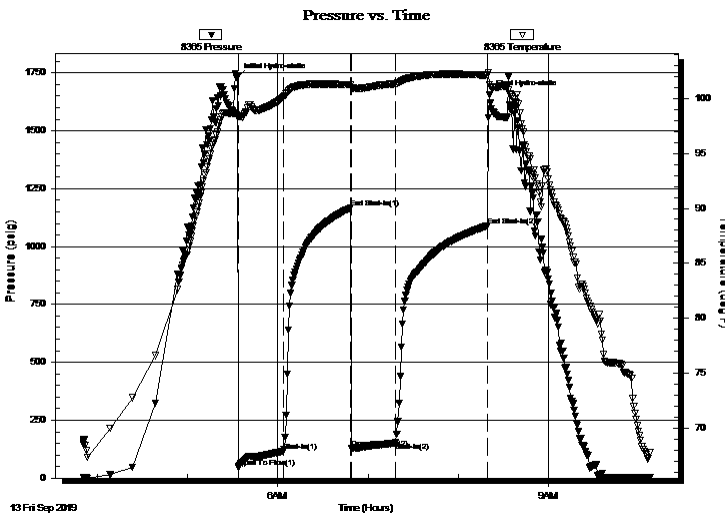
End Time: 10:07:02

Time On Btm: 2019.09.13 @ 05:33:17

Time Off Btm: 2019.09.13 @ 08:20:32

**TEST COMMENT:** IF 30 Minutes/ Blow built to BOB in 17 1/2 minutes/ Total build 19 inches  
 ISI 45 Minutes/ No blow back  
 FF 30 Minutes/ Blow built to 11 inches  
 FSI 60 Minutes/ Light surface blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1731.52	98.43	Initial Hydro-static
1	46.35	98.38	Open To Flow (1)
31	115.94	100.13	Shut-In(1)
75	1166.23	101.22	End Shut-In(1)
76	129.48	101.02	Open To Flow (2)
105	152.69	101.35	Shut-In(2)
166	1089.51	102.11	End Shut-In(2)
168	1654.45	101.26	Final Hydro-static

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
124.00	SOCMW/ O 5% W 45% M 50%	0.65
144.00	GSOCMW/ G 5% O 10% M 30% W 55%	2.02
0.00	102 feet GIP	0.00

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Darrah Oil Operations LLC

**28/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 28C-1**

Job Ticket: 66294

**DST#: 4**

Test Start: 2019.09.13 @ 03:51:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:33:47

Time Test Ended: 10:07:02

Test Type: Conventional Straddle (Initial)

Tester: Ken Swinney

Unit No: 72 Great Bend/ 14

**Interval: 3306.00 ft (KB) To 3357.00 ft (KB) (TVD)**

Reference Elevations: 1897.00 ft (KB)

Total Depth: 3660.00 ft (KB) (TVD)

1892.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6752 Outside**

Press@RunDepth: 1090.91 psig @ 3342.24 ft (KB)

Capacity: psig

Start Date: 2019.09.13

End Date: 2019.09.13

Last Calib.: 2019.09.13

Start Time: 03:51:01

End Time: 10:06:02

Time On Btm: 2019.09.13 @ 05:33:02

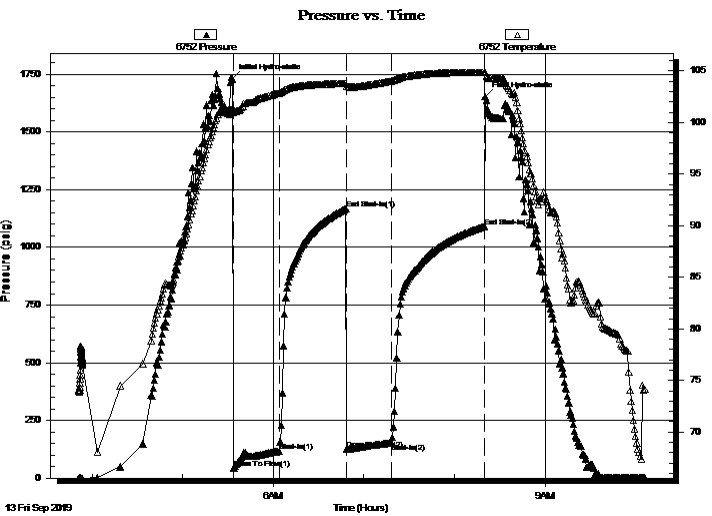
Time Off Btm: 2019.09.13 @ 08:20:17

**TEST COMMENT:** IF 30 Minutes/ Blow built to BOB in 17 1/2 minutes/ Total build 19 inches

ISI 45 Minutes/ No blow back

FF 30 Minutes/ Blow built to 11 inches

FSI 60 Minutes/ Light surface blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1729.68	101.24	Initial Hydro-static
1	41.57	100.97	Open To Flow (1)
31	115.99	102.86	Shut-In(1)
76	1167.51	103.74	End Shut-In(1)
76	126.22	103.54	Open To Flow (2)
106	152.63	104.03	Shut-In(2)
167	1090.91	104.83	End Shut-In(2)
168	1653.06	104.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	SOCMW/ O 5% W 45% M 50%	0.65
144.00	GSOCMW/ G 5% O 10% M 30% W 55%	2.02
0.00	102 feet GIP	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Darrah Oil Operations LLC

**28/20S/13W/Barton**

125 N Market  
Suite 1425  
Wichita Kansas 67202  
ATTN: Seth Everson

**Gaunt 28C-1**

Job Ticket: 66294

**DST#: 4**

Test Start: 2019.09.13 @ 03:51:00

## 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:

65000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	SOCWM/ O 5% W 45% M 50%	0.646
144.00	GSOCMM/ G 5% O10% M 30% W 55%	2.020
0.00	102 feet GIP	0.000

Total Length: 268.00 ft      Total Volume: 2.666 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Recovery Resistivity .107 ohms @ 76 deg.

