

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1326007  
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: \_\_\_\_\_

1326007

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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

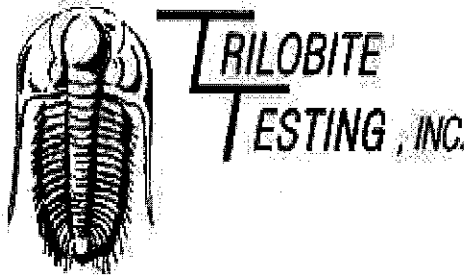
<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Castle Resources, Inc.
Well Name	MORAN 1
Doc ID	1326007

Tops

Name	Top	Datum
Anhydrite	1450	+751
Heebner	3537	-1376
LKC	3575	-1414
Pawnee	3953	-1791
Fort Scott	4028	-1868
Cherokee Sand	4043	-1882
Mississippi	4090	-1929
RTD	4202	-2041





## DRILL STEM TEST REPORT

Prepared For: **Castle Resources, Inc.**

PO Box 583  
Russell, KS 67655

ATTN: Jerry Green

**Moran #1**

**7-17S-20W Rush,KS**

Start Date: 2016.12.26 @ 23:22:48

End Date: 2016.12.27 @ 04:19:48

Job Ticket #: 58223                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2016.12.28 @ 09:15:14

Castle Resources, Inc. 7-17S-20W Rush,KS Moran #1 DST # 1 Cherokee 2016.12.26



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Castle Resources, Inc.

**7-17S-20W Rush,KS**

PO Box 583  
Russell, KS 67655

**Moran #1**

Job Ticket: 58223                      **DST#: 1**

ATTN: Jerry Green

Test Start: 2016.12.26 @ 23:22:48

## GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:41:48

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Time Test Ended: 04:19:48

Unit No: 73

Interval: **4034.00 ft (KB) To 4045.00 ft (KB) (TVD)**

Reference Elevations: 2161.00 ft (KB)

Total Depth: 4045.00 ft (KB) (TVD)

2156.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8959                      Outside**

Press@RunDepth: psig @ 4042.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.12.26                      End Date: 2016.12.27

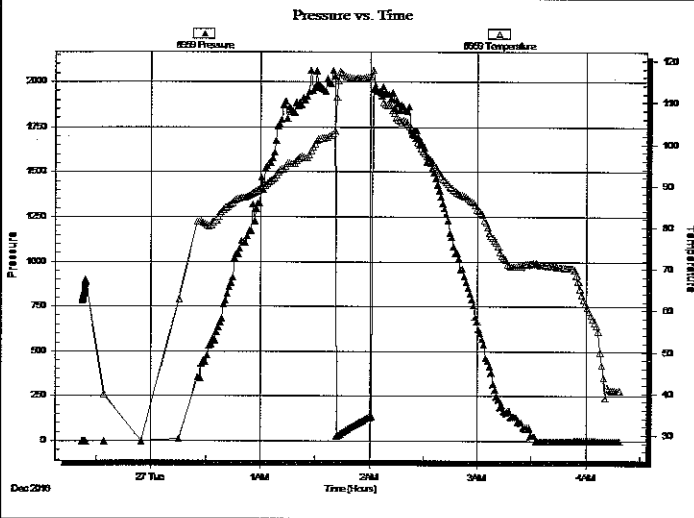
Last Calib.: 2016.12.27

Start Time: 23:22:08                      End Time: 04:19:07

Time On Btm:

Time Off Btm:

TEST COMMENT: 20- IF- BOB 4 mins Pulled tool @ 20 mins



## PRESSURE SUMMARY

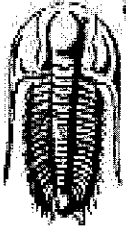
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

## Recovery

Length (ft)	Description	Volume (bbl)
270.00	MW, 25%M 75%W H2S present @ 24ppm	3.83

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Castle Resources, Inc.

**7-17S-20W Rush, KS**

PO Box 583  
Russell, KS 67655

**Moran #1**

Job Ticket: 58223

**DST#: 1**

ATTN: Jerry Green

Test Start: 2016.12.26 @ 23:22:48

## 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:

70000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbf

Water Loss: 19.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 18000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
270.00	MW, 25%M75%WH2S present @ 24ppm	3.827

Total Length: 270.00 ft

Total Volume: 3.827 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial#:

Laboratory Name:

Laboratory Location:

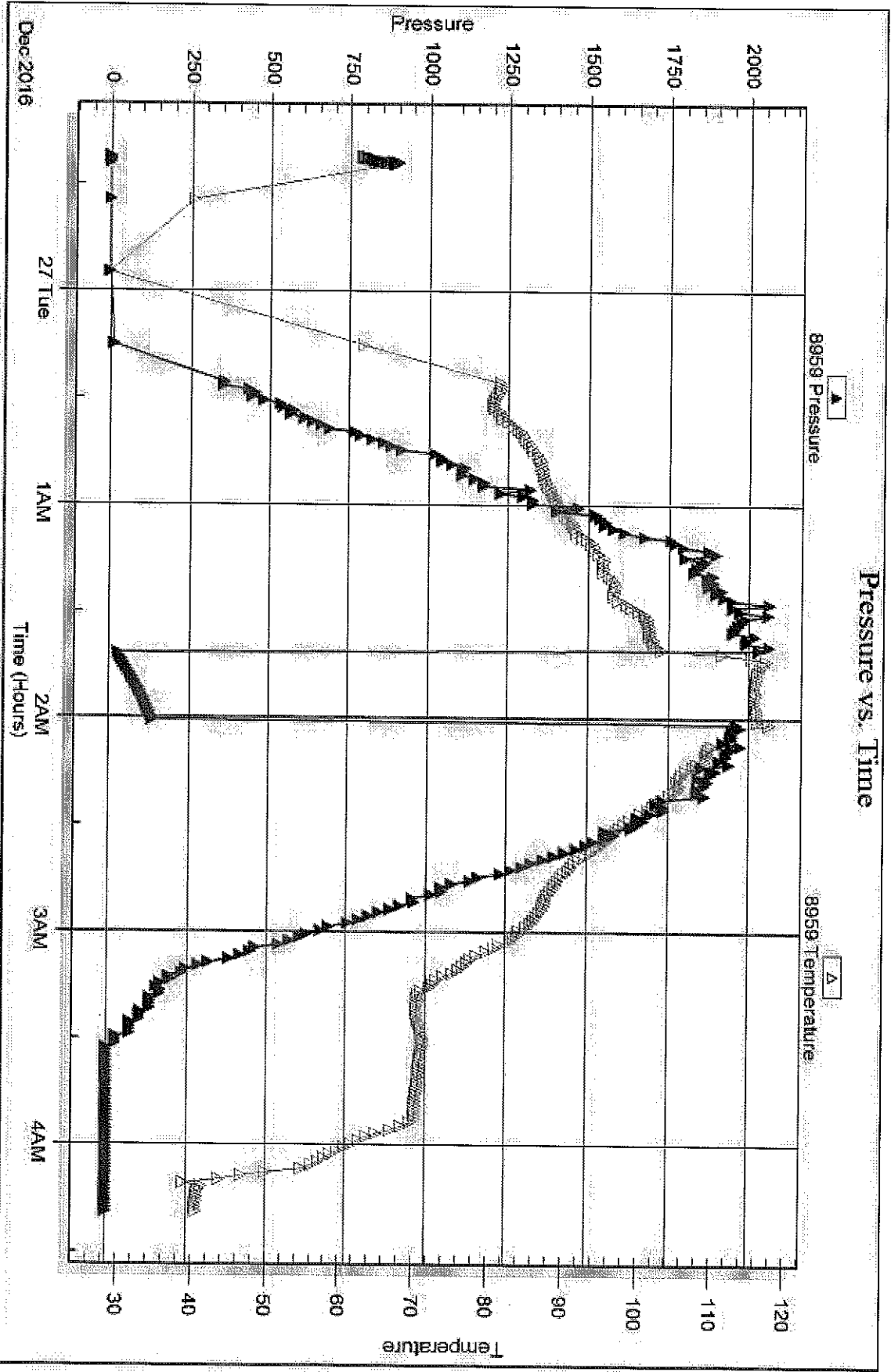
Recovery Comments: RW: .28@35deg

Serial #: 8959

Outside Castle Resources, Inc.

Moran #1

DST Test Number: 1

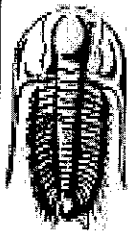


Triobite Testing, Inc

Ref. No: 58223

Printed: 2016-12-28 @ 09:15:17





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Castle Resources, Inc.

**7-17S-20W Rush, KS**

PO Box 583  
Russell, KS 67655

**Moran #1**

Job Ticket: 58224

DST#: 2

ATTN: Jerry Green

Test Start: 2016.12.27 @ 19:03:47

## GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:13:46

Time Test Ended: 00:05:16

Test Type: Conventional Straddle (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: **4057.00 ft (KB) To 4082.00 ft (KB) (TVD)**

Total Depth: 4202.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2161.00 ft (KB)

2156.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8959** Outside

Press@RunDepth: psig @ 4058.00 ft (KB)

Start Date: 2016.12.27

End Date:

2016.12.28

Start Time: 19:03:47

End Time:

00:05:16

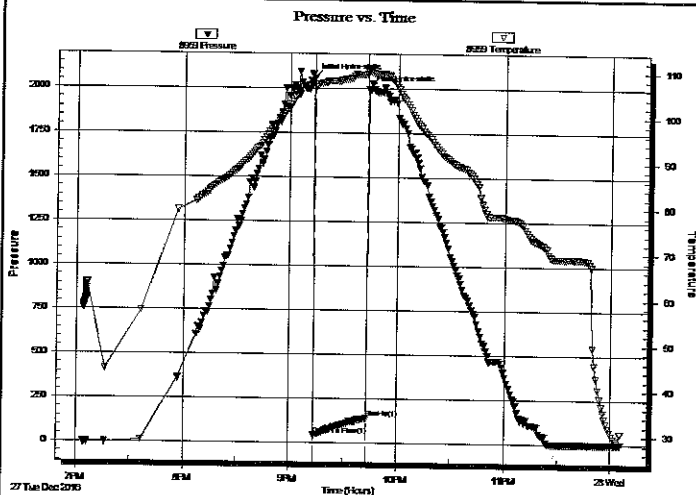
Capacity: 8000.00 psig

Last Calib.: 2016.12.28

Time On Btm: 2016.12.27 @ 21:13:16

Time Off Btm: 2016.12.27 @ 21:43:16

TEST COMMENT: 30- IF- BOB 6mins Pulled tool



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2061.73	107.18	Initial Hydro-static
1	42.00	106.62	Open To Flow (1)
30	141.11	109.45	Shut-In(1)
30	1992.97	109.94	Final Hydro-static

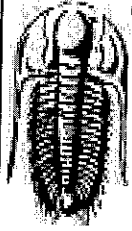
## Recovery

Length (ft)	Description	Volume (bb)
250.00	VM, 10%W 90%M	3.54

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Castle Resources, Inc.

**7-17S-20W Rush, KS**

PO Box 583  
Russell, KS 67655

**Moran #1**

Job Ticket: 58224

**DST#: 2**

ATTN: Jerry Green

Test Start: 2016.12.27 @ 19:03:47

## Tool Information

Drill Pipe:	Length: 4059.00 ft	Diameter: 3.82 inches	Volume: 57.54 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
		<u>Total Volume:</u>	- bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4057.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	4082.00 ft			
Interval between Packers:	25.00 ft			
Tool Length:	167.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

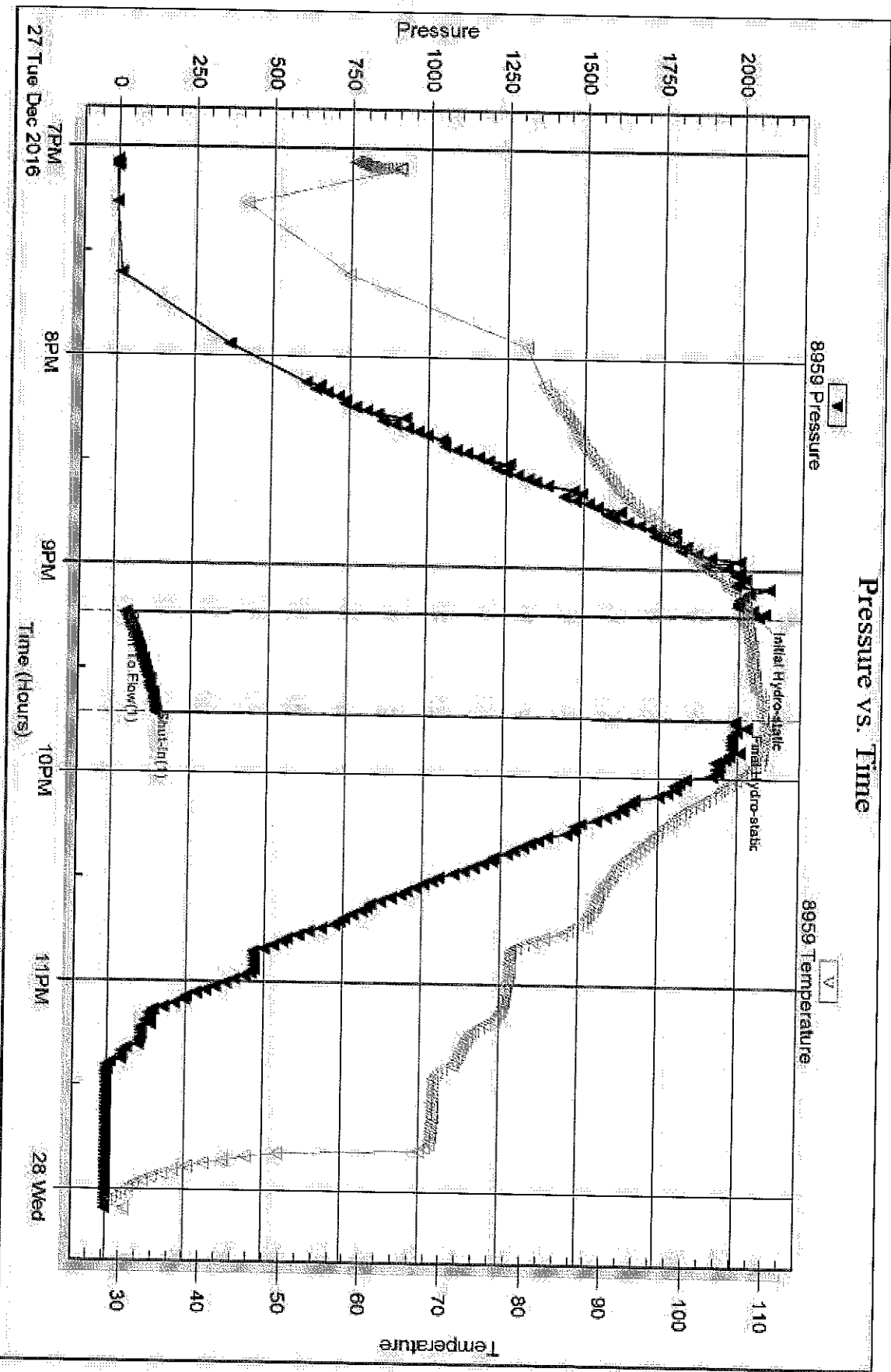
Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4036.00	
Shut In Tool	5.00			4041.00	
Hydraulic tool	5.00			4046.00	
Jars	5.00			4051.00	
Safety Joint	2.00			4053.00	
Packer	4.00			4057.00	22.00 Bottom Of Top Packer
Stubb	1.00			4058.00	
Recorder	0.00	6651	Inside	4058.00	
Recorder	0.00	8959	Outside	4058.00	
Perforations	20.00			4078.00	
Blank Off Sub	1.00			4079.00	
Blank Spacing	3.00			4082.00	25.00 Tool Interval
Packer	1.00			4083.00	
Stubb	1.00			4084.00	
Recorder	0.00	6839	Below	4084.00	
Perforations	18.00			4102.00	
Change Over Sub	1.00			4103.00	
Drill Pipe	95.00			4198.00	
Change Over Sub	1.00			4199.00	
Bullnose	3.00			4202.00	120.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>167.00</b>				

Serial #: 8959

Outside Castle Resources, Inc.

Moran #1

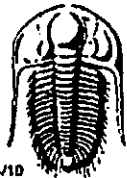
DST Test Number: 2



Tribble Testing, Inc

Ref. No: 58224

Printed: 2016.12.28 @ 09:14:28



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 58223

Well Name & No. Moran #1 Test No. 1 Date 12/27/16  
 Company Castle Resources, Inc. Elevation 2161 KB 2156 GL  
 Address PO Box 583 Russell, KS 67655  
 Co. Rep / Geo. Terry Green Rig White Knight  
 Location: Sec. 7 Twp. 17 S Rge. 20 W Co. Rush State KS

Interval Tested 4034-4045 Zone Tested Cherokee  
 Anchor Length 11' Drill Pipe Run 4027 Mud Wt. 9.1  
 Top Packer Depth 4029 Drill Collars Run — Vis 45  
 Bottom Packer Depth 4034 Wt. Pipe Run — WL 20.0  
 Total Depth 4045 Chlorides 18,000 ppm System LCM 1 1/2 #  
 Blow Description IF-303 4mins Pulled tool @ 20mins

Rec	Feet of	%gas	%oil	%water	%mud
<u>270</u>	<u>MMW</u>			<u>75</u>	<u>25</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 270' BHT 117° Gravity — API RW 28 @ 35° F Chlorides 20,000 ppm  
 (A) Initial Hydrostatic 2030  Test 1150 T-On Location 12/26 2309  
 (B) First Initial Flow 27  Jars 250 T-Started 2322  
 (C) First Final Flow 137  Safety Joint 75 T-Open 0141  
 (D) Initial Shut-In —  Circ Sub — T-Pulled 0201  
 (E) Second Initial Flow —  Hourly Standby — T-Out 0419  
 (F) Second Final Flow —  Mileage 26 RT 57 Comments H<sub>2</sub>S present @ 24 ppm  
 (G) Final Shut-In —  Sampler —  
 (H) Final Hydrostatic 1985  Straddle —  
 Shale Packer —  
 Extra Packer —  
 Extra Recorder —  
 Day Standby —  
 Accessibility —  
 Sub Total 1532

Approved By — Our Representative Brannon Lonsdale

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.

# GLOBAL OIL FIELD SERVICES, LLC

2796

REMIT TO 24 S. Lincoln  
Russell, KS 67665

SERVICE POINT: Russell, KS

DATE <u>12-20-16</u>	SEC.	TWP. -	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>10:15pm</u>
LEASE <u>Moran</u>	WELL #. <u>1</u>	LOCATION <u>McCormick, KS</u>			COUNTY <u>Rush</u>	STATE <u>KS</u>	
OLD OR <input checked="" type="radio"/> NEW <input type="radio"/> (CIRCLE ONE)		1 W 4 1/4 N Winto					

CONTRACTOR White knight

TYPE OF JOB Surface

HOLE SIZE 10 1/4 T.D. 208

CASING SIZE 8 5/8 DEPTH 206

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 20ft

PERFS

DISPLACEMENT 11 3/4 bbl

EQUIPMENT

PUMP TRUCK CEMENTER Heath

# 417 HELPER Jason

BULK TRUCK DRIVER Jack

# 378

BULK TRUCK DRIVER

#

OWNER

CEMENT AMOUNT ORDERED 150sx 80/20 4 1/2 cc

2 1/2 gel

COMMON @

POZMIX @

GEL @

CHLORIDE @

ASC @

HANDLING @

MILEAGE @

TOTAL

REMARKS:  
Run 5 sts of 8 5/8 casing and landing  
est circulation with mud pump  
Hook up and mix 150sx and disp.  
11 3/4 bbl of 420 - shut in @ 200 ps.  
Cement D.O. Circulate!!

CHARGE TO: Castle

STREET

CITY STATE ZIP

Global Oil Field Services, LLC  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side. Thank you!!

PRINTED NAME

SIGNATURE Terry Castle

### SERVICE

DEPTH OF JOB

PUMP TRUCK CHARGE

EXTRA FOOTAGE @

MILEAGE @

MANIFOLD @

TOTAL

### PLUG & FLOAT EQUIPMENT

@

@

@

@

TOTAL

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

# 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. 7309

Date	12-28-16	Sec.	7	Twp.	17	Range	20	County	Rush	State	KS	On Location		Finish	9:45am
Lease								Location		McCombs 1 1/2 S					
Well No. 1								Owner							
Contractor								To Quality Oilwell Cementing, Inc.							
Type Job								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								T.D.		Charge To					
7 7/8								4200		Castle Resources					
Csg.								Depth		Street					
Tbg. Size								Depth		City State					
Tool								Depth		The above was done to satisfaction and supervision of owner agent or contractor.					
Cement Left in Csg.								Shoe Joint		Cement Amount Ordered					
										230 <sup>60</sup> /40 4-1/2" 1/4" # FLO					
Meas Line								Displace							
EQUIPMENT								Common							
Pumptrk 20 No. Cementer								138							
Helper								Poz. Mix							
Driver								92							
Bulktrk No. Driver								Gel.							
8								8							
Bulktrk 9 No. Driver								Calcium							
Driver								Hulls							
JOB SERVICES & REMARKS								Salt							
Remarks:								Flowseal							
Rat Hole								57#							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
1st 1470 50%K								Handling							
2nd 600 80%K								238							
3rd 240 50%K								Mileage							
4th 40 20%K								FLOAT EQUIPMENT							
								Guide Shoe							
								1 Day Hole plug							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge							
								Mileage							
								42 Plug							
Signature								Tax							
								Discount							
								Total Charge							