



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1203224
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
-----------------------------------	-----------------	---

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: _____

1203224

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)* _____

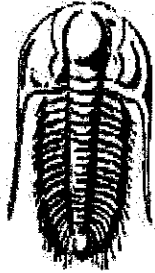
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Castle Resources, Inc.
Well Name	Harms 1
Doc ID	1203224

All Electric Logs Run

Dual Receiver Cement Bond
Microresistivity
Dual Compensated Porosity
Dual Induction



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Castle Resources**

PO Box 87
Schoenchen KS. 67667

ATTN: Chris Bean / JerryGr

Harms #1

10-20s-19w Pawnee,KS

Start Date: 2014.02.23 @ 09:23:00

End Date: 2014.02.23 @ 16:07:30

Job Ticket #: 56152 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Castle Resources

10-20s-19w Pawnee,KS

Harms #1

DST # 1

Cherokee

2014.02.23



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources

10-20s-19w Pawnee,KS

PO Box 87
Schoenchen KS. 67667

Harms #1

Job Ticket: 56152

DST#: 1

ATTN: Chris Bean / JerryGr

Test Start: 2014.02.23 @ 09:23:00

Tool Information

Drill Pipe:	Length: 4154.00 ft	Diameter: 3.80 inches	Volume: 58.27 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 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: 50000.00 lb
			Total Volume: 58.27 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	4147.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval bety een Packers:	13.00 ft			
Tool Length:	33.00 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			4128.00	
Shut in Tool	5.00			4133.00	
Hydraulic tool	5.00			4138.00	
Packer	4.00			4142.00	20.00 Bottom Of Top Packer
Packer	5.00			4147.00	
Stubb	1.00			4148.00	
Recorder	0.00	6625	Outside	4148.00	
Recorder	0.00	8679	Inside	4148.00	
Perforations	8.00			4156.00	
Bullnose	4.00			4160.00	13.00 Bottom Packers & Anchor
Total Tool Length:	33.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Castle Resources

10-20s-19w Pawnee, KS

PO Box 87
Schoenchen KS. 67667

Harms #1

Job Ticket: 56152

DST#: 1

ATTN: Chris Bean / JerryGr

Test Start: 2014.02.23 @ 09:23:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.19 in³

Resistivity: 0.00 ohm.m

Salinity: 7000.00 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
800.00	MUD 100%	11.222

Total Length: 800.00 ft Total Volume: 11.222 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: " PACKER FAILURE "

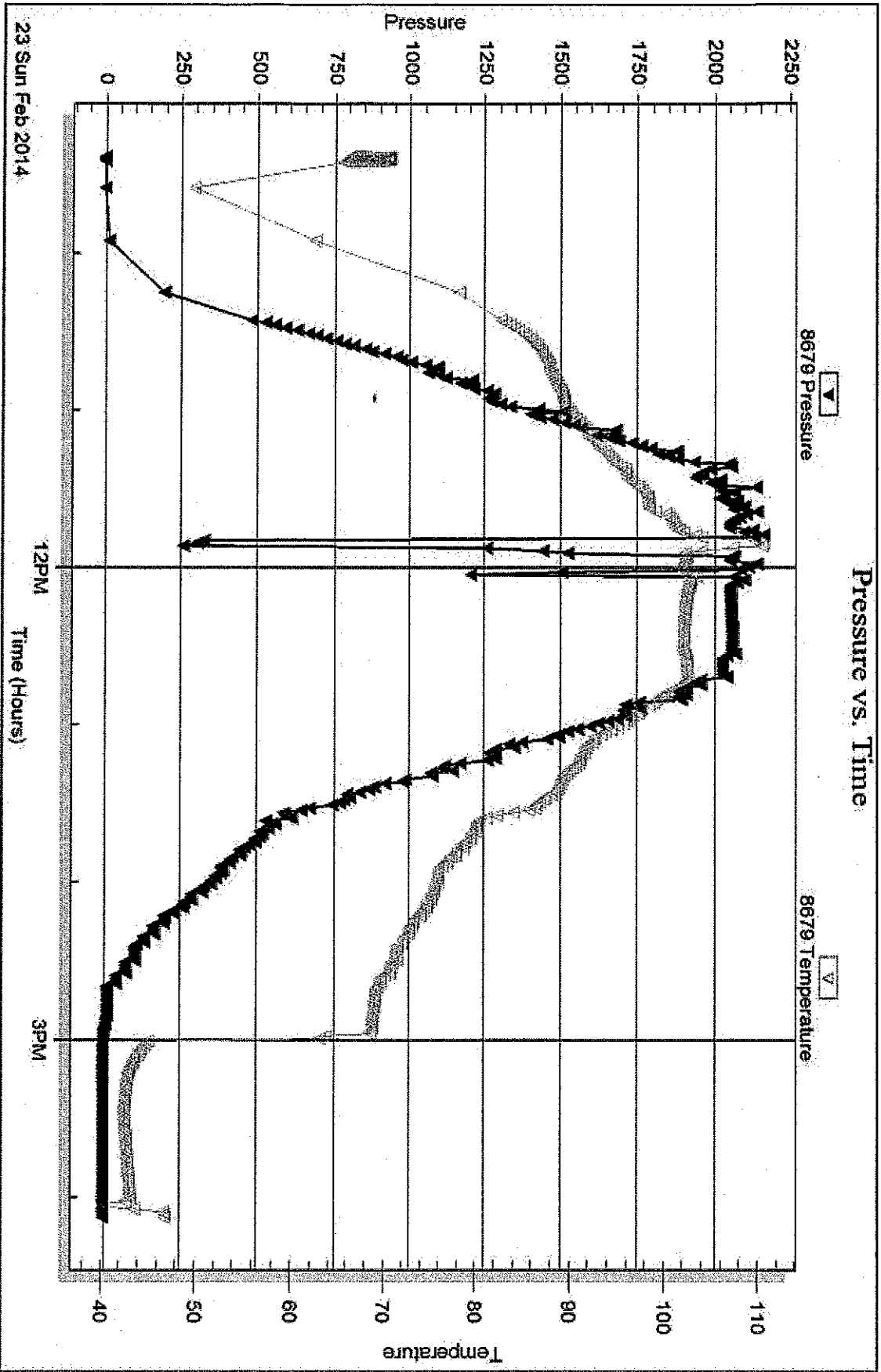
Serial #: 8679

Inside

Castle Resources

Harms #1

DST Test Number: 1



TiTokle Testing, Inc

Ref. No: 56152

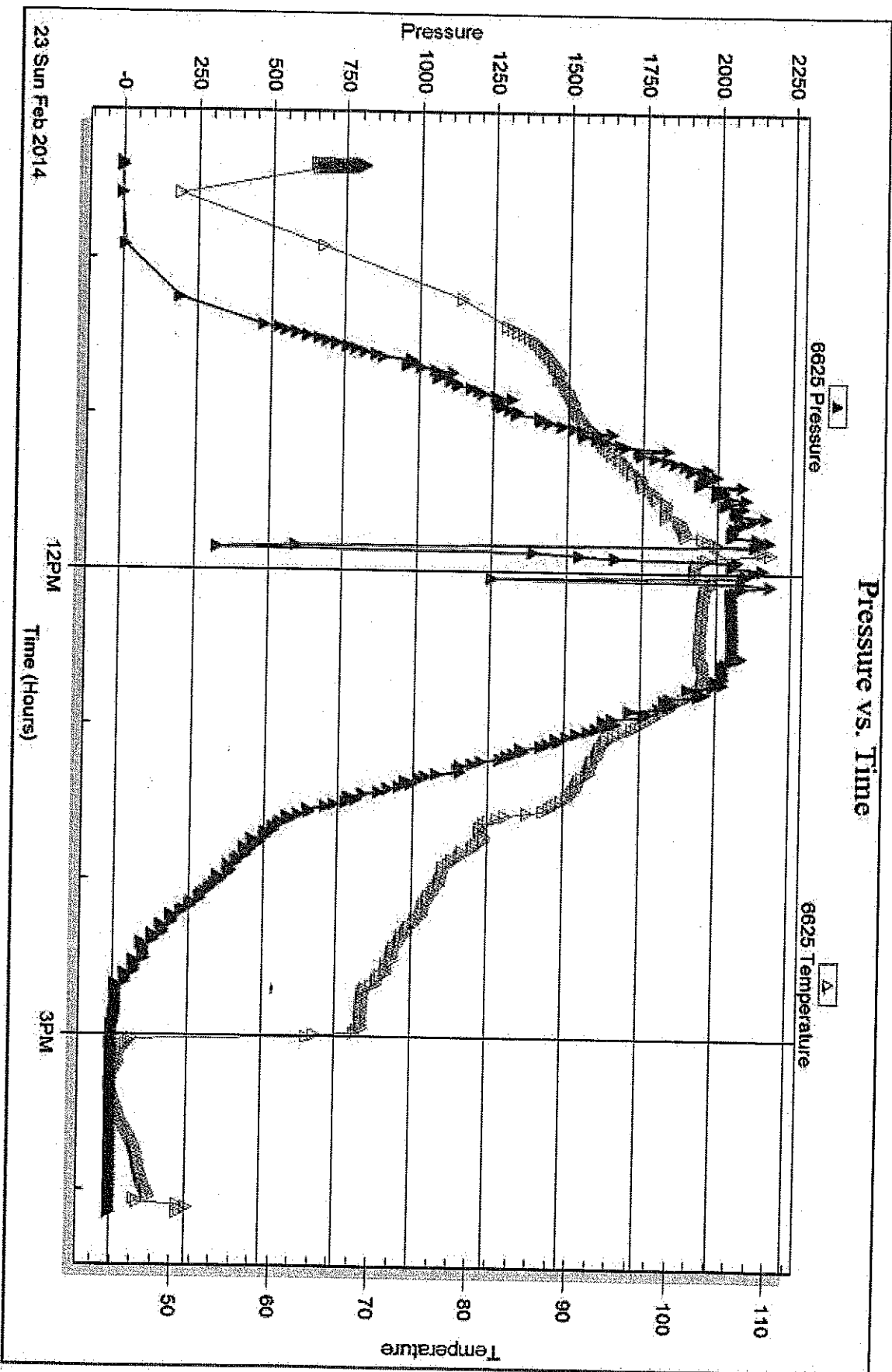
Printed: 2014.02.26 @ 14:48:32

Serial #: 6625

Outside Castle Resources

Harris #1

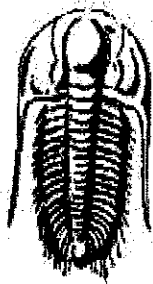
DST Test Number: 1



Tribble Testing, Inc

Ref. No: 58152

Printed: 2014.02.26 @ 14:48:32



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Castle Resources**
PO Box 87
Schoenchen KS. 67667

ATTN: Chris Bean / JerryGr

Harms #1

10-20s-19w Pawnee,KS

Start Date: 2014.02.23 @ 13:33:00
End Date: 2014.02.23 @ 20:53:15
Job Ticket #: 56152 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.02.26 @ 14:47:37

Castle Resources 10-20s-19w Pawnee,KS Harms #1 DST # 2 Cherokee 2014.02.23



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources

10-20s-19w Pawnee,KS

PO Box 87
Schoenchen KS. 67667

Harms #1

Job Ticket: 56152 **DST#: 2**

ATTN: Chris Bean / JerryGr

Test Start: 2014.02.23 @ 13:33:00

Tool Information

Drill Pipe:	Length: 4122.00 ft	Diameter: 3.80 inches	Volume: 57.82 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 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: 48000.00 lb
			Total Volume: 57.82 bbl	Tool Chased 4.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4126.00 ft			Final 46500.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	54.00 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			4107.00	
Shut In Tool	5.00			4112.00	
Hydraulic tool	5.00			4117.00	
Packer	4.00			4121.00	20.00 Bottom Of Top Packer
Packer	5.00			4126.00	
Stubb	1.00			4127.00	
Recorder	0.00	8166	Outside	4127.00	
Perforations	29.00			4156.00	
Bullnose	4.00			4160.00	34.00 Bottom Packers & Anchor
Total Tool Length:	54.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Castle Resources

10-20s-19w Pawnee, KS

PO Box 87
Schoenchen KS. 67667

Harms #1

Job Ticket: 56152

DST#: 2

ATTN: Chris Bean / JerryGr

Test Start: 2014.02.23 @ 13:33:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.18 in³

Resistivity: 0.00 ohm.m

Salinity: 7000.00 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: 14000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	S,O,S,W,M OIL SPECS, MUD 10% WTR. 90%	0.842
120.00	S,O,C,M,W, OIL 10% MUD 20% WTR.70%	1.683
60.00	O,C,W,M, OIL 10% WTR.20% MUD 70%	0.842
240.00	O,C,M,W, OIL 20% MUD 20% WTR. 60%	3.367
1.00	CLEAN OIL 100%	0.014

Total Length: 481.00 ft Total Volume: 6.748 bbl

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

Laboratory Name: Laboratory Location:

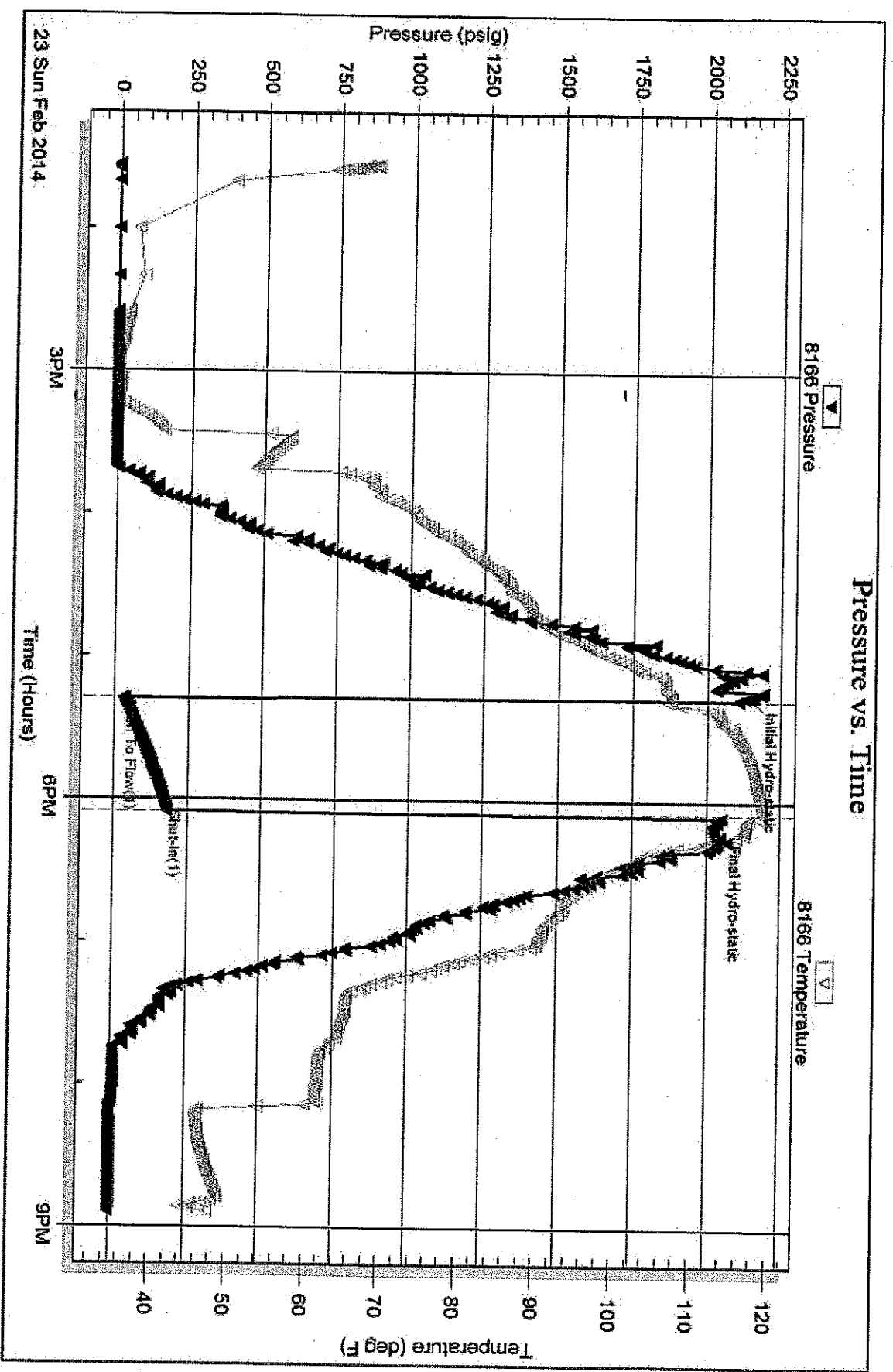
Recovery Comments: R.W. = .885 OHMS @ 38 DEG.

Serial #: 8166

Outside: Castle Resources

Harms #1

DST Test Number: 2



Tribble Testing, Inc

Ref. No: 56152

Printed: 2014.02.26 @ 14:47:40



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 56152

Well Name & No. Harms #1 Test No. 1 Date 2/23/14
 Company Castle Resources Elevation 2245 KB 2240 GL
 Address P.O. Box 87 Schoenchen KS 67667
 Co. Rep / Geo. Chris Bean / Jerry Green Rig White Knight
 Location: Sec. 10 Twp. 20-3 Rge. 19-W Co. Pawnee State KS

Interval Tested 4147 - 4160 Zone Tested Cher
 Anchor Length 13 Drill Pipe Run 4154 Mud Wt. 9.5
 Top Packer Depth 4142 Drill Collars Run --- Vis 46
 Bottom Packer Depth 4147 Wt. Pipe Run --- WL 10.2
 Total Depth 4160 Chlorides 7000 ppm System LCM 1
 Blow Description I.F. - "Packer failure"

I.S.I -
F.C -
F.S.I -

Rec	Feet of	%gas	%oil	%water	%mud
	<u>"Packer failure"</u>				
	<u>"Packer failure"</u>				
<u>800</u>					<u>100</u> %mud

Rec Total 8150 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic _____ Test 1050 T-On Location 08:00:00
 (B) First Initial Flow _____ Jars 250 T-Started 09:23:00
 (C) First Final Flow _____ Safety Joint 75 T-Open 11:51:00
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 17:20:00
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 16:08:00
 (F) Second Final Flow _____ Mileage 102 / R.T. 158.10 Comments (Packer failure)
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic _____ Straddle _____
 Shale Packer 250 Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Day Standby _____ Sub Total 0
 Accessibility _____ Total 1783.10
 Sub Total 1783.10 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

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. 56153

Well Name & No. Horns #1 Test No. 2 Date 2-23-14
 Company Castle Resources Elevation 2245 KB 2240 GL
 Address P.O. Box 87 Schoenchen KS. 67667
 Co. Rep / Geo. Chris Bean / Jerry Green Rig White Knight
 Location: Sec. 10 Twp. 20 S. Rge. 19 W. Co. Pawnee State KS.

Interval Tested 4126 - 4160 Zone Tested Cherokee
 Anchor Length 34' Drill Pipe Run 4122 Mud Wt. 9.5
 Top Packer Depth 4121 Drill Collars Run _____ Vis 46
 Bottom Packer Depth 4126 Wt. Pipe Run _____ WL 10.2
 Total Depth 4160 Chlorides 7000 ppm System LCM 1
 Blow Description I.F. - 45 - 1/2 INT. Blow Built to (B.O.B. in 7 min.)

"Pulled test after I.F. as Requested By Jerry Green"

Rec	Feet of	%gas	%oil	%water	%mud
1	Clean oil	100			
240	O.C.M.W	20	60	20	
60	S.O.C.W M	10	20	70	
120	S.O.C.M.W	10	70	20	
60	S.O.S. M.W. (Scum oil)	scum	90	10	
Rec Total	481 BHT 119	Gravity _____	API RW, 885 @ 38° F	Chlorides 14,000	ppm

(A) Initial Hydrostatic 2,145 Test 1250 T-On Location 08:00:00
 (B) First Initial Flow 34 Jars 250 T-Started 13:33:00
 (C) First Final Flow 183 Safety Joint 75 T-Open 17:23:00
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 18:08:00
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 20:57:00
 (F) Second Final Flow _____ Mileage Re.Run. 158.10
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 2,028 Straddle _____
 Initial Open 45 Shale Packer 250 Ruined Shale Packer _____
 Initial Shut-In _____ Extra Packer _____ Ruined Packer _____
 Final Flow _____ Extra Recorder _____ Extra Copies _____
 Final Shut-In _____ Day Standby _____ Sub Total 0
 Sub Total 1983.10 Total 1983.10
 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]
 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.

