

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. 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				

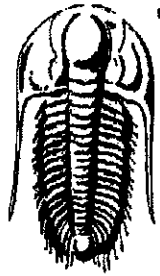
1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted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

DRILL STEM TEST REPORT

Prepared For: **Castle Resources Inc**

PO Box 583
Russell, KS 67665+0583

ATTN: Jerry Green

Patterson #1

32-7S-19W Rooks,KS

Start Date: 2019.03.20 @ 04:44:00

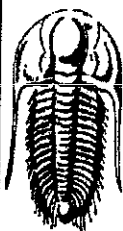
End Date: 2019.03.20 @ 12:57:00

Job Ticket #: 65103 DST #: 1

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

Printed: 2019.03.21 @ 11:07:40

Castle Resources Inc 32-7S-19W Rooks,KS Patterson #1 DST # 1 Arbuckle 2019.03.20



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Castle Resources Inc
 PO Box 583
 Russell, KS 67665+0583
 ATTN: Jerry Green

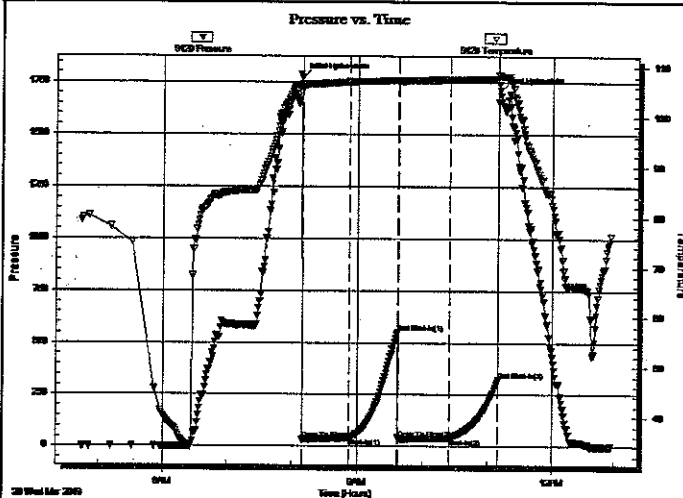
32-7S-19W Rooks, KS
Patterson #1
 Job Ticket: 65103 **DST#: 1**
 Test Start: 2019.03.20 @ 04:44:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:09:15 Test Type: Conventional Straddle (Initial)
 Time Test Ended: 12:57:00 Tester: Spencer J Staab
 Unit No: 84
 Interval: **3336.00 ft (KB) To 3402.00 ft (KB) (TVD)** Reference Elevations: 1932.00 ft (KB)
 Total Depth: 3470.00 ft (KB) (TVD) 1927.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 9120 **Outside**
 Press@RunDepth: 39.91 psig @ 3373.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.03.20 End Date: 2019.03.20 Last Calib.: 2019.03.20
 Start Time: 04:44:15 End Time: 12:57:00 Time On Btm: 2019.03.20 @ 08:09:00
 Time Off Btm: 2019.03.20 @ 11:11:00

TEST COMMENT: 45-IF-Weak; Built to 3"
 45-ISI-No Return
 45-FF-Weak; Built to 2"
 45-FSI-No Return



PRESSURE SUMMARY

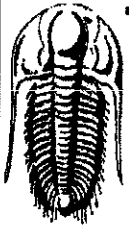
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1772.37	106.58	Initial Hydro-static
1	34.78	105.49	Open To Flow (1)
44	36.79	107.03	Shut-In(1)
88	549.51	107.33	End Shut-In(1)
89	36.46	107.19	Open To Flow (2)
136	39.91	107.51	Shut-In(2)
181	319.53	107.76	End Shut-In(2)
182	1710.99	108.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 10%O 90%M	0.14
15.00	MCO 10%M 90%O	0.21

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Castle Resources Inc
PO Box 583
Russell, KS 67665+0583
ATTN: Jerry Green

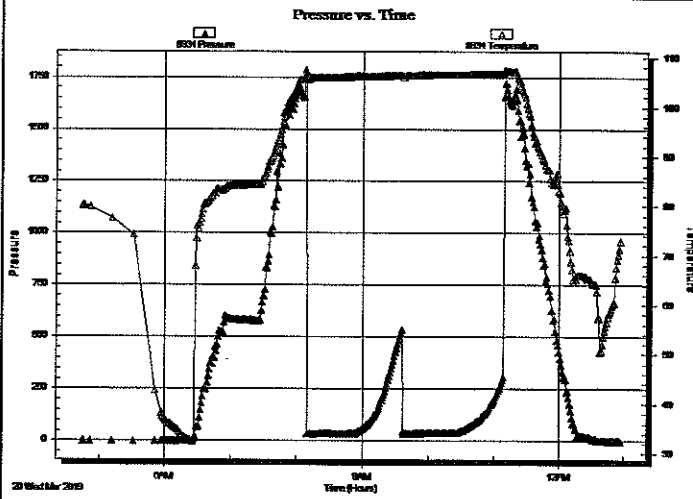
32-7S-19W Rooks, KS
Patterson #1
Job Ticket: 65103 **DST#: 1**
Test Start: 2019.03.20 @ 04:44:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:09:15
Time Test Ended: 12:57:00
Interval: **3336.00 ft (KB) To 3402.00 ft (KB) (TVD)**
Total Depth: 3470.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Straddle (Initial)
Tester: Spencer J Staab
Unit No: 84
Reference Elevations: 1932.00 ft (KB)
1927.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8934 **Inside**
Press@RunDepth: psig @ 3373.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2019.03.20 End Date: 2019.03.20 Last Calib.: 2019.03.20
Start Time: 04:44:15 End Time: 12:57:00 Time On Btm:
Time Off Btm:

TEST COMMENT: 45-IF-Weak; Built to 3"
45-IS-No Return
45-FF-Weak; Built to 2"
45-FSI-No Return



PRESSURE SUMMARY

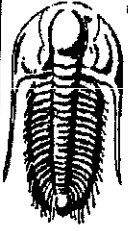
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 10%O 90%M	0.14
15.00	MCO 10%M 90%O	0.21

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Castle Resources Inc
PO Box 583
Russell, KS 67665+0583
ATTN: Jerry Green

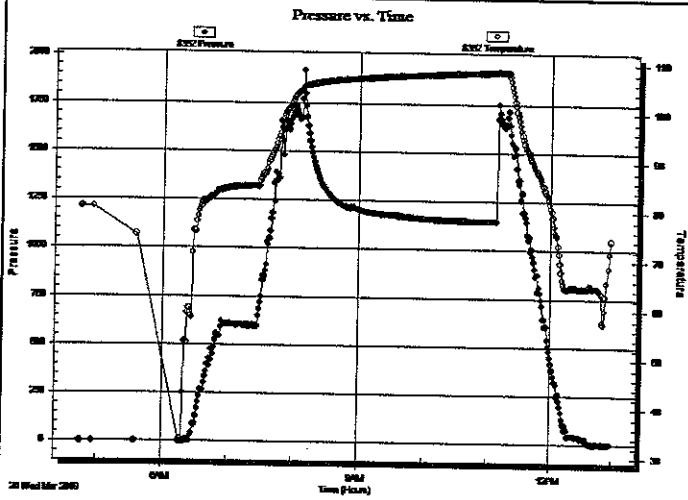
32-7S-19W Rooks, KS
Patterson #1
Job Ticket: 65103 **DST#: 1**
Test Start: 2019.03.20 @ 04:44:00

GENERAL INFORMATION:

Formation: Arbuckle	
Deviated: No Whipstock: ft (KB)	Test Type: Conventional Straddle (Initial)
Time Tool Opened: 08:09:15	Tester: Spencer J Staab
Time Test Ended: 12:57:00	Unit No: 84
Interval: 3336.00 ft (KB) To 3402.00 ft (KB) (TVD)	Reference Elevations: 1932.00 ft (KB)
Total Depth: 3470.00 ft (KB) (TVD)	1927.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair	KB to GR/CF: 5.00 ft

Serial #: 8352	Below (Straddle)		
Press@RunDepth: psig @ 3407.00 ft (KB)		Capacity:	8000.00 psig
Start Date: 2019.03.20	End Date: 2019.03.20	Last Calib.:	2019.03.20
Start Time: 04:44:05	End Time: 12:58:44	Time On Btm:	
		Time Off Btm:	

TEST COMMENT: 45-IF-Weak; Built to 3"
45-ISI-No Return
45-FF-Weak; Built to 2"
45-FSI-No Return



PRESSURE SUMMARY

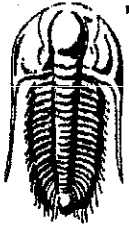
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OCM 10%O 90%M	0.14
15.00	MCO 10%M 90%O	0.21

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources Inc
PO Box 583
Russell, KS 67665+0583
ATTN: Jerry Green

32-7S-19W Rooks, KS
Patterson #1
Job Ticket: 65103 **DST#: 1**
Test Start: 2019.03.20 @ 04:44:00

Tool Information

Drill Pipe:	Length: 3332.00 ft	Diameter: 3.82 inches	Volume: 47.23 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 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: 50000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3336.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	3471.00 ft			
Interval between Packers:	135.00 ft			
Tool Length:	156.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3316.00	
Shut In Tool	5.00			3321.00	
Hydraulic tool	5.00			3326.00	
Packer	5.00			3331.00	21.00 Bottom Of Top Packer
Packer	5.00			3336.00	
Stubb	1.00			3337.00	
Perforations	2.00			3339.00	
Change Over Sub	1.00			3340.00	
Drill Pipe	32.00			3372.00	
Change Over Sub	1.00			3373.00	
Recorder	0.00	8934	Inside	3373.00	
Recorder	0.00	9120	Outside	3373.00	
Perforations	24.00			3397.00	
Blank Off Sub	1.00			3398.00	
Top S. Packer	4.00			3402.00	
Straddle Packer	1.00			3403.00	
Stubb	1.00			3404.00	
Perforations	2.00			3406.00	
Change Over Sub	1.00			3407.00	
Recorder	0.00	8352	Below	3407.00	
Drill Pipe	64.00			3471.00	135.00 Bottom Packers & Anchor

Total Tool Length: 156.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Castle Resources Inc

32-7S-19W Rooks,KS

PO Box 583
Russell,KS 67665+0583

Patterson #1

Job Ticket: 65103

DST#: 1

ATTN: Jerry Green

Test Start: 2019.03.20 @ 04:44:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 6.99 in³
Resistivity: ohm.m
Salinity: 3000.00 ppm
Filter Cake: inches

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

Oil API: 27 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	OCM 10%O 90%M	0.142
15.00	MCO 10%M 90%O	0.213

Total Length: 25.00 ft Total Volume: 0.355 bbl

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

Laboratory Name: Laboratory Location:

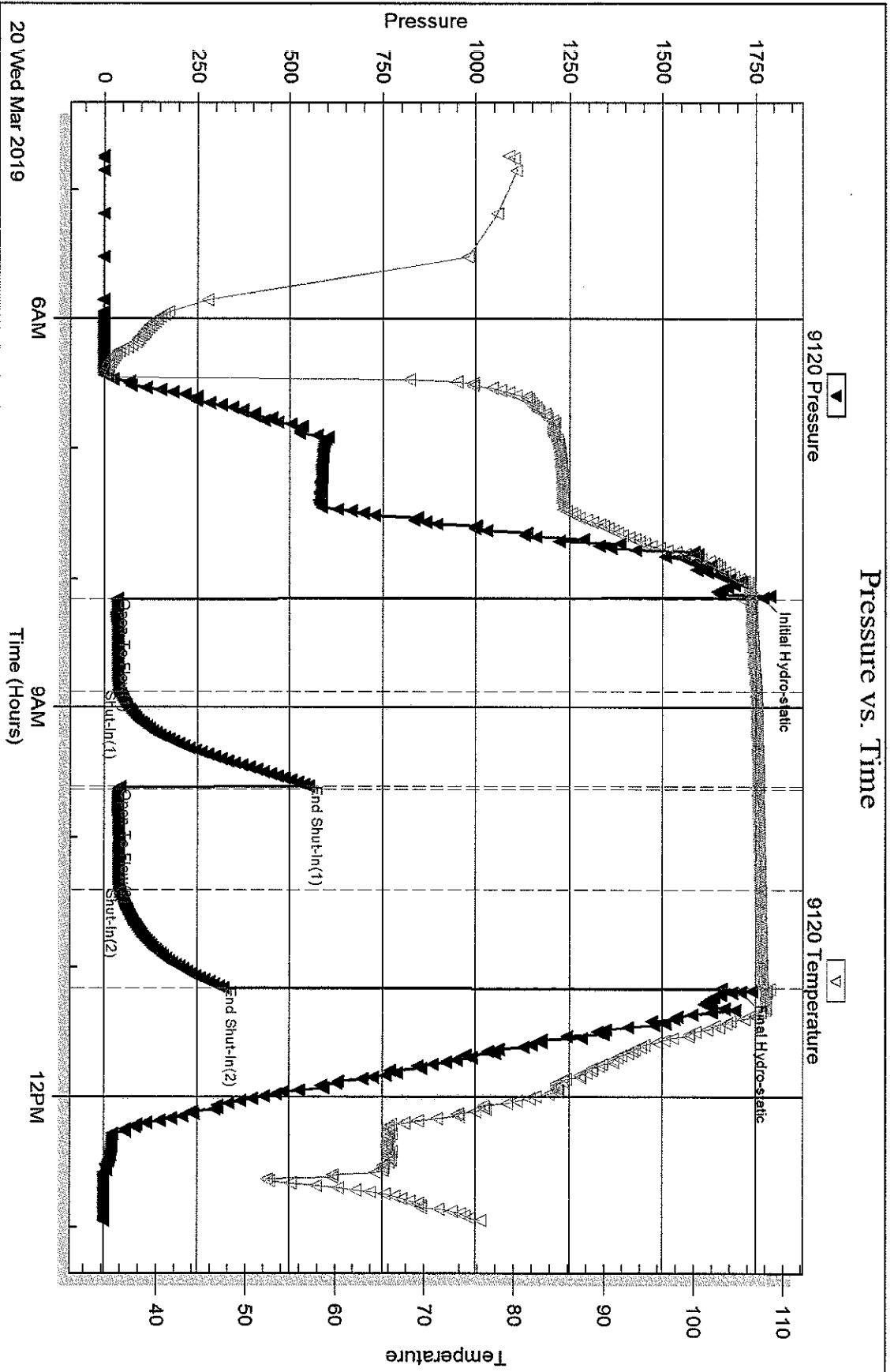
Recovery Comments: 2#LCM

Serial #: 9120

Outside Castle Resources Inc

Patterson #1

DST Test Number: 1



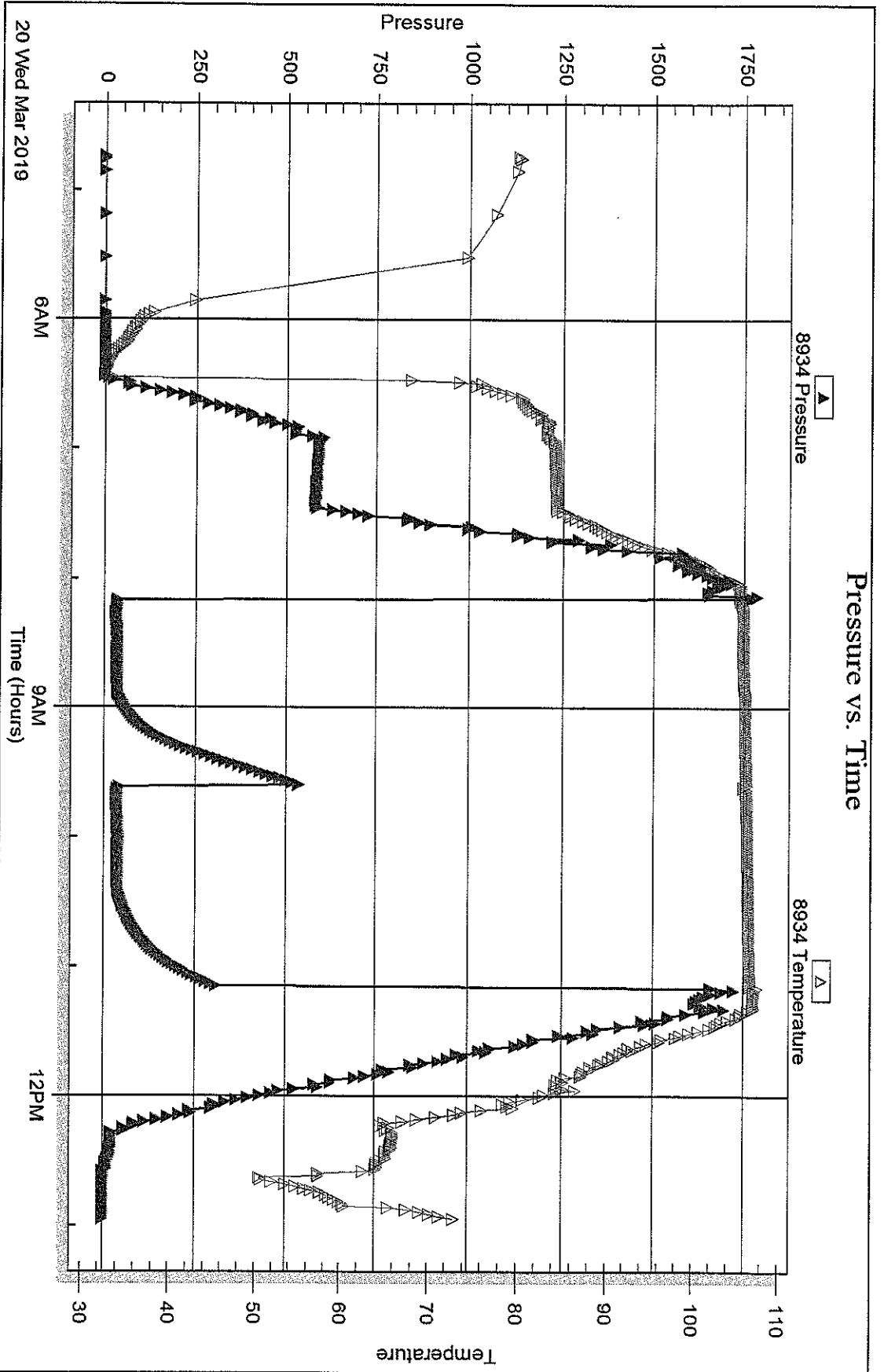
Serial #: 8934

Inside

Castle Resources Inc

Patterson #1

DST Test Number: 1



20 Wed Mar 2019

Triobite Testing, Inc

Ref. No: 65103

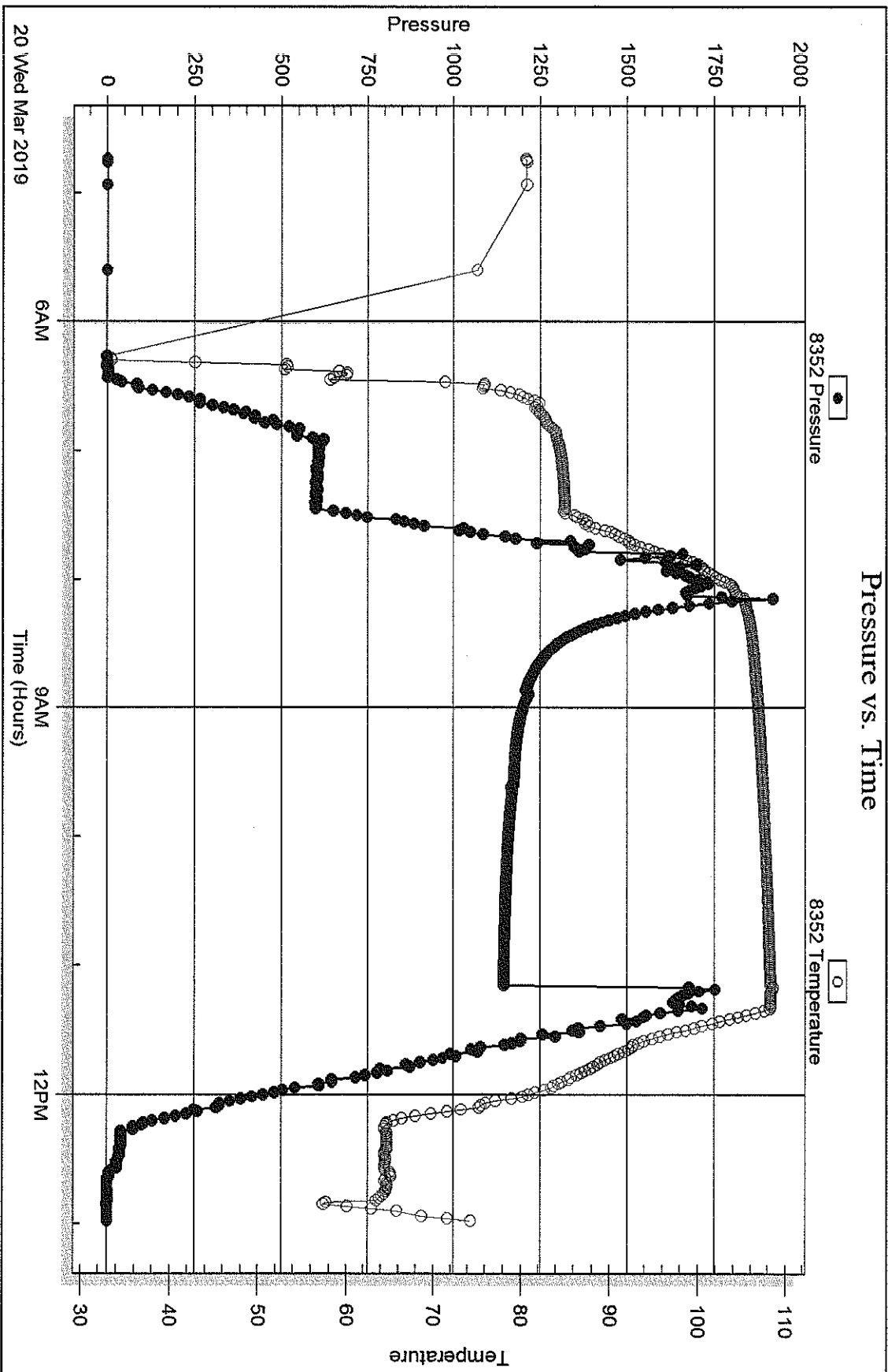
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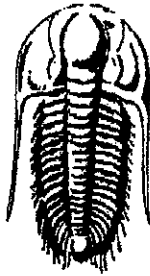
Serial #: 8352

Below (Stratified) Resources Inc

Patterson #1

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Castle Resources Inc**

PO Box 583
Russell, KS 67665+0583

ATTN: Jerry Green

Patterson #1

32-7S-19W Rooks,KS

Start Date: 2019.03.20 @ 13:30:00

End Date: 2019.03.20 @ 18:31:15

Job Ticket #: 65104 DST #: 2

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

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

Printed: 2019.03.21 @ 11:06:55

Castle Resources Inc

32-7S-19W Rooks,KS

Patterson #1

Job # 2

Printed

2019.03.21



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Castle Resources Inc
 PO Box 583
 Russell, KS 67665+0583
 ATTN: Jerry Green

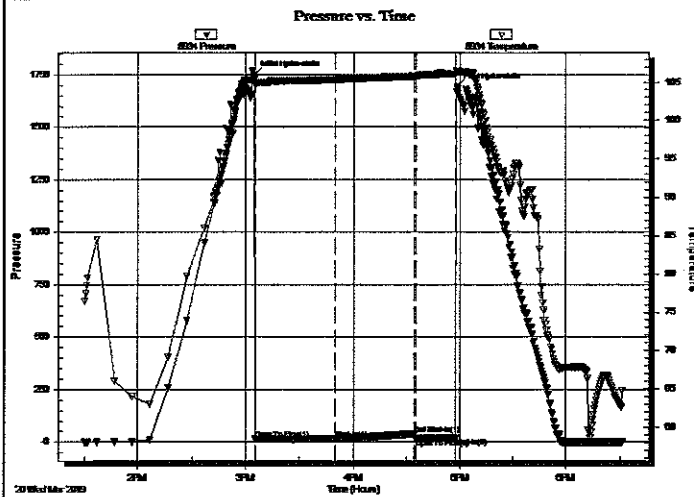
32-7S-19W Rooks, KS
Patterson #1
 Job Ticket: 65104 **DST#: 2**
 Test Start: 2019.03.20 @ 13:30:00

GENERAL INFORMATION:

Formation: **LKC 'J'**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:05:15
 Time Test Ended: 18:31:15
 Interval: **3300.00 ft (KB) To 3335.00 ft (KB) (TVD)**
 Total Depth: 3470.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Spencer J Staab
 Unit No: 84
 Reference Elevations: 1932.00 ft (KB)
 1927.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8934 Inside
 Press@RunDepth: 16.49 psig @ 3306.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.03.20 End Date: 2019.03.20 Last Calib.: 2019.03.20
 Start Time: 13:30:15 End Time: 18:31:15 Time On Btm: 2019.03.20 @ 15:05:00
 Time Off Btm: 2019.03.20 @ 16:58:30

TEST COMMENT: 45-IF-Weak; Built to 1/2"; Died back to 1/4"
 45-IS-No Return
 20-FF-No Blow; Flushed; No Help



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1749.03	105.38	Initial Hydro-static
1	14.91	104.59	Open To Flow (1)
45	16.49	105.34	Shut-In(1)
90	39.78	105.75	End Shut-In(1)
90	17.04	105.80	Open To Flow (2)
113	18.06	106.06	Shut-In(2)
114	1691.81	106.41	Final Hydro-static

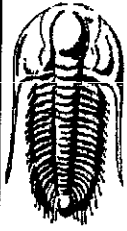
Recovery

Length (ft)	Description	Volume (bbl)
8.00	OSM 100%M	0.11

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Castle Resources Inc
 PO Box 583
 Russell, KS 67665+0583
 ATTN: Jerry Green

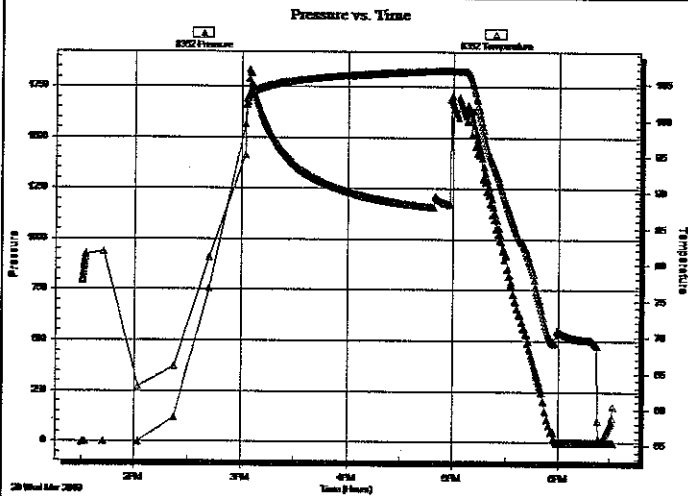
32-7S-19W Rooks, KS
 Patterson #1
 Job Ticket: 65104 DST#: 2
 Test Start: 2019.03.20 @ 13:30:00

GENERAL INFORMATION:

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 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Straddle (Reset)
 Tester: Spencer J Staab
 Unif No: 84
 Reference Elevations: 1932.00 ft (KB)
 1927.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8352 Below (Straddle)
 Press@RunDepth: psig @ 3340.00 ft (KB)
 Start Date: 2019.03.20 End Date: 2019.03.20 Capacity: 8000.00 psig
 Start Time: 13:30:05 End Time: 18:31:29 Last Calib.: 2019.03.20
 Time On Btm:
 Time Off Btm:

TEST COMMENT: 45-IF-Weak; Built to 1/2"; Died back to 1/4"
 45-ISI-No Return
 20-FF-No Blow; Flushed; No Help



PRESSURE SUMMARY

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

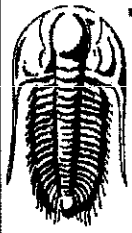
Recovery

Length (ft)	Description	Volume (bbl)
8.00	OSM 100%M	0.11

* Recovery from multiple tests

Gas Rates

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



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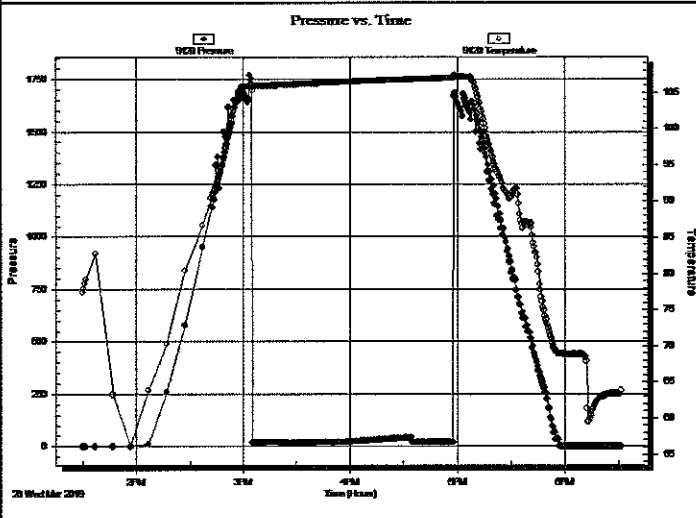
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Patterson #1
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 Tester: Spencer J Staab
 Unit No: 84
 Reference Elevations: 1932.00 ft (KB)
 1927.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 9120 **Outside**
 Press@RunDepth: psig @ 3306.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.03.20 End Date: 2019.03.20 Last Calib.: 2019.03.20
 Start Time: 13:30:15 End Time: 18:31:15 Time On Btm:
 Time Off Btm:

TEST COMMENT: 45-IF-Weak; Built to 1/2"; Died back to 1/4"
 45-ISI-No Return
 20-FF-No Blow ; Flushed; No Help

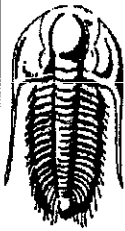


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bb)
8.00	OSM 100%M	0.11

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (M.cfd)

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources Inc
PO Box 583
Russell, KS 67665+0583
ATTN: Jerry Green

32-7S-19W Rooks, KS
Patterson #1
Job Ticket: 65104 DST#: 2
Test Start: 2019.03.20 @ 13:30:00

Tool Information

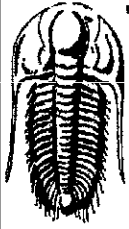
Drill Pipe:	Length: 3295.00 ft	Diameter: 3.82 inches	Volume: 46.71 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 49000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3300.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	3471.00 ft			
Interval between Packers:	171.00 ft			
Tool Length:	192.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3280.00	
Shut In Tool	5.00			3285.00	
Hydraulic tool	5.00			3290.00	
Packer	5.00			3295.00	21.00 Bottom Of Top Packer
Packer	5.00			3300.00	
Stubb	1.00			3301.00	
Perforations	5.00			3306.00	
Recorder	0.00	8934	Inside	3306.00	
Recorder	0.00	9120	Outside	3306.00	
Perforations	24.00			3330.00	
Blank Off Sub	1.00			3331.00	
Top S. Packer	4.00			3335.00	
Straddle Packer	1.00			3336.00	
Stubb	1.00			3337.00	
Perforations	2.00			3339.00	
Change Over Sub	1.00			3340.00	
Recorder	0.00	8352	Below	3340.00	
Drill Pipe	127.00			3467.00	
Change Over Sub	1.00			3468.00	
Bullnose	3.00			3471.00	171.00 Bottom Packers & Anchor

Total Tool Length: 192.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Castle Resources Inc
PO Box 583
Russell, KS 67665+0583
ATTN: Jerry Green

32-7S-19W Rooks, KS
Patterson #1
Job Ticket: 65104 **DST#: 2**
Test Start: 2019.03.20 @ 13:30:00

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:	ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.99 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3000.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
8.00	OSM 100%M	0.113

Total Length: 8.00 ft Total Volume: 0.113 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 23LCM

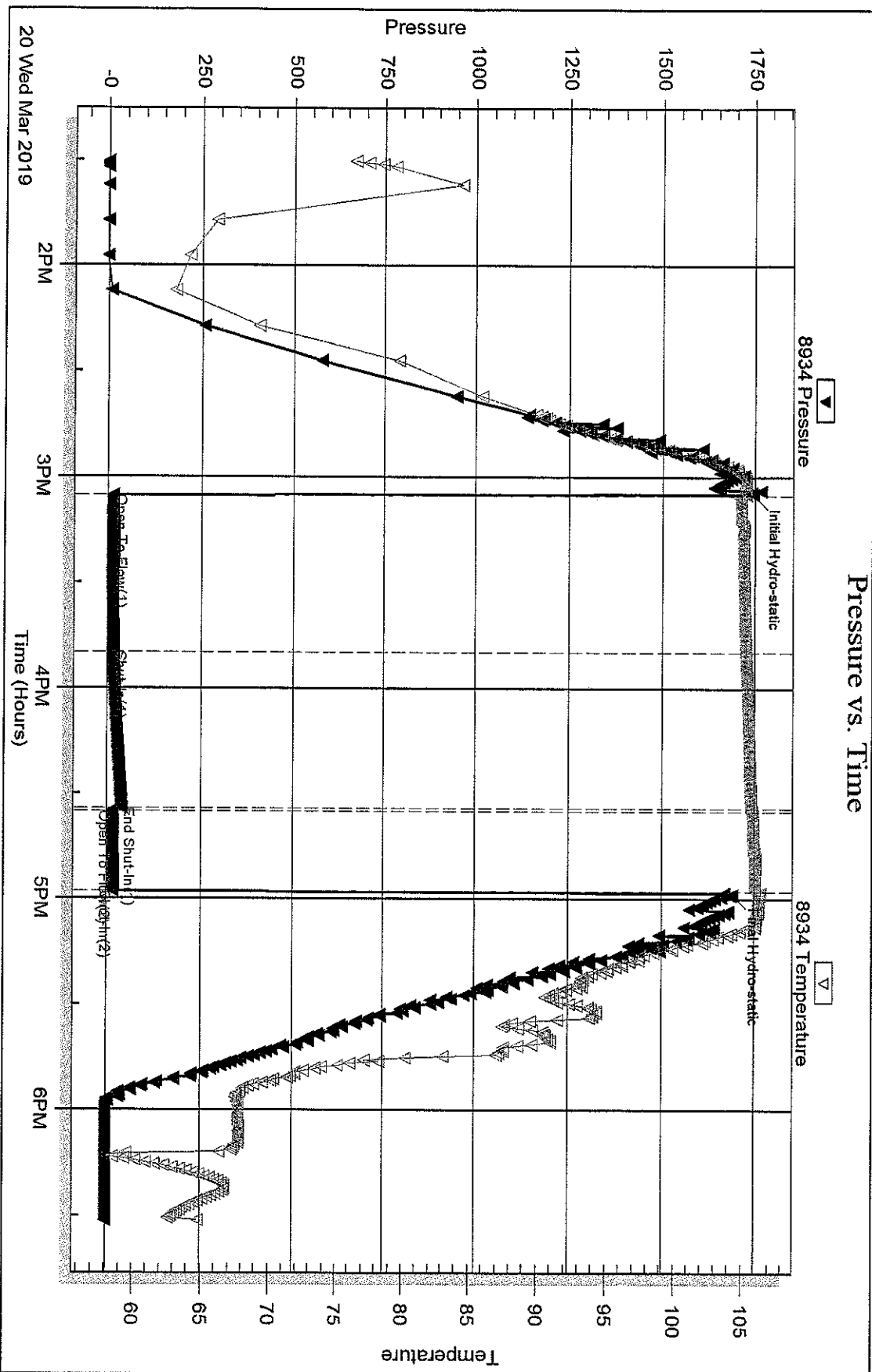
Serial #: 8934

Inside

Castle Resources Inc

Paterson #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 65104

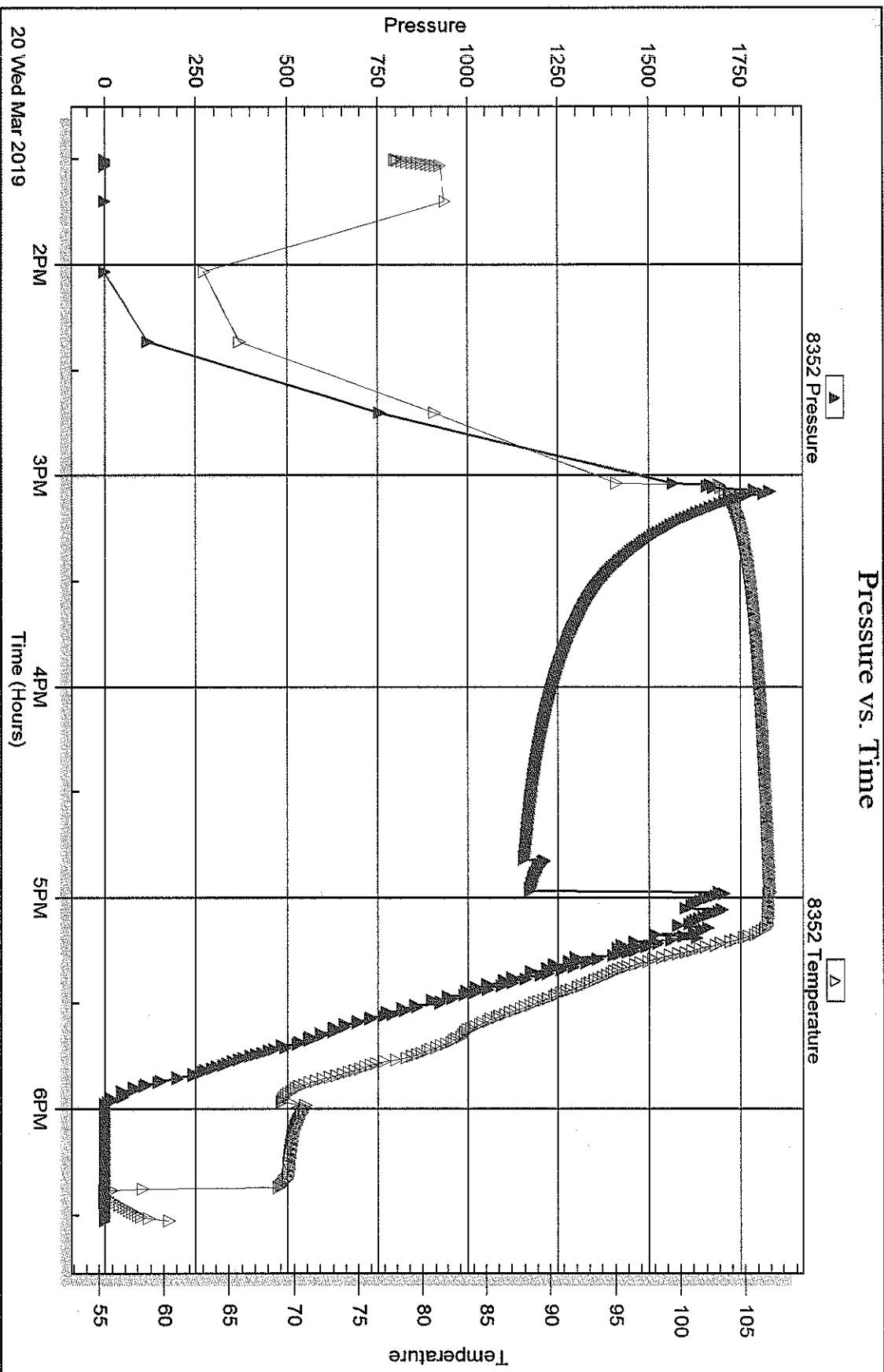
Printed: 2019.03.21 @ 11:06:57

Serial #: 8352

Below (Str ~~Adding~~) Resources Inc

Patterson #1

DST Test Number: 2

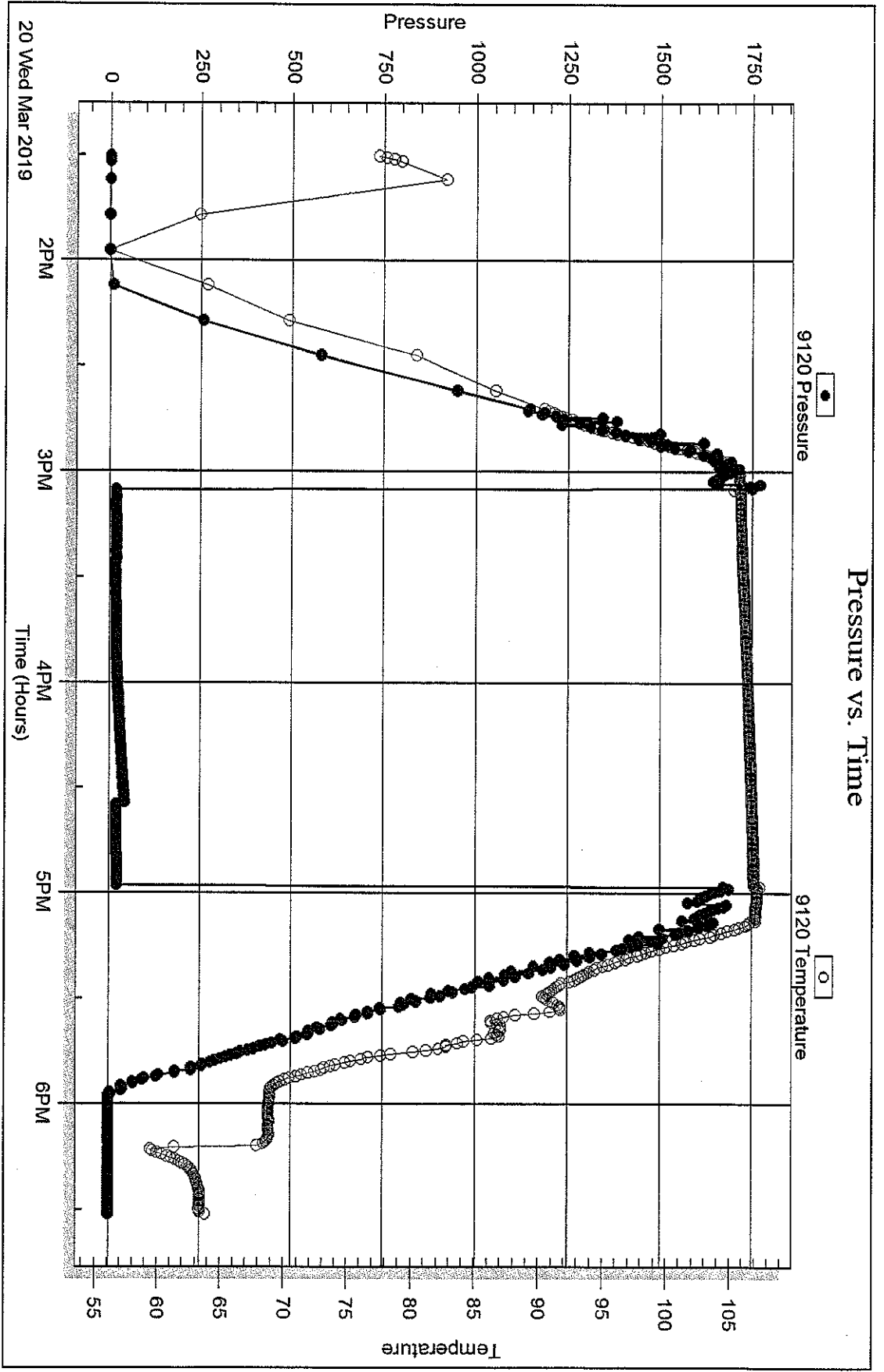


Serial #: 9120

Outside Castle Resources Inc

Paterson #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 65104

Printed: 2019.03.21 @ 11:06:57



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 65103

Well Name & No. Patterson #1 Test No. 1 Date 03/20/2019
 Company Castle Resources Inc Elevation 1927 KB 1932 GL
 Address PO Box 583 Russell KS 67665-10583
 Co. Rep / Geo. Jerry Green Rig White Knight
 Location: Sec. 32 Twp 7s Rge. 19W Co. Rocks State KS

Interval Tested 3386' - 3402' Zone Tested Arbuckle
 Anchor Length 66 68' tail Drill Pipe Run 3332' Mud Wt. 9.0
 Top Packer Depth 3336' Drill Collars Run — Vls 47
 Bottom Packer Depth 3402' Wt. Pipe Run — WL 7.0
 Total Depth 3400' Chlorides 3000 ppm System LCM 2H

Blow Description 17- Wash Built to 3"
50- No Return
79- Wash Built to 2"
78- No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>OCM</u>	<u>10</u>		<u>76</u>	
<u>15</u>	<u>FO</u>	<u>90</u>		<u>10</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 25' BHT 107° Gravity 27° API RW — @ — °F Chlorides — ppm

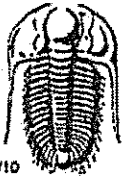
(A) Initial Hydrostatic 1772 Test 1200 T-On Location 03:25
 (B) First Initial Flow 34 Jars — T-Started 04:44
 (C) First Final Flow 38 Safety Joint — T-Open 08:05
 (D) Initial Shut-In 549 Circ Sub — T-Pulled 11:05
 (E) Second Initial Flow 36 Hourly Standby X1 T-Out 12:55
 (F) Second Final Flow 39 Mileage 106 Comments —
 (G) Final Shut-In 319 Sampler —
 (H) Final Hydrostatic 1710 Straddle 600 EM Tool —
 Shale Packer — Ruined Shale Packer —
 Extra Packer — Ruined Packer —
 Extra Recorder — Extra Copies —

Initial Open 45
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 45
 Sub Total 1906 MP/DST Disc'l —

Approved By — Our Representative Spencer J. Stank

Tribolite 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.

785-259-0056



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 65104

Well Name & No. Patterson #1 Test No. 2 Date 03/20/2019
 Company Castle Resources Inc Elevation 1927 KB 1932 GL
 Address PO BOX 583 Russell KS 67665 +0583
 Co. Rep / Geo. Jerry Green Rig White Knight
 Location: Sec. 32 Twp 7A Rge. 19W Co. Rock State KS

Interval Tested 3306' - 3335' Zone Tested LKC
 Anchor Length 35' 135' tail Drill Pipe Run 3295' Mud Wt. 9.0
 Top Packer Depth 3306' Drill Collars Run - Vls 47
 Bottom Packer Depth 3335' Wt. Pipe Run - WL 7.0
 Total Depth 3470' Chlorides 3000 ppm System LCM 2H

Blow Description 77- Weak; built to 1/2, died back to 1/4"
75J - No Return
77 - No Blow; Flushed; No help
75 - - -

Rec	Feet of	%gas	%oil	%water	%mud
8'	OSM			100	

Rec Total 8' BHT 106° Gravity - API RW - @ - °F Chlorides - ppm

(A) Initial Hydrostatic 1749 Test 1200 T-On Location 13:00
 (B) First Initial Flow 14 Jars - T-Started 13:30
 (C) First Final Flow 16 Safety Joint - T-Open 14:52
 (D) Initial Shut-In 39 Circ Sub - T-Pulled 16:42
 (E) Second Initial Flow 17 Hourly Standby - T-Out 18:19
 (F) Second Final Flow 18 Mileage 106.27 Comments -
 (G) Final Shut-In - Sampler -
 (H) Final Hydrostatic 1691 Straddle 600

Initial Open 45 Shale Packer - EM Tool -
 Initial Shut-In 45 Extra Packer - Ruined Shale Packer -
 Final Flow 30 ↑ Extra Recorder - Ruined Packer -
 Final Shut-In - Day Standby - Extra Copies -
 Sub Total 0 Accessibility - Total 1800
 Sub Total 1800 MP/DST Disc't -

Approved By - Our Representative Jerry Green Thanks!
 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.

785-259-0056

GLOBAL OIL FIELD SERVICES, LLC

0013361

REMIT TO 24 S. Lincoln
Russell, KS 67665

SERVICE POINT Russell

DATE <u>3-15-19</u>	SEG <u>32</u>	TWP <u>7S</u>	RANGE <u>19W</u>	CALLED OUT	ON LOCATION	JOB START	JOB FINISH <u>7:30</u>
LEASE <u>Patterson</u>	WELL# <u>1</u>	LOCATION <u>South 2 1/2 miles to Highway 24</u>			COUNTY <u>ROCKS</u>	STATE <u>KS</u>	
OLD OR NEW (CIRCLE ONE)		<u>2 W 3/4 South 1/4 East South 1/4</u>					

CONTRACTOR White Night Drilling

TYPE OF JOB Surface

HOLE SIZE 12 1/2 T.D. 215

CASING SIZE 8 1/2 DEPTH

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG.

PERFS

DISPLACEMENT 12 1/2 120

EQUIPMENT

PUMP TRUCK CEMENTER Jason

417 HELPER

BULK TRUCK

379 DRIVER Tom

BULK TRUCK

DRIVER

OWNER

CEMENT AMOUNT ORDERED 160 sk Com 3/4 cc

2 1/2 gal

COMMON @

POZMIX @

GEL @

CHLORIDE @

ASC @

HANDLING @

MILEAGE @

TOTAL

REMARKS:
Ran 5 Jts 8 1/2 casing in the hole. Hooked to Rio Brake circulation. Hooked to pump back mixed cement. Displaced with 12 1/2 120. Shut in 2 jts. Cement did circulate.

CHARGE TO: Castle Resources Inc.

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.

PRINTED NAME Terry Austin

SIGNATURE Terry Austin

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. 1241

Date	Sec.	Twp.	Range	County	State	On Location	Finish
3-21-19	32	7	19	Rooks	KS		2:15 AM
Location: Webster Dam 2W 1/2S 1/4E S1110							

Lease	Well No.	Owner	
Patterson	1	To Quality Oilwell Cementing, Inc.	
Contractor	You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.		
Type Job	Charge To		
Rotary Plug	Castle Resources		
Hole Size	T.D.	Street	
7 7/8	3470		
Csg.	Depth	City	
		State	
Tbg. Size	Depth	The above was done to satisfaction and supervision of owner agent or contractor.	
		Cement Amount Ordered: 290 cu/ft 4.002 1/4" 110	
Cement Left in Csg.	Shoe Joint		
Meas Line	Displace		

EQUIPMENT			
Pumptrk	No.	Cementor	Common
17		Helper	174
Bulktrk	No.	Driver	Poz. Mix
		Driver	116
Bulktrk	No.	Driver	Get.
15		Driver	10
		Driver	Calcium

JOB SERVICES & REMARKS	
Remarks:	Hulls
Rat Hole	Salt
30SK	Flowseal 75#
Mouse Hole	Kol-Seal
Centralizers	Mud CLR 48
Baskets	CFL-117 or CD110 CAF 38
D/V or Port Collar	Sand
1st 3380 50SK	Handling 300
2nd 1450 50SK	Mileage

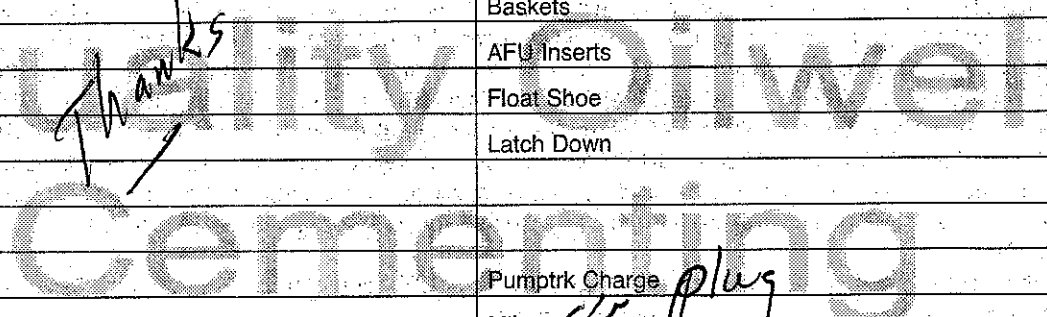
FLOAT EQUIPMENT	
3rd 830 100SK	Guide Shoe
4th 265 50SK	Centralizer
5th 40 10SK	Baskets

AFI Inserts
Float Shoe
Latch Down

Pumptrk Charge	Tax
Mileage 45 plug	Discount
	Total Charge

Signature: *[Handwritten Signature]*

Thanks



JERRY GREEN

CONSULTING GEOLOGIST
 4350 Keystone Rd
 HAYS, KS 67601
 PHONE: 785-625-5155

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY: CASTLE RESOURCES, INC.
 LEASE: PATTERSON #1
 FIELD: RESERVOIR WEST

LOCATION: NE-NW-NW
 SEC: 32 TWP: 7S RGE: 19W
 COUNTY: ROOKS STATE: KANSAS

CONTRACTOR: WHITE KNIGHT DRILLING
 SPUD: 3-15-19 COMP: 3-21-19
 RTD: 3-470' LTD: 3-470'

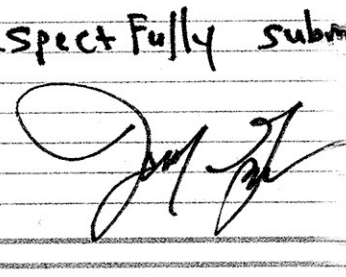
MUD UP: 2800' TYPE: MUD CHEM.
 SAMPLES SAVED FROM: 2800' TO TD.

DRILLING TIME KEPT FROM: 2800' TO TD.
 SAMPLES EXAMINED FROM: 2800' TO TD.

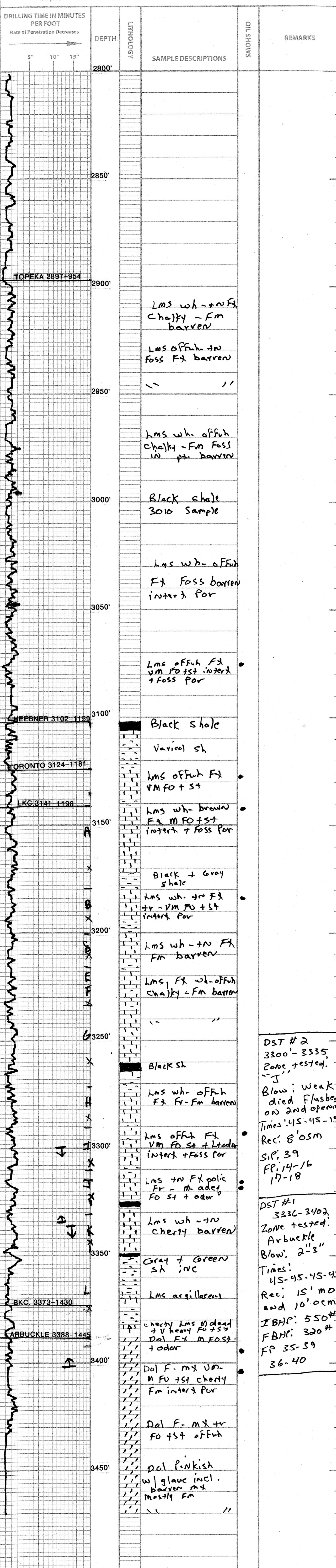
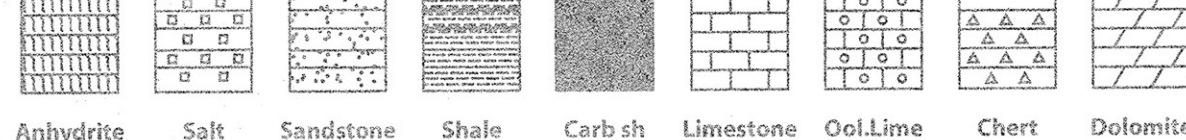
GEOLOGICAL SUPERVISION FROM: 2800' TO TD.

FORMATION TOPS LOG SAMPLES

FORMATION TOPS	LOG	SAMPLES
ANHY	1414-1454 529	
TOPEKA	2895-952	2897-954
HEEBNER	3100-1157	3102-1159
TORONTO	3122-1179	3124-1181
LKC	3138-1195	3141-1198
BKC	3374-1431	3373-1430
ARBUCKLE	3392-1449	3388-1445
RTD	3470-1527	3470-1527

REMARKS: All parties involved recommended that this well be plugged.
 Respectfully submitted


LEGEND



DST #2
 3300' - 3335'
 Zone tested.
 Blow: Weak
 died Flushed
 on 2nd opening
 Times: 45-45-15
 Rec: 8' 0" sm
 SP: 39
 FP: 14-16
 17-18

DST #1
 3336-3402
 Zone tested.
 Arbuckle
 Blow: 2-3"
 Times: 45-45-45-45
 Rec: 15' mo
 and 10' ocm
 IBHP: 550#
 FBHP: 320#
 FP 35-39
 36-40