

Form	ACO1 - Well Completion
Operator	Castle Resources, Inc.
Well Name	LATTIN 1
Doc ID	1620851

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	272	com	225	3%CC 2%Gel
Production	7.88	4.5	11.5	3135	com	125	common



DRILL STEM TEST REPORT

Prepared For: **Castle Resources**

PO Box 583
Russell KS 67665

ATTN: Jerry Green

Lattin #1

3-10s-13w Osborne,KS

Start Date: 2022.02.17 @ 20:30:00

End Date: 2022.02.18 @ 06:41:15

Job Ticket #: 59478 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.02.21 @ 11:23:21



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Castle Resources

3-10s-13w Osborne, KS

PO Box 583
Russell KS 67665

Lattin #1

Job Ticket: 59478

DST#: 1

ATTN: Jerry Green

Test Start: 2022.02.17 @ 20:30:00

GENERAL INFORMATION:

Formation: **LKC A - C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:22:45

Time Test Ended: 06:41:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Terry Wickham

Unit No: 75

Interval: 2921.00 ft (KB) To 2993.00 ft (KB) (TVD)

Reference Elevations: 1675.00 ft (KB)

Total Depth: 3001.00 ft (KB) (TVD)

1671.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 4.00 ft

Serial #: 8368 Inside

Press@RunDepth: 48.67 psig @ 2927.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.02.17

End Date:

2022.02.18

Last Calib.: 2022.02.18

Start Time: 20:30:05

End Time:

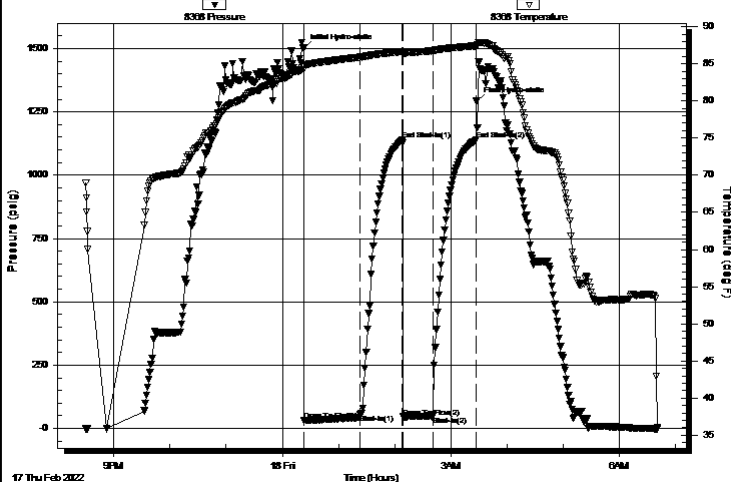
06:41:15

Time On Btm: 2022.02.18 @ 00:22:30

Time Off Btm: 2022.02.18 @ 03:27:30

TEST COMMENT: IF 60 Weak blow
ISI 30 No return
FF 45 Weak blow died in 15 min
FSI 45 No return

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1499.86	84.77	Initial Hydro-static
1	31.51	84.26	Open To Flow (1)
61	56.10	85.90	Shut-In(1)
106	1138.19	86.65	End Shut-In(1)
107	45.71	86.38	Open To Flow (2)
139	48.67	86.76	Shut-In(2)
185	1138.97	87.42	End Shut-In(2)
185	1291.61	87.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MUD	2950.70

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TESTING, INC.

DRILL STEM TEST REPORT

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3-10s-13w Osborne, KS

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Reference Elevations: 1675.00 ft (KB)

Total Depth: 3001.00 ft (KB) (TVD)

1671.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition:

KB to GR/CF: 4.00 ft

Serial #: 8320 Inside

Press@RunDepth: psig @ 2927.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.02.17

End Date:

2022.02.18

Last Calib.:

2022.02.18

Start Time: 20:30:05

End Time:

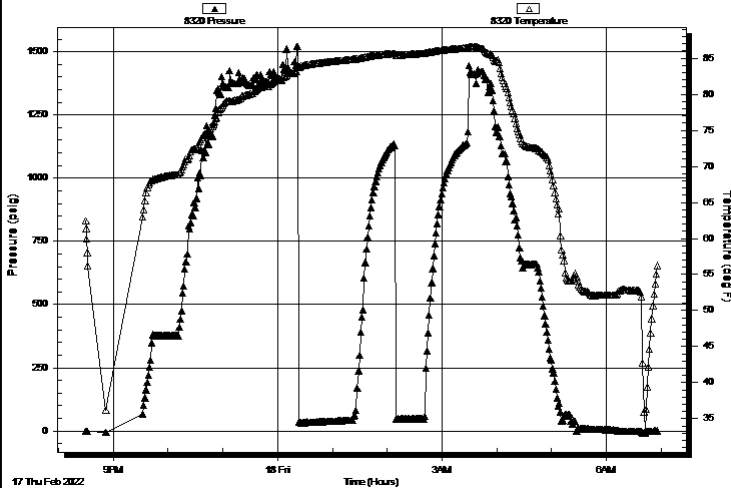
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Time On Btm:

Time Off Btm:

TEST COMMENT: IF 60 Weak blow
ISI 30 No return
FF 45 Weak blow died in 15 min
FSI 45 No return

Pressure vs. Time



PRESSURE SUMMARY

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

Length (ft)	Description	Volume (bbl)
60.00	MUD	2950.70

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Castle Resources

3-10s-13w Osborne, KS

PO Box 583
Russell KS 67665

Lattin #1

Job Ticket: 59478

DST#: 1

ATTN: Jerry Green

Test Start: 2022.02.17 @ 20:30:00

Tool Information

Drill Pipe:	Length:	2794.00 ft	Diameter:	3.82 inches	Volume:	39.61 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:	121.00 ft	Diameter:	225.00 inches	Volume:	5950.58 bbl	Weight to Pull Loose:	55000.00 lb
					Total Volume:	- bbl	Tool Chased	13.00 ft
Drill Pipe Above KB:		13.00 ft					String Weight: Initial	45000.00 lb
Depth to Top Packer:		2921.00 ft					Final	45000.00 lb
Depth to Bottom Packer:		ft						
Interval between Packers:		72.00 ft						
Tool Length:		91.00 ft						
Number of Packers:		2	Diameter:	6.88 inches				
Tool Comments:								

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			2907.00	
Jars	5.00			2912.00	
Packer	5.00			2917.00	19.00 Bottom Of Top Packer
Packer	4.00			2921.00	
Stubb	1.00			2922.00	
Perforations	4.00			2926.00	
Change Over Sub	1.00			2927.00	
Recorder	0.00	8368	Inside	2927.00	
Recorder	0.00	8320	Inside	2927.00	
Drill Pipe	62.00			2989.00	
Change Over Sub	1.00			2990.00	
Bullnose	3.00			2993.00	72.00 Bottom Packers & Anchor

Total Tool Length: 91.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Castle Resources

3-10s-13w Osborne, KS

PO Box 583
Russell KS 67665

Lattin #1

Job Ticket: 59478

DST#: 1

ATTN: Jerry Green

Test Start: 2022.02.17 @ 20:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 44.00 sec/qt

Water Loss: 15.99 in³

Resistivity: ohm.m

Salinity: 12000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MUD	2950.702

Total Length: 60.00 ft

Total Volume: bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: lcm -trace

Serial #: 8368

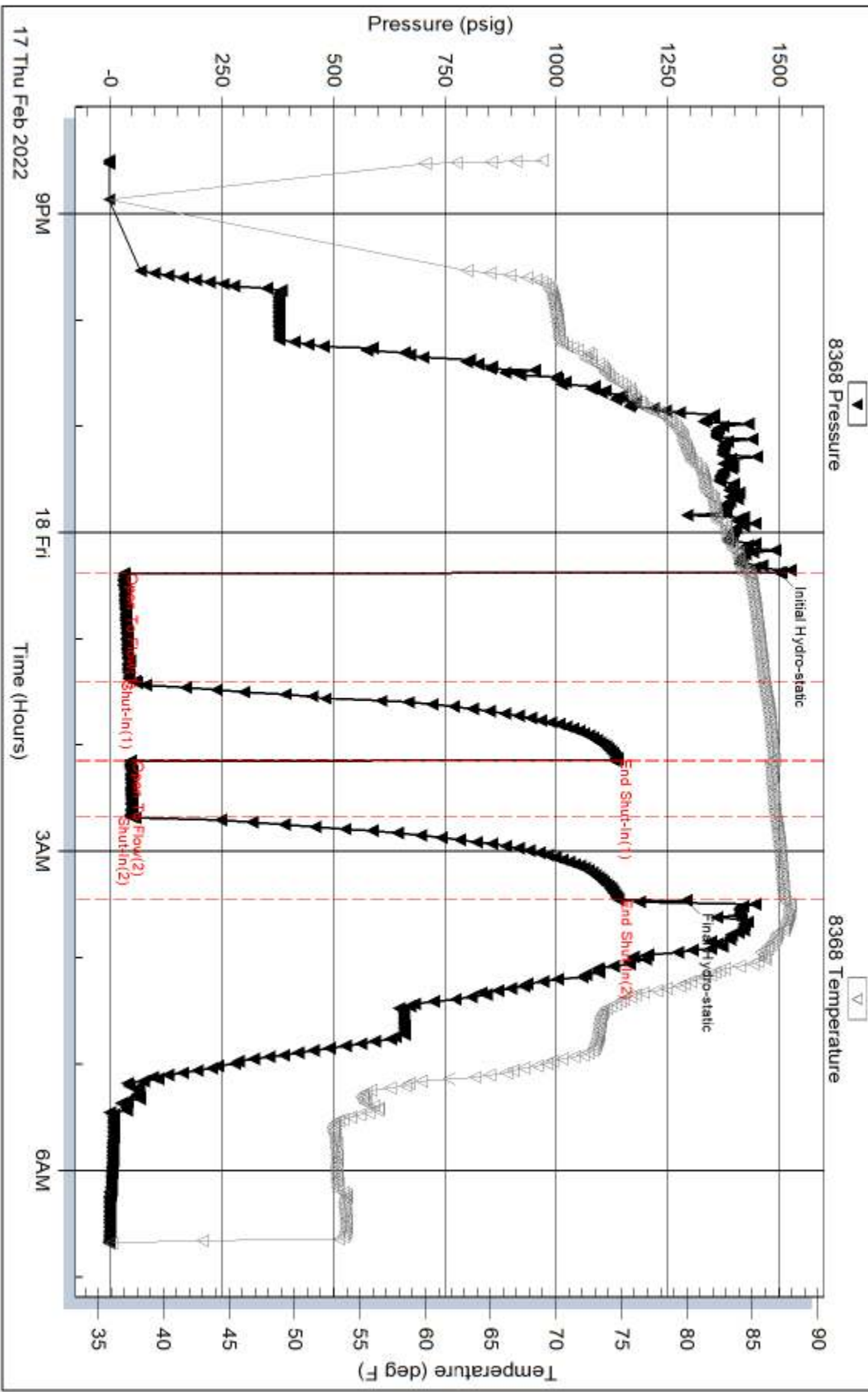
Inside

Castle Resources

Latin #1

DST Test Number: 1

Pressure vs. Time



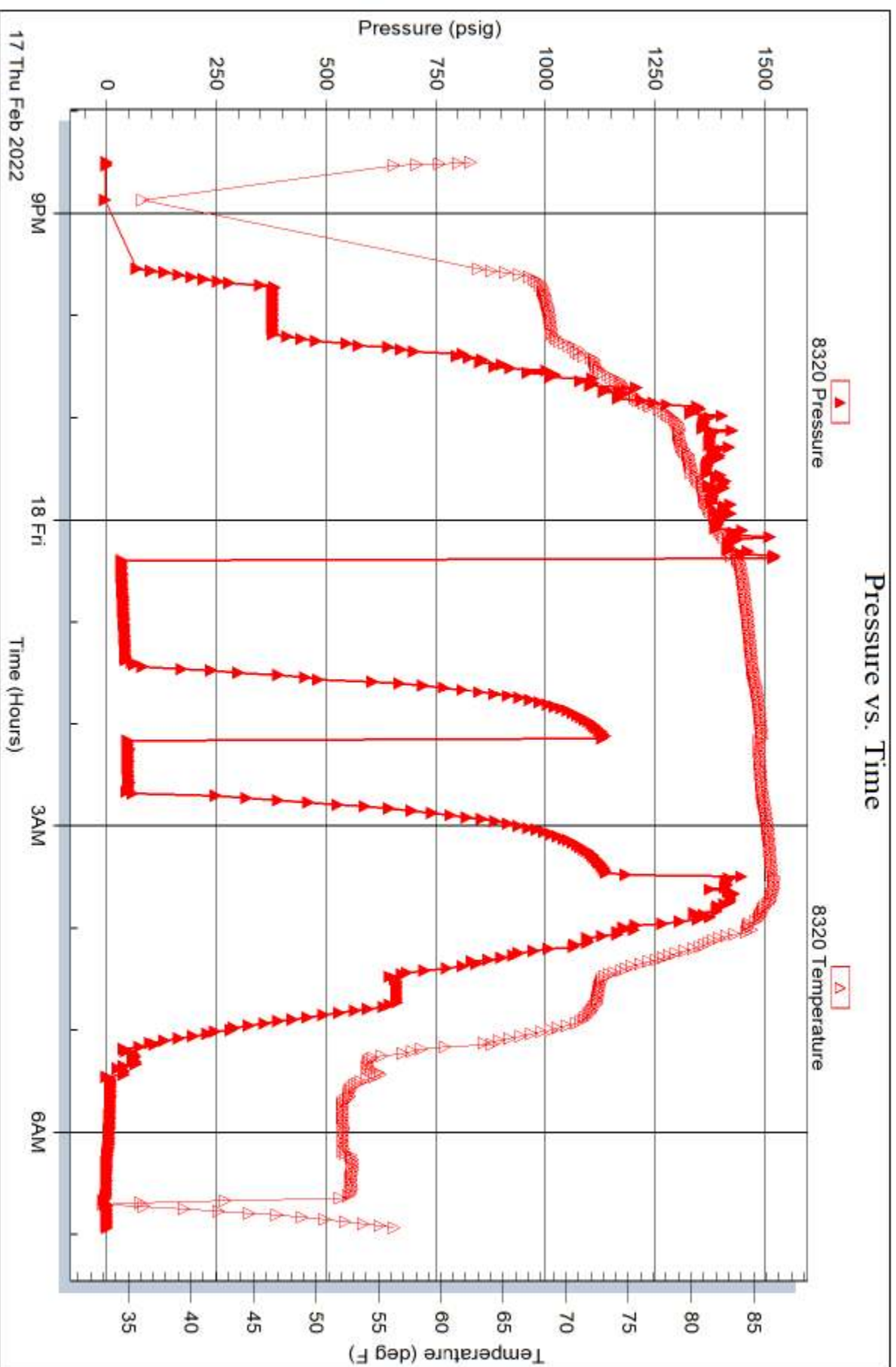
Serial #: 8320

Inside

Castle Resources

Latin #1

DST Test Number: 1





**TRILOBITE
TESTING INC.**

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **59478**

Well Name & No. Lattin #1 Test No. 1 Date 2-17-22
 Company Castle Resources Elevation KB GL
 Address P.O. Box 583 Russell, KS 67605
 Co. Rep / Geo. Jerry Green Rig
 Location: Sec. 3 Twp. 10 Rge. 13W Co. Osborne State KS

Interval Tested 2921-2993 Zone Tested Lansing A-
 Anchor Length 72' Drill Pipe Run 2794 Mud Wt. 9.2
 Top Packer Depth 2916 Drill Collars Run 121 Vis 44
 Bottom Packer Depth 2921 Wt. Pipe Run — WL 16
 Total Depth 2993 Chlorides 12,000 ppm System LCM Trace

Blow Description IF - 60 min - Weak Blow
ISI - 45 min - No Return
FS - 45 min - Weak Blow
FSI - 45 min - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total — BHT — Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>1499</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>4:15 PM</u>
(B) First Initial Flow <u>31</u>	<input type="checkbox"/> Jars <u>—</u>	T-Started <u>8:30</u>
(C) First Final Flow <u>56</u>	<input type="checkbox"/> Safety Joint <u>—</u>	T-Open <u>12:25</u>
(D) Initial Shut-In <u>1129</u>	<input checked="" type="checkbox"/> Circ Sub <u>—</u>	T-Pulled <u>3:25</u>
(E) Second Initial Flow <u>46</u>	<input type="checkbox"/> Hourly Standby <u>—</u>	T-Out <u>7:00</u>
(F) Second Final Flow <u>49</u>	<input checked="" type="checkbox"/> Mileage <u>46 X 2</u> <u>230</u>	Comments <u>—</u>
(G) Final Shut-In <u>1139</u>	<input type="checkbox"/> Sampler <u>—</u>	
(H) Final Hydrostatic <u>1291</u>	<input type="checkbox"/> Straddle <u>46 X 2</u>	<input type="checkbox"/> Ruined Shale Packer <u>—</u>
	<input type="checkbox"/> Shale Packer <u>—</u>	<input type="checkbox"/> Ruined Packer <u>—</u>
	<input type="checkbox"/> Extra Packer <u>—</u>	<input type="checkbox"/> Extra Copies <u>—</u>
	<input type="checkbox"/> Extra Recorder <u>—</u>	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby <u>—</u>	Total <u>1530</u>
	<input type="checkbox"/> Accessibility <u>—</u>	MP/DST Disc't <u>—</u>
	Sub Total <u>1530</u>	

Initial Open 60
 Initial Shut-In 45
 Final Flow 30
 Final Shut-In 45

Approved By —

Our Representative Terry W. ZKham

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.

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TREATMENT REPORT

Acid Stage No. _____

Date 2/19/2022 District GB F.O. No. 50538
Company Cassel Resources
Well Name & No. Lattin #1
Location _____ Field _____
County Osbourne State KS

Type Treatment:	Amt.	Type Fluid	Sand Size	Pounds of Sand
Bkdown	_____ Bbl./Gal.	_____	_____	_____
	_____ Bbl./Gal.	_____	_____	_____
	_____ Bbl./Gal.	_____	_____	_____
	_____ Bbl./Gal.	_____	_____	_____
Flush	_____ Bbl./Gal.	_____	_____	_____

Casing: Size 4.5" Type & Wt. _____ Set at _____ ft.
Formation: _____ Perf. _____ to _____
Formation: _____ Perf. _____ to _____
Formation: _____ Perf. _____ to _____
Liner: Size _____ Type & Wt. _____ Top at _____ ft. Bottom at _____ ft.
Cemented: Yes ☒ Perforated from _____ ft. to _____ ft.
Tubing: Size & Wt. _____ Swung at _____ ft.
Perforated from _____ ft. to _____ ft.

Treated from	ft. to	ft.	No. ft.
_____	_____	_____	0
from _____	ft. to _____	ft.	0
from _____	ft. to _____	ft.	0

Actual Volume of Oil / Water to Load Hole: _____ Bbl./Gal.

Pump Trucks. No. Used: Std. 365 Sp. _____ Twin _____

Auxiliary Equipment _____ 327

Personnel Nathan Joe Greg

Auxiliary Tools _____

Plugging or Sealing Materials: Type _____

Open Hole Size _____ T.D. _____ ft. P.B. to _____ ft.

_____ Gals. _____ lb.

Company Representative Jerry G. Treater Nathan W.

TIME	PRESSURES		Total Fluid Pumped	REMARKS
	Tubing	Casing		
a.m./p.m.				
9:00		4.5"		On Location.
				Pipe-3174' Centralizers-1,3,5
				Baffle-3146'
				Break circulation with mud pump. Circulate for 30 minutes.
				Pump 600gal of Mud Flush.
				Plug Rat Hole with 30sk.
				Mix 150sk Common 12% Salt .5% C-37 .5%C-12 .5% C41p 5#/sk Gilsonite.
				at 15#/gal.
				Displace with 51bbls at 6bpm-500# Plug landed at 1000#
				Release pressure. Float held.
				Thank You!
				Nathan W.

JERRY GREEN

CONSULTING GEOLOGIST

P.O. BOX 87
SCHENCKEN, KS 67667
PHONE: 785-625-5155

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY CASTLE RESOURCES INC.

ELEVATIONS

LEASE LATIN #1

FIELD WC

LOCATION 1520 E 365 F E L

SEC 33 T15P 10S RGE 13W

COUNTY OSBORNE STATE KS

CONTRACTOR WHITE KNIGHT DRILG

SPUD 2-12-22 COMP 2-19-22

RD 3149 LTD 3148

MUD UP 2500' TYPE MUD chem

SAMPLES SAVED FROM 2600'

DRILLING TIME KEPT FROM 2600'

SAMPLES EXAMINED FROM 2600'

GEOLOGICAL SUPERVISION FROM 2600'

GEOLOGIST ON WELL 2500'

FORMATION TOPS LOG

ANHY 752 923 744 931

TOPEKA 2656 981 2655 980

HEEBNER 2886 1211 2886 1211

LKC 2942 1267 2942 1267

RTD 3148 1473 3149 1474

LEGEND

Anhydrite Salt Sandstone Shale Carb sh Limestone Dol.Lime Chert Dolomite

DRILLING TIME IN MINUTES
PER FOOT
Rate of Penetration Decreases

5" 10" 15" 20" 25"

DEPTH

LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

2600'

2650'

2700'

2750'

2800'

2850'

2900'

2950'

3000'

3050'

3100'

3150'

3200'