



## DRILL STEM TEST REPORT

Prepared For: **Blue Ridge Petroleum Corp**

PO Box 30545  
Edmond OK 73003

ATTN: James Musgrove

### **Lanning #1-10**

#### **10-4s-32w Rawlins,KS**

Start Date: 2019.12.19 @ 19:52:00

End Date: 2019.12.20 @ 03:44:39

Job Ticket #: 65643                      DST #: 1

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

Printed: 2019.12.24 @ 10:23:29



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins, KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65643

**DST#: 1**

ATTN: James Musgrove

Test Start: 2019.12.19 @ 19:52:00

## GENERAL INFORMATION:

Formation: **Toronto - Lansing A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:40:50

Time Test Ended: 03:44:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Shawn Wheelbarger

Unit No: 76

**Interval: 3870.00 ft (KB) To 3930.00 ft (KB) (TVD)**

Reference Elevations: 2960.00 ft (KB)

Total Depth: 3930.00 ft (KB) (TVD)

2955.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8355 Outside**

Press@RunDepth: 302.95 psig @ 3871.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.12.19 End Date: 2019.12.20

Last Calib.: 2019.12.20

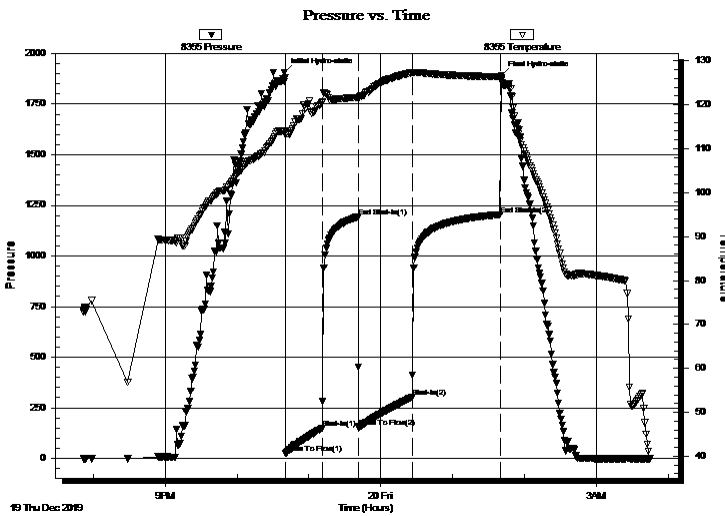
Start Time: 19:52:01 End Time: 03:44:40

Time On Btm: 2019.12.19 @ 22:39:50

Time Off Btm: 2019.12.20 @ 01:40:39

**TEST COMMENT:** 30-IF-2" Blow @ open BOB in 9 min 30 sec built to 26 1/4"  
30-ISI-No blow back  
45-FF-BOB in 17 min Blow built to 29 3/4"  
60-FSI-No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1905.02	113.85	Initial Hydro-static
1	26.25	113.23	Open To Flow (1)
32	150.40	120.48	Shut-In(1)
62	1192.82	121.70	End Shut-In(1)
62	153.10	121.41	Open To Flow (2)
107	302.95	127.27	Shut-In(2)
180	1204.65	126.37	End Shut-In(2)
181	1891.83	125.57	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
378.00	SMCW w/ oil Spots 93%W, 7%M	5.30
252.00	SOSWM 1%O, 25%W, 74%M	3.53

## Gas Rates

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



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Blue Ridge Petroleum Corp

**10-4s-32w Rawlins, KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65643

**DST#: 1**

ATTN: James Musgrove

Test Start: 2019.12.19 @ 19:52:00

## GENERAL INFORMATION:

Formation: **Toronto - Lansing A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:40:50

Time Test Ended: 03:44:39

Test Type: Conventional Bottom Hole (Initial)

Tester: Shawn Wheelbarger

Unit No: 76

**Interval: 3870.00 ft (KB) To 3930.00 ft (KB) (TVD)**

Total Depth: 3930.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2960.00 ft (KB)

2955.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8645 Inside**

Press@RunDepth: psig @ 3871.00 ft (KB)

Start Date: 2019.12.19

End Date: 2019.12.20

Start Time: 19:52:01

End Time: 03:44:40

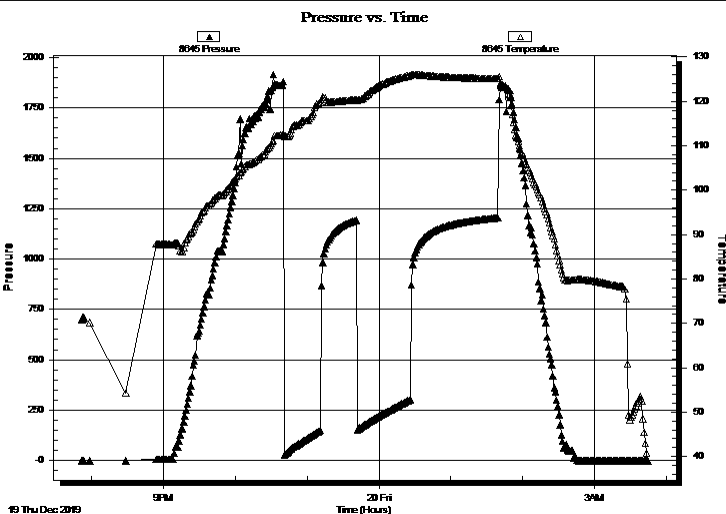
Capacity: 8000.00 psig

Last Calib.: 2019.12.20

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 30-IF-2" Blow @ open BOB in 9 min 30 sec built to 26 1/4"  
30-ISI-No blow back  
45-FF-BOB in 17 min Blow built to 29 3/4"  
60-FSI-No blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
378.00	SMCW w/ oil Spots 93%W, 7%M	5.30
252.00	SOSWM 1%O, 25%W, 74%M	3.53

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65643

**DST#: 1**

ATTN: James Musgrove

Test Start: 2019.12.19 @ 19:52:00

## Tool Information

Drill Pipe:	Length: 3874.00 ft	Diameter: 3.80 inches	Volume: 54.34 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 54.34 bbl</u>	Tool Chased 10.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	3870.00 ft			Final 78000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	81.00 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			3850.00	
Shut In Tool	5.00			3855.00	
Hydraulic tool	5.00		Inside	3860.00	
Packer	5.00			3865.00	21.00 Bottom Of Top Packer
Packer	5.00			3870.00	
Stubb	1.00			3871.00	
Recorder	0.00	8355	Outside	3871.00	
Recorder	0.00	8645	Inside	3871.00	
Perforations	22.00			3893.00	
Change Over Sub	1.00			3894.00	
Drill Pipe	32.00			3926.00	
Change Over Sub	1.00			3927.00	
Bullnose	3.00			3930.00	60.00 Bottom Packers & Anchor

**Total Tool Length: 81.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65643

**DST#: 1**

ATTN: James Musgrove

Test Start: 2019.12.19 @ 19:52:00

## 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:

10000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
378.00	SMCW w / oil Spots 93%W, 7%M	5.302
252.00	SOSWM 1%O, 25%W, 74%M	3.535

Total Length: 630.00 ft      Total Volume: 8.837 bbl

Num Fluid Samples: 0

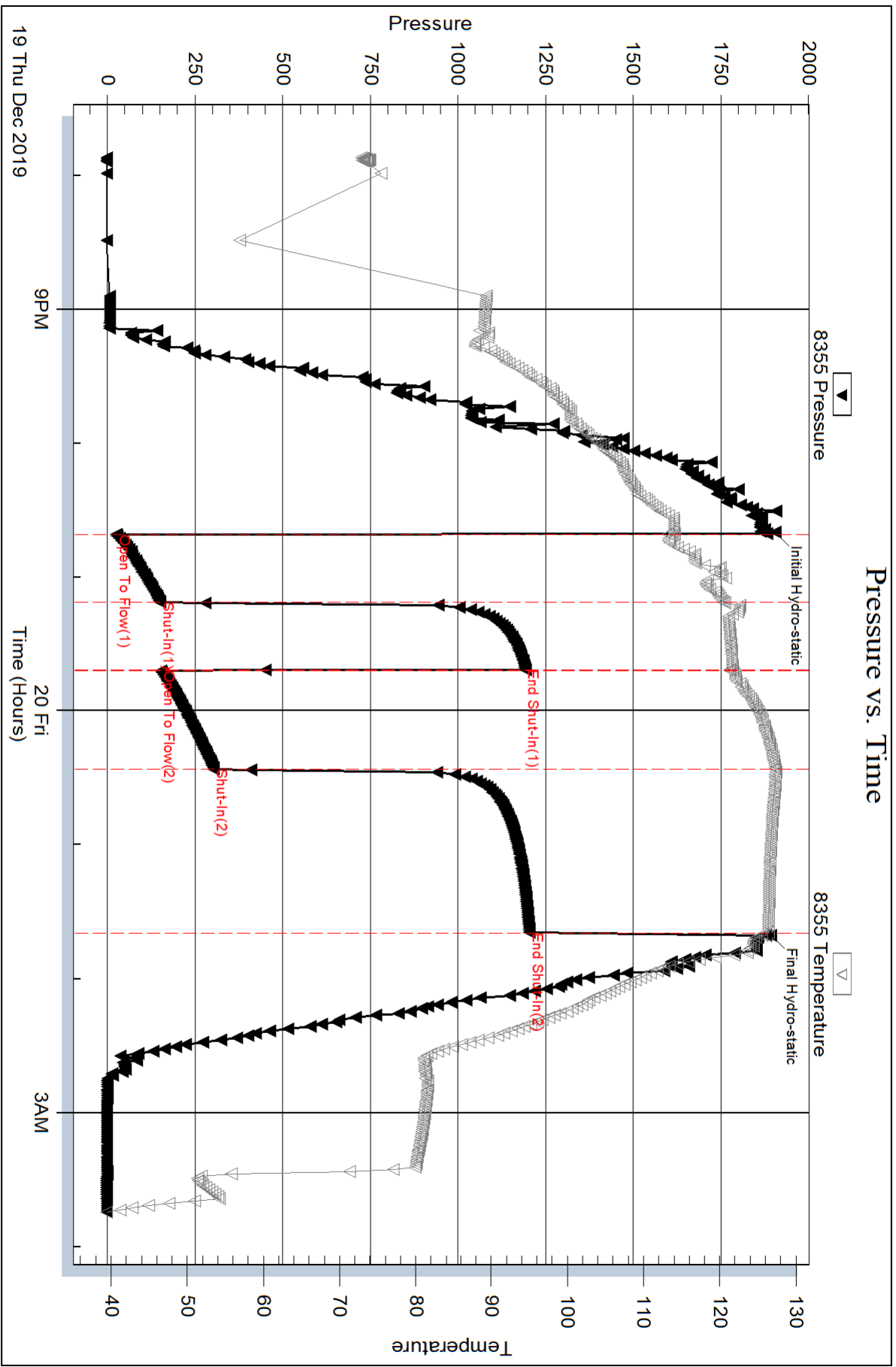
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW 1.457@28.1 DEG F Chlorides 10000 PPM



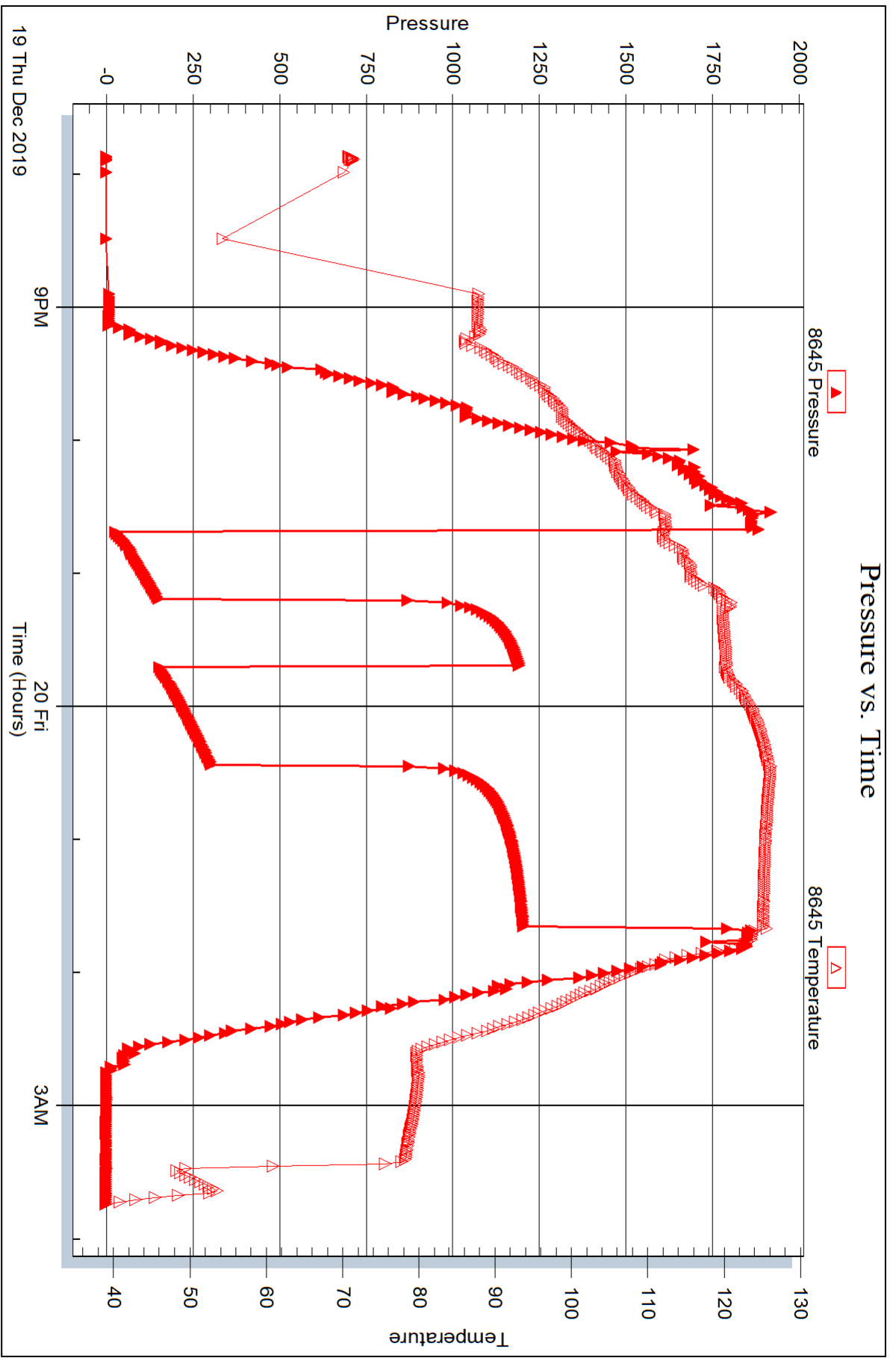
Serial #: 8645

Inside

Blue Ridge Petroleum Corp

Lanning #1-10

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 65643

Printed: 2019.12.24 @ 10:23:30



## DRILL STEM TEST REPORT

Prepared For: **Blue Ridge Petroleum Corp**

PO Box 30545  
Edmond OK 73003

ATTN: James Musgrove

### **Lanning #1-10**

#### **10-4s-32w Rawlins,KS**

Start Date: 2019.12.20 @ 11:57:00

End Date: 2019.12.20 @ 18:30:39

Job Ticket #: 65644                      DST #: 2

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

Printed: 2019.12.24 @ 10:22:25





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins, KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65644

**DST#: 2**

ATTN: James Musgrove

Test Start: 2019.12.20 @ 11:57:00

## GENERAL INFORMATION:

Formation: **Lansing C - D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:05:00

Time Test Ended: 18:30:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Shawn Wheelbarger

Unit No: 76

**Interval: 3931.00 ft (KB) To 3970.00 ft (KB) (TVD)**

Reference Elevations: 2960.00 ft (KB)

Total Depth: 3970.00 ft (KB) (TVD)

2955.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8355 Outside**

Press@RunDepth: 26.24 psig @ 3932.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.12.20 End Date: 2019.12.20

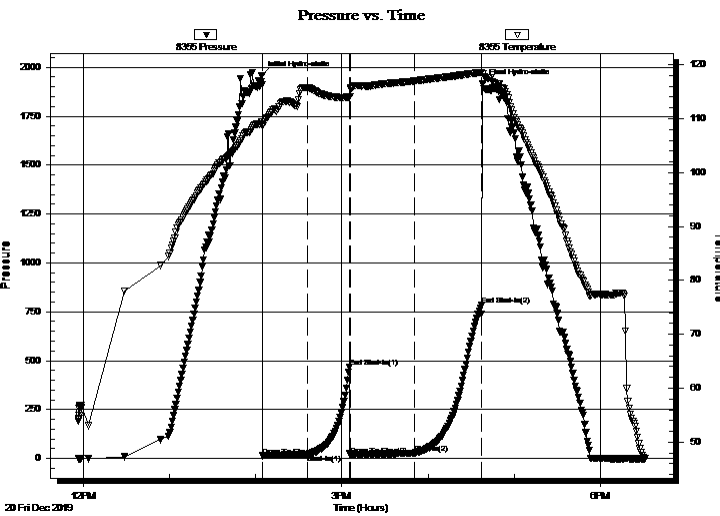
Last Calib.: 2019.12.20

Start Time: 11:57:01 End Time: 18:30:40

Time On Btm: 2019.12.20 @ 14:04:20

Time Off Btm: 2019.12.20 @ 16:38:00

**TEST COMMENT:** 30-IF-Surface blow @ open built to 2 1/4"  
30-ISI-No blow back  
45-FF-Blow built to 1 1/2"  
45-FSI-No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1956.12	109.36	Initial Hydro-static
1	13.16	108.68	Open To Flow (1)
32	19.33	115.79	Shut-In(1)
61	465.32	114.02	End Shut-In(1)
62	17.01	115.55	Open To Flow (2)
107	26.24	117.00	Shut-In(2)
153	781.89	118.58	End Shut-In(2)
154	1917.25	118.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
32.00	MO 84%O, 16%M	0.45
0.00	30' Gas in pipe	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp  
PO Box 30545  
Edmond OK 73003  
ATTN: James Musgrove

**10-4s-32w Rawlins, KS**

**Lanning #1-10**

Job Ticket: 65644

**DST#: 2**

Test Start: 2019.12.20 @ 11:57:00

### GENERAL INFORMATION:

Formation: **Lansing C - D**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:05:00

Time Test Ended: 18:30:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Shawn Wheelbarger

Unit No: 76

**Interval: 3931.00 ft (KB) To 3970.00 ft (KB) (TVD)**

Total Depth: 3970.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2960.00 ft (KB)

2955.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8645** Inside

Press@RunDepth: psig @ 3932.00 ft (KB)

Start Date: 2019.12.20 End Date: 2019.12.20

Start Time: 11:57:01 End Time: 18:30:40

Capacity: 8000.00 psig

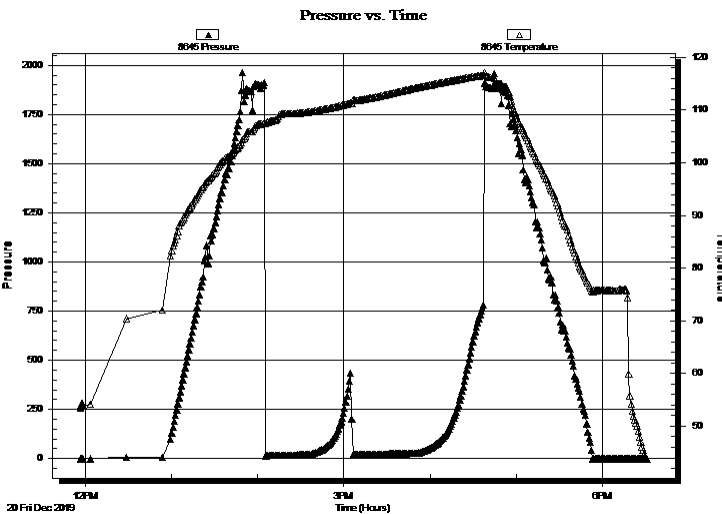
Last Calib.: 2019.12.20

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 30-IF-Surface blow @ open built to 2 1/4"  
30-ISI-No blow back  
45-FF-Blow built to 1 1/2"  
45-FSI-No blow

### PRESSURE SUMMARY



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

### Recovery

Length (ft)	Description	Volume (bbl)
32.00	MO 84%O, 16%M	0.45
0.00	30' Gas in pipe	0.00

\* Recovery from multiple tests

### Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65644

**DST#: 2**

ATTN: James Musgrove

Test Start: 2019.12.20 @ 11:57:00

## Tool Information

Drill Pipe:	Length: 3937.00 ft	Diameter: 3.80 inches	Volume: 55.23 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 55.23 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial	74000.00 lb
Depth to Top Packer:	3931.00 ft			Final	76000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	39.00 ft				
Tool Length:	60.00 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			3911.00	
Shut In Tool	5.00			3916.00	
Hydraulic tool	5.00		Inside	3921.00	
Packer	5.00			3926.00	21.00 Bottom Of Top Packer
Packer	5.00			3931.00	
Packer - Shale	0.00			3931.00	
Stubb	1.00			3932.00	
Recorder	0.00	8355	Outside	3932.00	
Recorder	0.00	8645	Inside	3932.00	
Perforations	35.00			3967.00	
Bullnose	3.00			3970.00	39.00 Bottom Packers & Anchor

**Total Tool Length: 60.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65644

**DST#: 2**

ATTN: James Musgrove

Test Start: 2019.12.20 @ 11:57:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

21.3 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3400.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
32.00	MO 84%O, 16%M	0.449
0.00	30' Gas in pipe	0.000

Total Length: 32.00 ft      Total Volume: 0.449 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

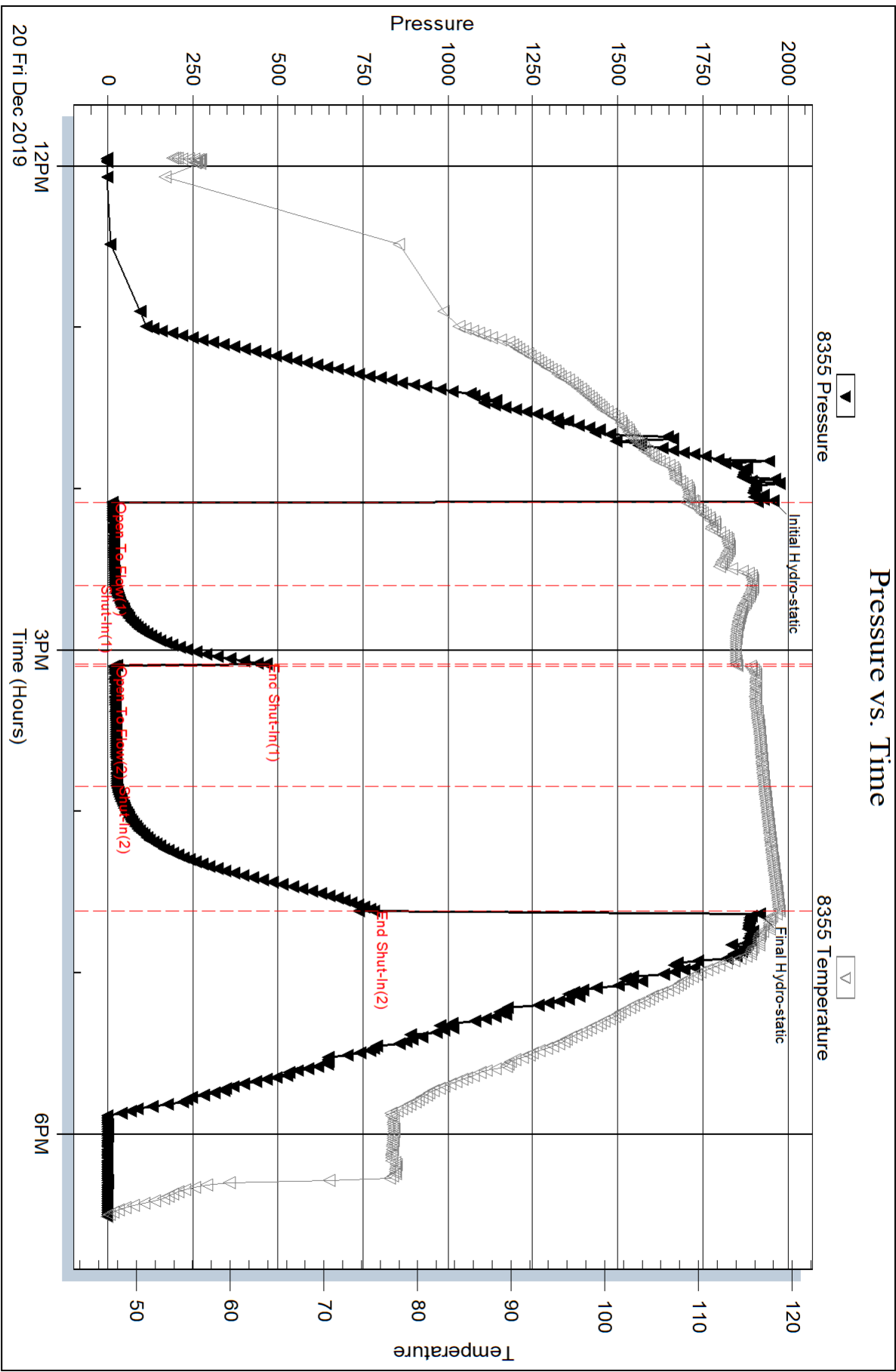
Recovery Comments: 23.3 @ 80 DEG F Adjusted to 21.3 DEG API

Serial #: 8355

Outside Blue Ridge Petroleum Corp

Lanning #1-10

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 65644

Printed: 2019.12.24 @ 10:22:27

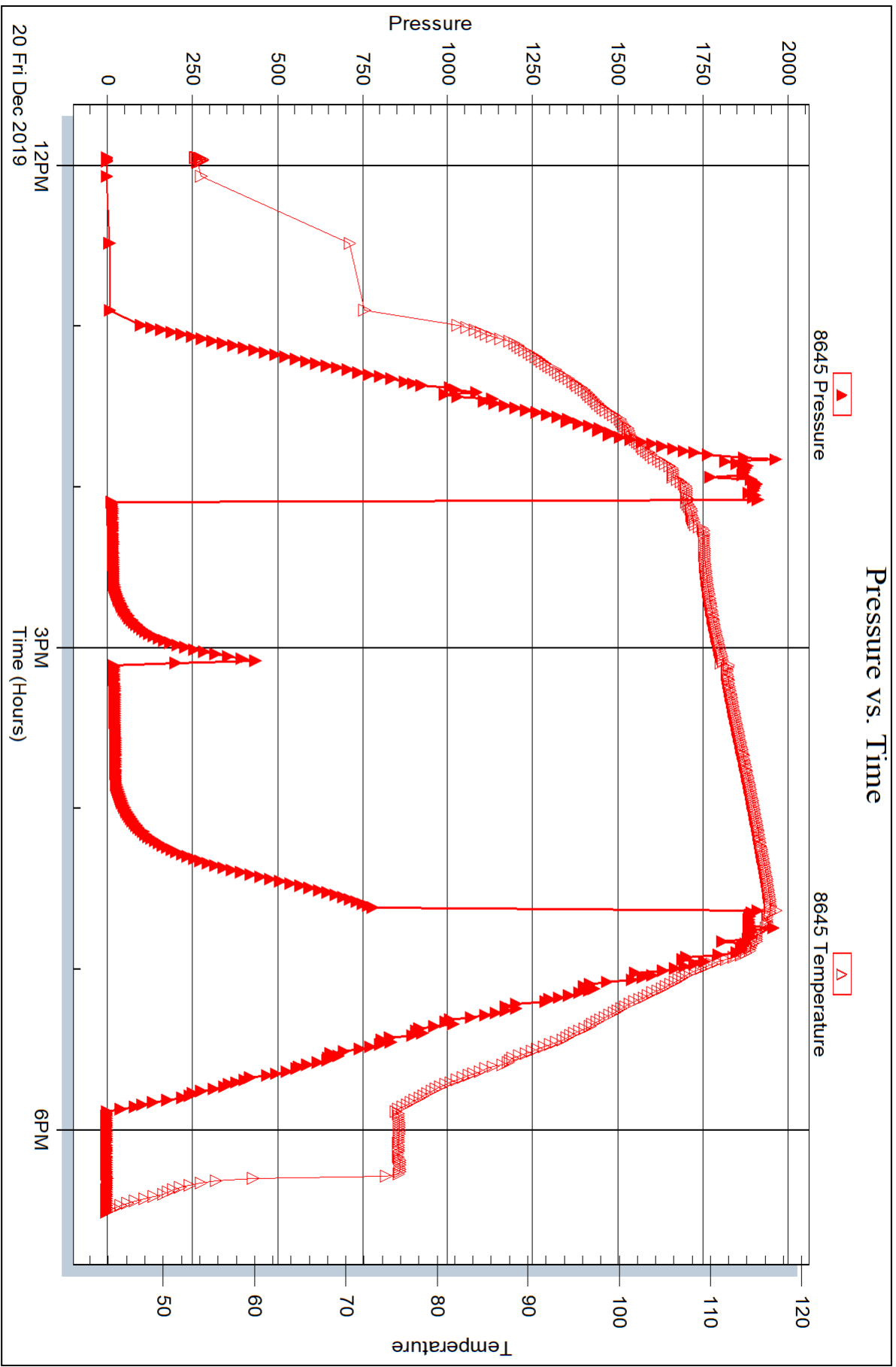
Serial #: 8645

Inside

Blue Ridge Petroleum Corp

Lanning #1-10

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 65644

Printed: 2019.12.24 @ 10:22:27



## DRILL STEM TEST REPORT

Prepared For: **Blue Ridge Petroleum Corp**

PO Box 30545  
Edmond OK 73003

ATTN: James Musgrove

### **Lanning #1-10**

#### **10-4s-32w Rawlins,KS**

Start Date: 2019.12.21 @ 05:00:00

End Date: 2019.12.21 @ 10:47:20

Job Ticket #: 65645                      DST #: 3

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

Printed: 2019.12.24 @ 10:21:37



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins, KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65645

**DST#: 3**

ATTN: James Musgrove

Test Start: 2019.12.21 @ 05:00:00

## GENERAL INFORMATION:

Formation: **LKC" E - G "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:02:50

Time Test Ended: 10:47:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 76

**Interval: 3966.00 ft (KB) To 4021.00 ft (KB) (TVD)**

Total Depth: 4021.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2960.00 ft (KB)

2955.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8645**

**Inside**

Press@RunDepth: 22.80 psig @ 3967.00 ft (KB)

Start Date: 2019.12.21

End Date:

2019.12.21

Start Time: 05:00:01

End Time:

10:47:20

Capacity: 8000.00 psig

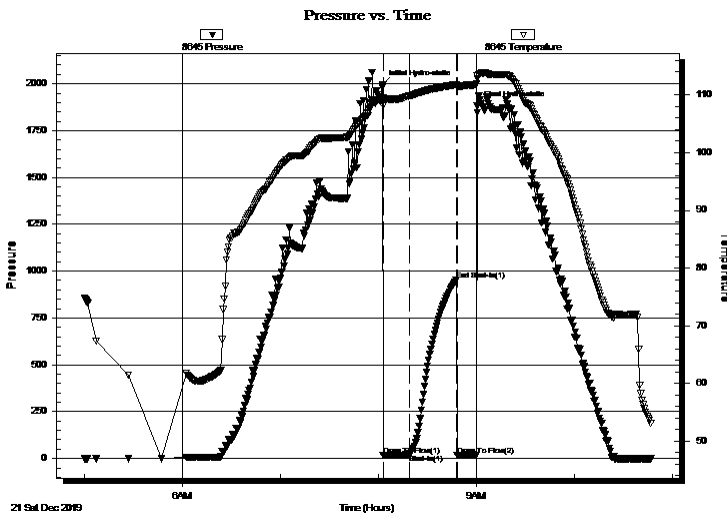
Last Calib.: 2019.12.21

Time On Btm: 2019.12.21 @ 08:02:40

Time Off Btm: 2019.12.21 @ 09:00:30

**TEST COMMENT:** 15 IF - No blow , flushed tool, no blow  
30 ISI - No return  
10 FF - No blow , flushed tool, w eak surface blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1996.31	109.61	Initial Hydro-static
1	17.61	108.14	Open To Flow (1)
17	22.80	109.87	Shut-In(1)
46	953.60	111.83	End Shut-In(1)
46	18.12	111.27	Open To Flow (2)
58	1880.65	113.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w / oil spots 100%M	0.14

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE**  
**TESTING, INC.**

# DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins, KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65645

**DST#: 3**

ATTN: James Musgrove

Test Start: 2019.12.21 @ 05:00:00

## GENERAL INFORMATION:

Formation: **LKC" E - G "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:02:50

Time Test Ended: 10:47:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 76

**Interval: 3966.00 ft (KB) To 4021.00 ft (KB) (TVD)**

Reference Elevations: 2960.00 ft (KB)

Total Depth: 4021.00 ft (KB) (TVD)

2955.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8355**

**Outside**

Press@RunDepth: psig @ 3967.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.12.21

End Date:

2019.12.21

Last Calib.:

2019.12.21

Start Time: 05:07:01

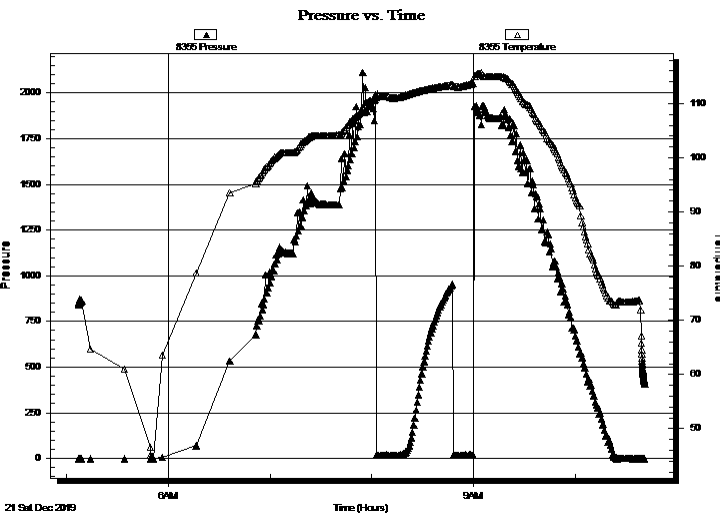
End Time:

10:41:13

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 15 IF - No blow , flushed tool, no blow  
30 ISI - No return  
10 FF - No blow , flushed tool, w eak surface blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud w / oil spots 100%M	0.14

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65645

**DST#: 3**

ATTN: James Musgrove

Test Start: 2019.12.21 @ 05:00:00

## Tool Information

Drill Pipe:	Length: 3968.00 ft	Diameter: 3.80 inches	Volume: 55.66 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 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: 55.66 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	3966.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	55.00 ft			
Tool Length:	76.00 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			3946.00	
Shut In Tool	5.00			3951.00	
Hydraulic tool	5.00		Inside	3956.00	
Packer	5.00			3961.00	21.00 Bottom Of Top Packer
Packer	5.00			3966.00	
Stubb	1.00			3967.00	
Recorder	0.00	8355	Outside	3967.00	
Recorder	0.00	8645	Inside	3967.00	
Perforations	18.00			3985.00	
Change Over Sub	1.00			3986.00	
Drill Pipe	31.00			4017.00	
Change Over Sub	1.00			4018.00	
Bullnose	3.00			4021.00	55.00 Bottom Packers & Anchor

**Total Tool Length: 76.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65645

**DST#: 3**

ATTN: James Musgrove

Test Start: 2019.12.21 @ 05:00:00

## 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: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud w / oil spots 100%M	0.140

Total Length: 10.00 ft      Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

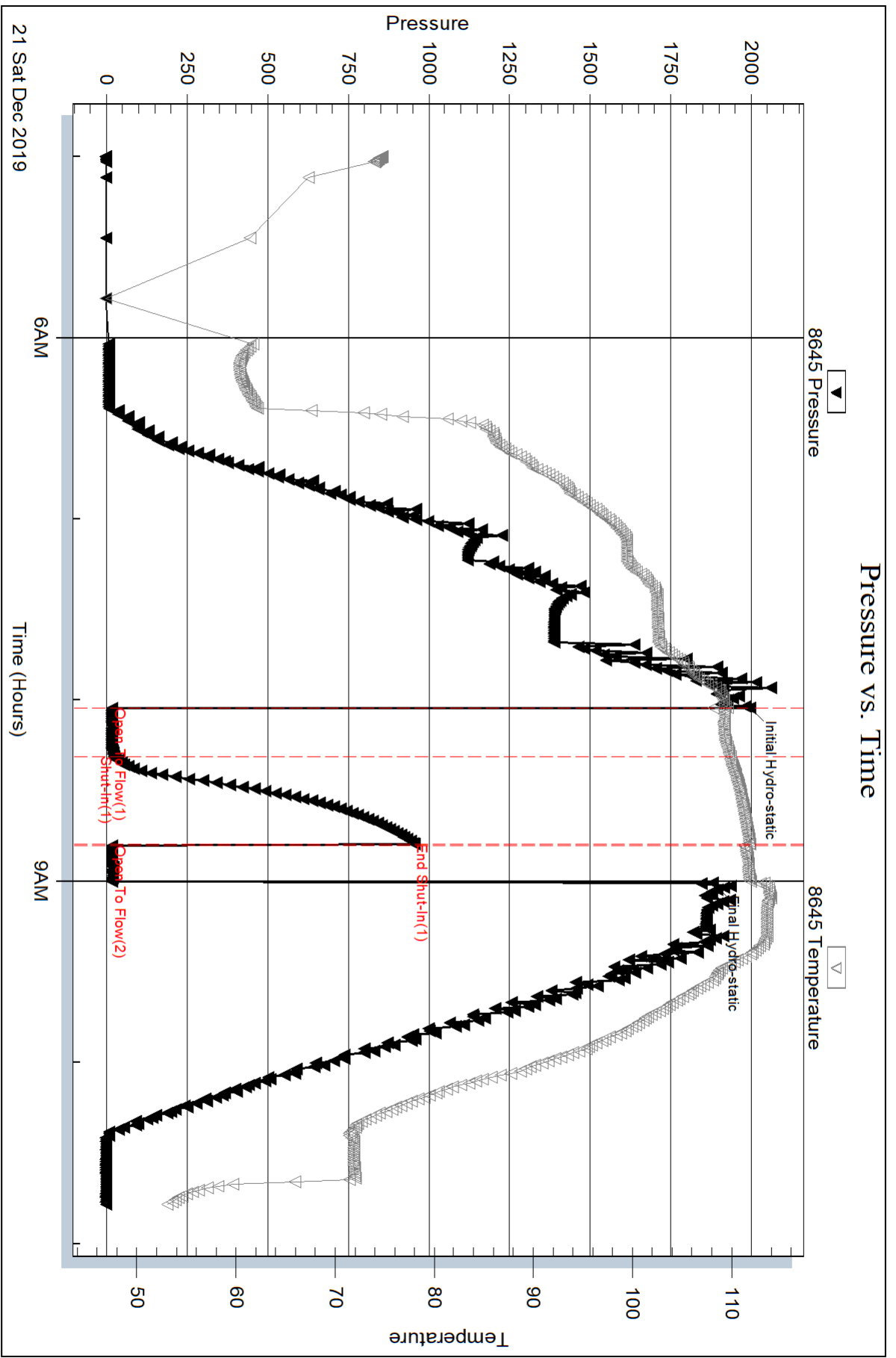
Serial #: 8645

Inside

Blue Ridge Petroleum Corp

Lanning #1-10

DST Test Number: 3

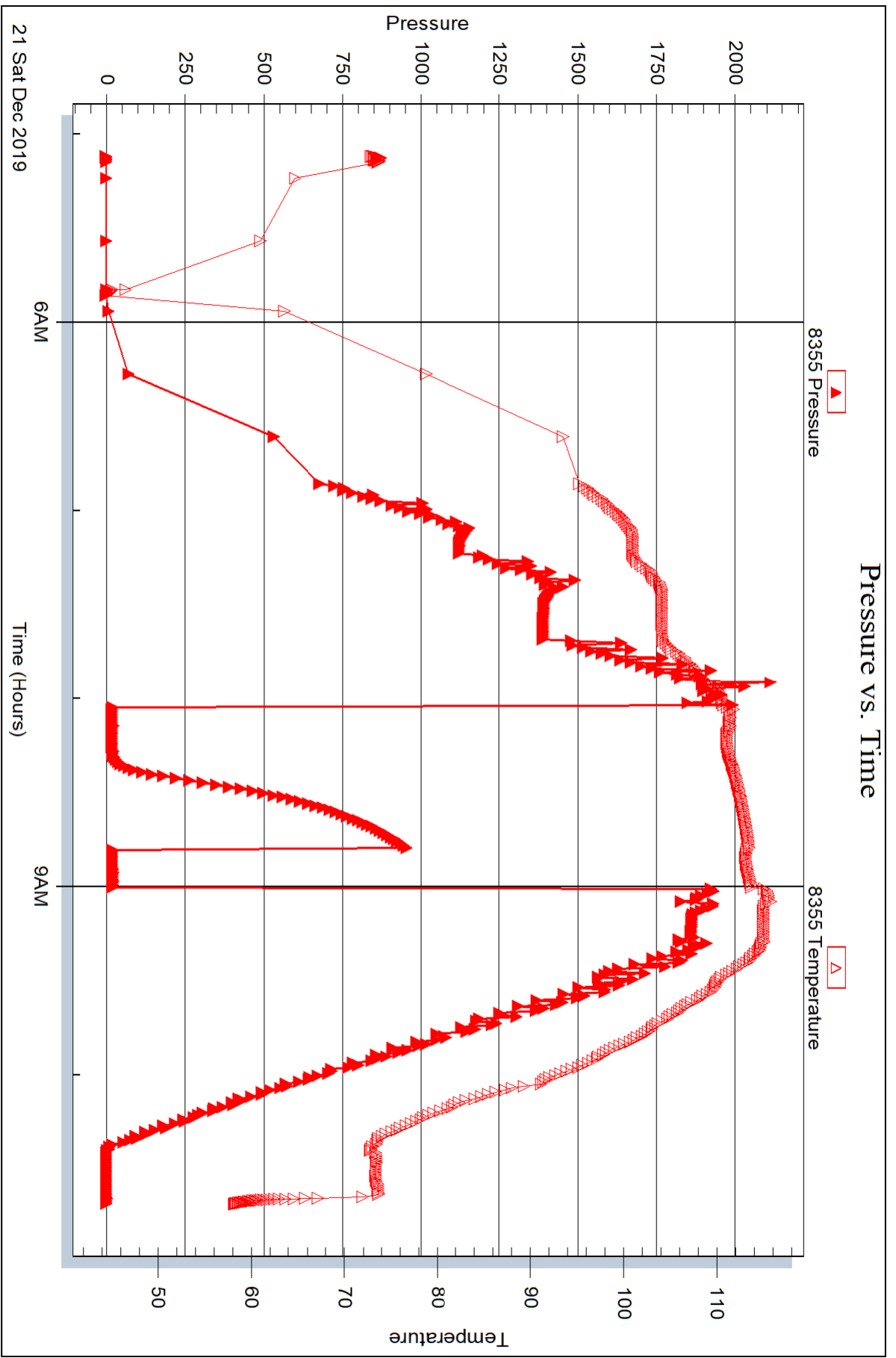


Serial #: 8355

Outside Blue Ridge Petroleum Corp

Lanning #1-10

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 65645

Printed: 2019.12.24 @ 10:21:38



## DRILL STEM TEST REPORT

Prepared For: **Blue Ridge Petroleum Corp**

PO Box 30545  
Edmond OK 73003

ATTN: James Musgrove

### **Lanning #1-10**

#### **10-4s-32w Rawlins,KS**

Start Date: 2019.12.22 @ 01:43:00

End Date: 2019.12.22 @ 09:59:09

Job Ticket #: 65646                      DST #: 4

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

Printed: 2019.12.24 @ 10:20:40



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins, KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65646

**DST#: 4**

ATTN: James Musgrove

Test Start: 2019.12.22 @ 01:43:00

## GENERAL INFORMATION:

Formation: **LKC" H - K "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:14:20

Time Test Ended: 09:59:09

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 76

**Interval: 4012.00 ft (KB) To 4115.00 ft (KB) (TVD)**

Reference Elevations: 2960.00 ft (KB)

Total Depth: 4115.00 ft (KB) (TVD)

2955.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8645**

**Inside**

Press@RunDepth: 887.32 psig @ 4013.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.12.22

End Date:

2019.12.22

Last Calib.:

2019.12.22

Start Time: 01:43:01

End Time:

09:59:10

Time On Btm:

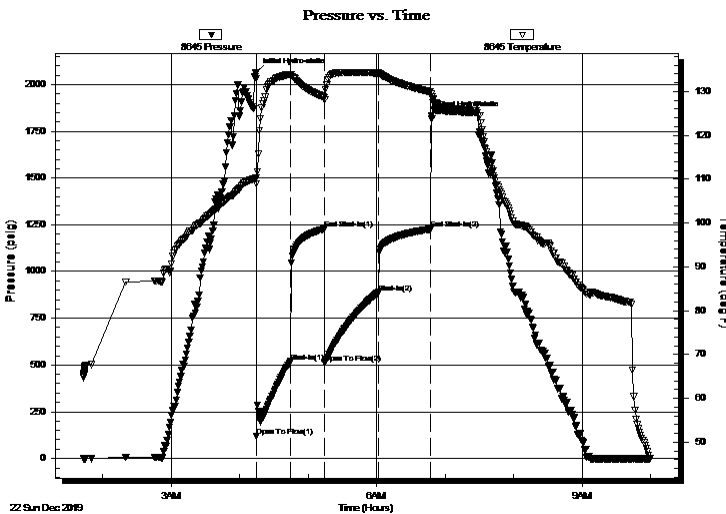
2019.12.22 @ 04:14:00

Time Off Btm:

2019.12.22 @ 06:47:50

**TEST COMMENT:** 30 IF - BoB @ 3 mins  
30 ISI - Surface return started @ 5 mins built to 1/4"  
45 FF - BoB @ 4 1/2 mins  
45 FSI - No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2064.45	110.21	Initial Hydro-static
1	120.49	108.97	Open To Flow (1)
31	517.44	133.88	Shut-In(1)
61	1227.72	128.67	End Shut-In(1)
61	512.32	128.15	Open To Flow (2)
108	887.32	134.19	Shut-In(2)
153	1226.16	129.92	End Shut-In(2)
154	1834.80	129.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	MCW - 40%M - 60%W	0.88
1512.00	MCW - 5%M - 95%W	21.21
63.00	MCW - 10%M - 90%W	0.88
126.00	MCW - 30%M - 70%W	1.77

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Blue Ridge Petroleum Corp  
 PO Box 30545  
 Edmond OK 73003  
 ATTN: James Musgrove

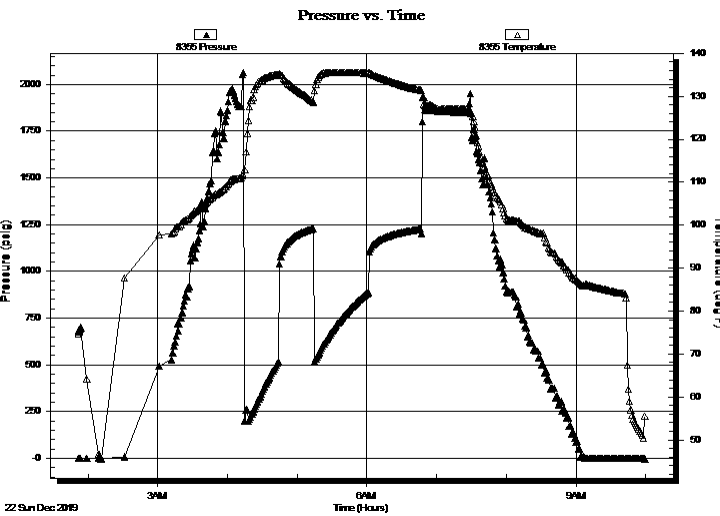
**10-4s-32w Rawlins, KS**  
**Lanning #1-10**  
 Job Ticket: 65646 **DST#: 4**  
 Test Start: 2019.12.22 @ 01:43:00

**GENERAL INFORMATION:**

Formation: **LKC" H - K "**  
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 04:14:20 Tester: Ryan Nichols  
 Time Test Ended: 09:59:09 Unit No: 76  
**Interval: 4012.00 ft (KB) To 4115.00 ft (KB) (TVD)** Reference Elevations: 2960.00 ft (KB)  
 Total Depth: 4115.00 ft (KB) (TVD) 2955.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

**Serial #: 8355 Outside**  
 Press@RunDepth: psig @ 4013.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.12.22 End Date: 2019.12.22 Last Calib.: 2019.12.22  
 Start Time: 01:52:01 End Time: 09:59:02 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 30 IF - BoB @ 3 mins  
 30 ISI - Surface return started @ 5 mins built to 1/4"  
 45 FF - BoB @ 4 1/2 mins  
 45 FSI - No return



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
63.00	MCW - 40%M- 60%W	0.88
1512.00	MCW - 5%M - 95%W	21.21
63.00	MCW - 10%M - 90%W	0.88
126.00	MCW - 30%M - 70%W	1.77

**Gas Rates**

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65646

**DST#: 4**

ATTN: James Musgrove

Test Start: 2019.12.22 @ 01:43:00

## Tool Information

Drill Pipe:	Length: 4000.00 ft	Diameter: 3.80 inches	Volume: 56.11 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 96000.00 lb
			<u>Total Volume: 56.11 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 79000.00 lb
Depth to Top Packer:	4012.00 ft			Final 86000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	103.00 ft			
Tool Length:	124.00 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			3992.00	
Shut In Tool	5.00			3997.00	
Hydraulic tool	5.00		Inside	4002.00	
Packer	5.00			4007.00	21.00 Bottom Of Top Packer
Packer	5.00			4012.00	
Stubb	1.00			4013.00	
Recorder	0.00	8355	Outside	4013.00	
Recorder	0.00	8645	Inside	4013.00	
Perforations	34.00			4047.00	
Change Over Sub	1.00			4048.00	
Drill Pipe	63.00			4111.00	
Change Over Sub	1.00			4112.00	
Bullnose	3.00			4115.00	103.00 Bottom Packers & Anchor

**Total Tool Length: 124.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Blue Ridge Petroleum Corp

**10-4s-32w Rawlins,KS**

PO Box 30545  
Edmond OK 73003

**Lanning #1-10**

Job Ticket: 65646

**DST#: 4**

ATTN: James Musgrove

Test Start: 2019.12.22 @ 01:43:00

## 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:

73000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
63.00	MCW - 40%M- 60%W	0.884
1512.00	MCW - 5%M - 95%W	21.209
63.00	MCW - 10%M - 90%W	0.884
126.00	MCW - 30%M - 70%W	1.767

Total Length: 1764.00 ft      Total Volume: 24.744 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

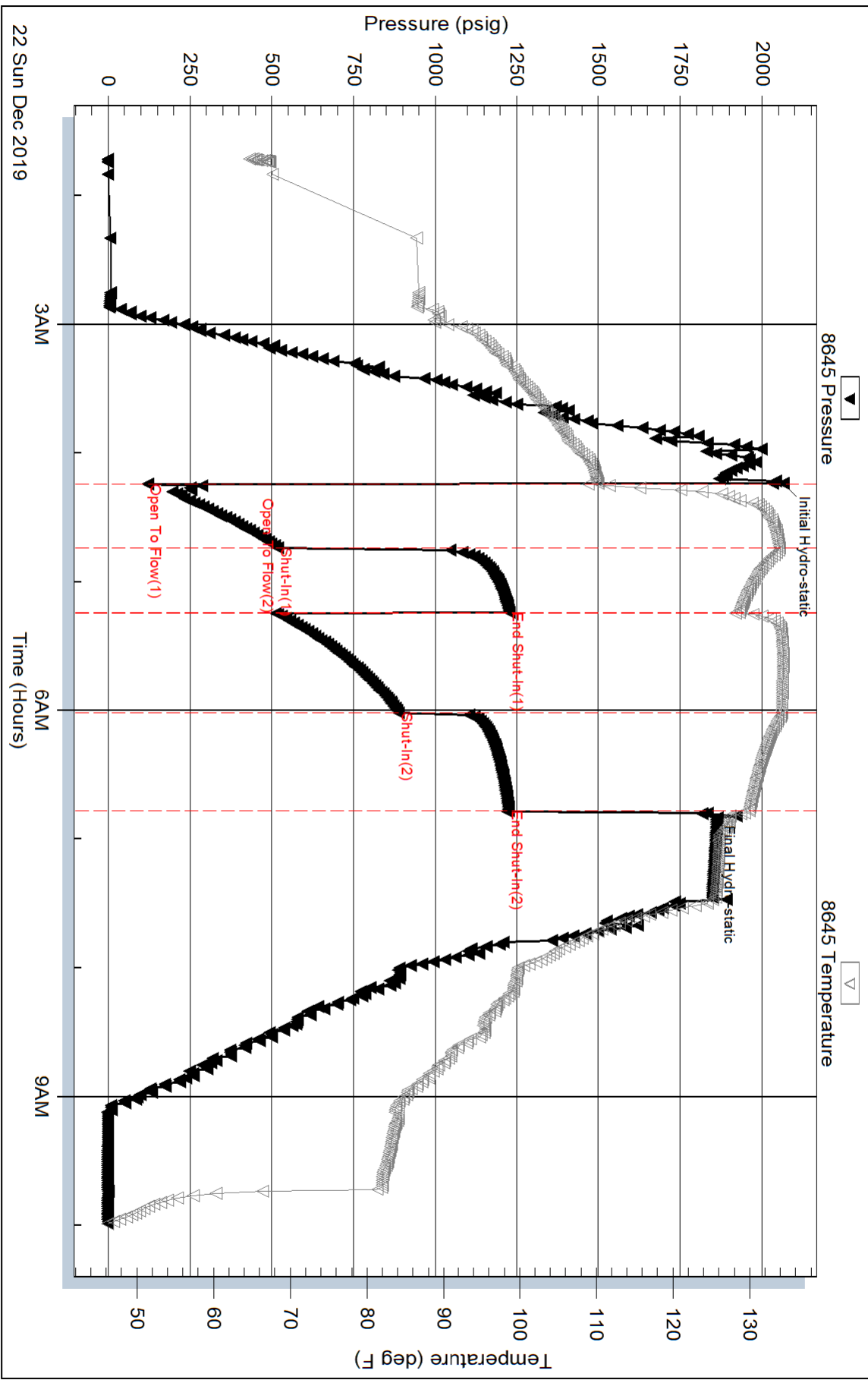
Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .217 @ 26 DEG F

CHLORIDES = 73,000 PPM

### Pressure vs. Time

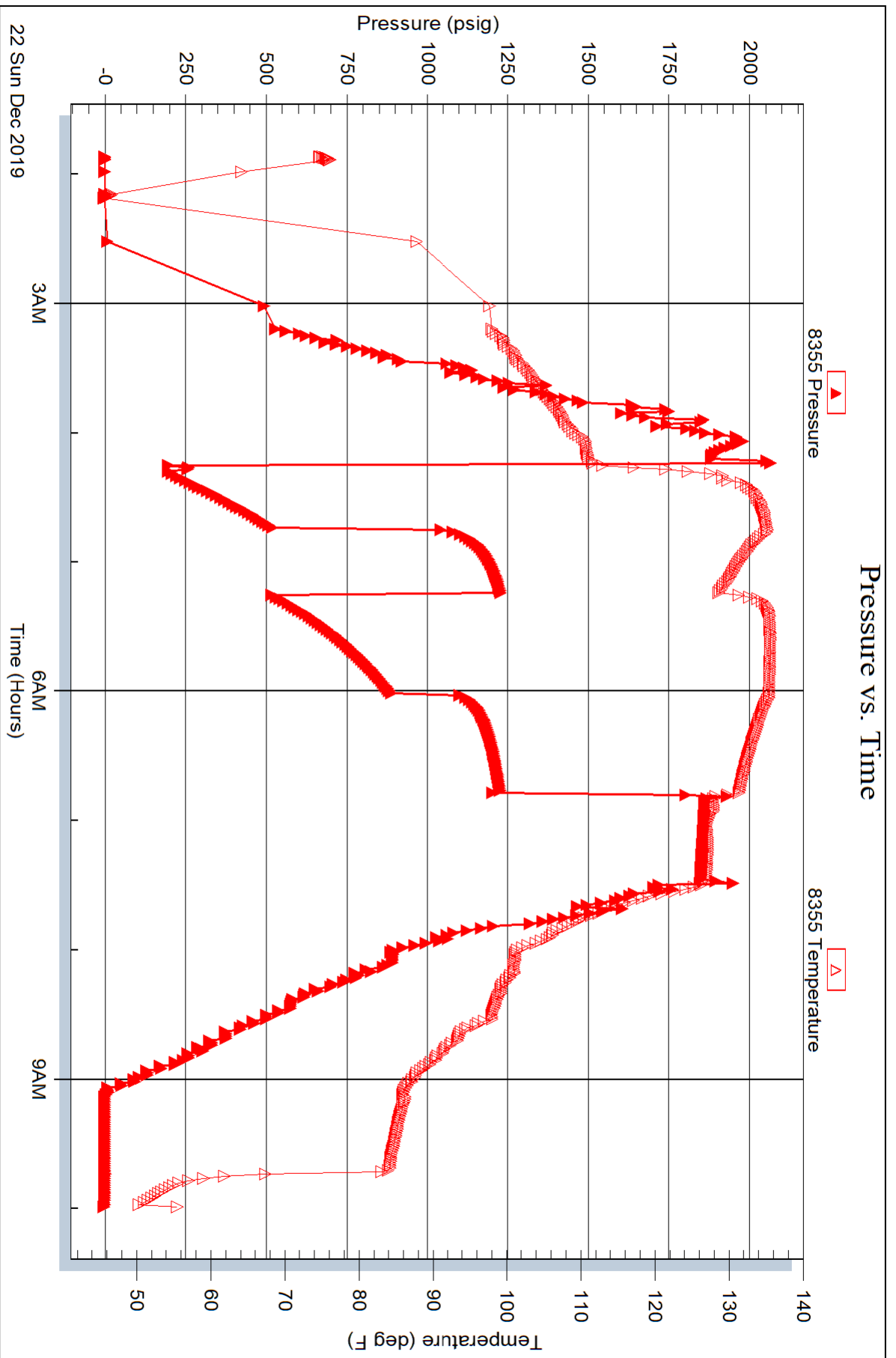


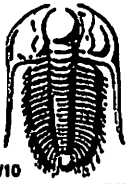
Serial #: 8355

Outside Blue Ridge Petroleum Corp

Lanning #1-10

DST Test Number: 4





# TRIOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 65643

Well Name & No. Lanning #1-10 Test No. 1 Date 12-19-19  
 Company Blue Ridge Petroleum Corp Elevation 2960 KB 2955 GL  
 Address PO Box 30545 Edmond OK 73003  
 Co. Rep / Geo. James Musgrave Rig LD Drilling #1  
 Location: Sec. 10 Twp 43 Rge. 32w Co. Rawlins State KS

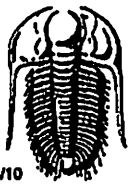
Interval Tested 3870-3900 Zone Tested Lansing A  
 Anchor Length 60 Drill Pipe Run 3874 Mud Wt. 8.9  
 Top Packer Depth 3865 Drill Collars Run — Vis 53  
 Bottom Packer Depth 3870 Wt. Pipe Run — WL 6.4  
 Total Depth 3900 Chlorides 2000 ppm System LCM 5  
 Blow Description IF 2" Blow @ open BOB in 9min 30sec built to 26 1/4"  
ISI No blow back  
FF Blow built to 29 3/4" BOB in 17 min  
FSI No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>252</u>	<u>505WM</u>	<u>1</u>	<u>25</u>	<u>74</u>	
<u>378</u>	<u>SMLW w/oil spots</u>		<u>93</u>	<u>7</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 630 BHT 120 Gravity — API RW 14.57 @ 28.1 °F Chlorides 10000 ppm

(A) Initial Hydrostatic 1905  Test 1200 T-On Location 17:46  
 (B) First Initial Flow 26  Jars — T-Started 19:52  
 (C) First Final Flow 150  Safety Joint — T-Open 22:42  
 (D) Initial Shut-In 1193  Circ Sub — T-Pulled 1:37 12-20  
 (E) Second Initial Flow 153  Hourly Standby — T-Out 3:35 12-20  
 (F) Second Final Flow 303  Mileage 53 RT 53 Comments Tool slid 10ft to bottom  
 (G) Final Shut-In 1205  Sampler —  
 (H) Final Hydrostatic 1892  Straddle —  EM Tool —  
 Shale Packer —  Ruined Shale Packer —  
 Extra Packer —  Ruined Packer —  
 Extra Recorder —  Extra Copies —  
 Day Standby — Sub Total 0  
 Accessibility — Total 1253  
 Sub Total 1253 MP/DST Disc't —

Approved By \_\_\_\_\_ Our Representative Shawn Heelbarger  
 Triobite 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. 65644

Well Name & No. Lanning #1-10 Test No. 2 Date 12-20-19  
 Company Blue Ridge Petroleum Corp Elevation 2960 KB 2955 GL  
 Address PO Box 30545 Edmond OK 73003  
 Co. Rep / Geo. James Musgrove Rig LD Drilling #1  
 Location: Sec. 10 Twp 4S Rge. 32W Co. Rawlins State KS

Interval Tested 3931-3970 Zone Tested Lansing C-D  
 Anchor Length 39 Drill Pipe Run 3937 Mud Wt. 9.2  
 Top Packer Depth 3926 Drill Collars Run - Vis 50  
 Bottom Packer Depth 3931 Wt. Pipe Run - WL 8.8  
 Total Depth 3970 Chlorides 3400 ppm System LCM 4  
 Blow Description IF Surface blow @ open built to 2 1/4"  
ISI No blow back  
FF Blow built to 1 1/2"  
FSI NO blow

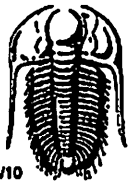
Rec	Feet of	%gas	%oil	%water	%mud
<u>32</u>	<u>MO</u>	<u>54</u>		<u>16</u>	
<u>30</u>	<u>Gas in pipe</u>	<u>100</u>			

Rec Total 62 BHT 118 Gravity 21.3 API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic 1956  Test 1200 T-On Location 11:14  
 (B) First Initial Flow 13  Jars \_\_\_\_\_ T-Started 11:57  
 (C) First Final Flow 19  Safety Joint \_\_\_\_\_ T-Open 14:05  
 (D) Initial Shut-In 465  Circ Sub \_\_\_\_\_ T-Pulled 16:35  
 (E) Second Initial Flow 17  Hourly Standby \_\_\_\_\_ T-Out 18:25  
 (F) Second Final Flow 26  Mileage 53 RT 53 Comments \_\_\_\_\_  
 (G) Final Shut-In 782  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1917  Straddle \_\_\_\_\_  
 EM Tool \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_

Initial Open 30  Shale Packer 250  
 Initial Shut-In 30  Extra Packer \_\_\_\_\_  
 Final Flow 45  Extra Recorder \_\_\_\_\_  
 Final Shut-In 45  Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1503 Sub Total 1503 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Steve Wheelbarger  
 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. 65645

Well Name & No. Lanning # 1-10 Test No. 3 Date 12/21/19  
 Company Blue Ridge Petroleum Corp Elevation 2960 KB 2955 GL  
 Address P.O. Box 30545 Edmond OK 73003  
 Co. Rep / Geo. James Musgrove Rig LD Drilling # 1  
 Location: Sec. 10 Twp 4S Rge. 32W Co. Rawlins State KS

Interval Tested 3966 - 4021 Zone Tested LKC "E-G"  
 Anchor Length 55' Drill Pipe Run 3968' Mud Wt. 9.2  
 Top Packer Depth 3961 Drill Collars Run 0' Vis 51  
 Bottom Packer Depth 3966 Wt. Pipe Run 0' WL 8.0  
 Total Depth 4021 Chlorides 2000 ppm System LCM 2  
 Blow Description 15 IF - No blow flushed tool no blow  
30 ISI - No return  
10 FF - No blow, flushed tool, weak surface

Rec	Feet of	%gas	%oil	%water	%mud
10'	Mud w/oil spots			100	

Rec Total 10' BHT 119° Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

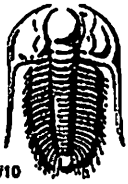
(A) Initial Hydrostatic 1996  Test 1300 T-On Location 04:30  
 (B) First Initial Flow 18  Jars \_\_\_\_\_ T-Started 05:00  
 (C) First Final Flow 23  Safety Joint \_\_\_\_\_ T-Open 08:02  
 (D) Initial Shut-In 954  Circ Sub \_\_\_\_\_ T-Pulled ~~09:00~~ 09:00  
 (E) Second Initial Flow 18  Hourly Standby \_\_\_\_\_ T-Out 10:45  
 (F) Second Final Flow \_\_\_\_\_  Mileage 53 RT 53 Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1880  Straddle \_\_\_\_\_  
 EM Tool \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_

Initial Open 15  Extra Packer \_\_\_\_\_  
 Initial Shut-In 30  Extra Recorder \_\_\_\_\_  
 Final Flow 10  Day Standby \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_  Accessibility ? Sub Total 1603  
 Sub Total 1603 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_

Our Representative James Musgrove

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. 65646

Well Name & No. Lanning #1-10 Test No. 4 Date 12/22/19  
 Company Blue Ridge Petroleum Corp. Elevation 2960 KB 2955 GL  
 Address P.O. Box 30545 Edmond OK 73003  
 Co. Rep / Geo. James Murgrove Rig LD Rig 1  
 Location: Sec. 10 Twp 45 Rge. 32 W Co. Rawlins State KS

Interval Tested 4002 - 4015 Zone Tested LKC "H - OK"  
 Anchor Length 103' Drill Pipe Run 4000' Mud Wt. 8.9  
 Top Packer Depth 4007 Drill Collars Run 0' Vls 56  
 Bottom Packer Depth 4012 Wt. Pipe Run 0' WL 8.2  
 Total Depth 4115 Chlorides 2000 ppm System LCM 2  
 Blow Description 30 IF - BoB @ 3 mins  
30 ISI - Surface return @ 5 mins built to 1/4"  
45 ~~IFF~~ BoB @ 4 1/2 mins  
45 FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>126'</u>	<u>MCW</u>		<u>70</u>	<u>30</u>	
<u>63'</u>	<u>MCW</u>		<u>90</u>	<u>10</u>	
<u>1512'</u>	<u>MCW</u>		<u>95</u>	<u>5</u>	
<u>63'</u>	<u>MCW</u>		<u>60</u>	<u>40</u>	

Rec Total 1764' BHT 130° Gravity — API RW 217 @ 26° F Chlorides 73,000 ppm

(A) Initial Hydrostatic <u>2064</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>01:15</u>
(B) First Initial Flow <u>120</u>	<input type="checkbox"/> Jars	T-Started <u>01:43</u>
(C) First Final Flow <u>517</u>	<input type="checkbox"/> Safety Joint	T-Open <u>04:14</u>
(D) Initial Shut-In <u>1228</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>06:47</u>
(E) Second Initial Flow <u>512</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>10:00</u>
(F) Second Final Flow <u>887</u>	<input checked="" type="checkbox"/> Mileage <u>53 RT</u> 106	Comments <u>loaded tools 12/22 21:45</u>
(G) Final Shut-In <u>1226</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> EM Tool
(H) Final Hydrostatic <u>1835</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>45</u>	<input type="checkbox"/> Day Standby	Total <u>1656</u>
	<input checked="" type="checkbox"/> Accessibility <u>?</u>	MP/DST Disc't
	Sub Total <u>1656</u>	

Approved By \_\_\_\_\_ Our Representative Thad Nicks  
 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.