



DRILL STEM TEST REPORT

Prepared For: **Vess Oil Corporation**

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619

ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

16-28S-4E Butler, KS

Start Date: 2019.08.25 @ 18:07:00

End Date: 2019.08.25 @ 23:12:09

Job Ticket #: 63949 DST #: 1

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

Printed: 2019.08.30 @ 09:48:10

Vess Oil Corporation

16-28S-4E Butler, KS

Braun Scully A #2

DST # 1

Upper Kansas City

2019.08.25



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Vess Oil Corporation
1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

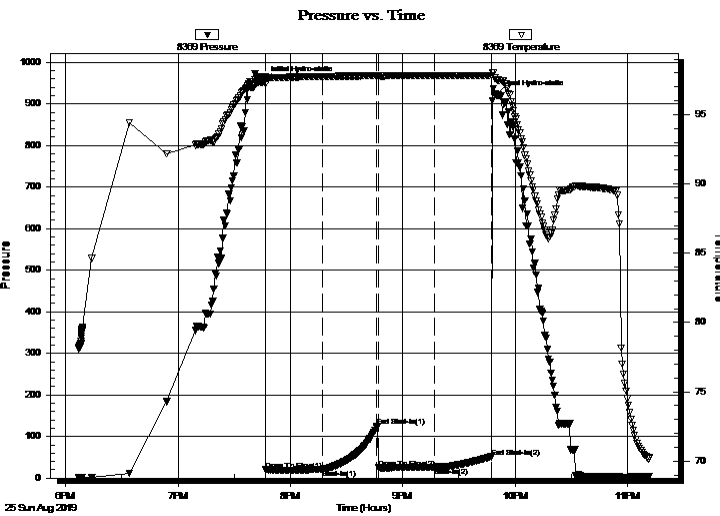
16-28S-4E Butler, KS
Braun Scully A #2
Job Ticket: 63949 **DST#: 1**
Test Start: 2019.08.25 @ 18:07:00

GENERAL INFORMATION:

Formation: **Upper Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:46:50
Time Test Ended: 23:12:09
Interval: **2004.00 ft (KB) To 2020.00 ft (KB) (TVD)**
Total Depth: 2020.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80
Reference Elevations: 1227.00 ft (KB)
1218.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8369 Outside
Press@RunDepth: 26.72 psig @ 2005.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2019.08.25 End Date: 2019.08.25 Last Calib.: 2019.08.25
Start Time: 18:07:01 End Time: 23:12:10 Time On Btm: 2019.08.25 @ 19:46:20
Time Off Btm: 2019.08.25 @ 21:50:10

TEST COMMENT: IF - Very weak surface blow dying to no blow.
FF - Very weak surface blow dying to no blow.



PRESSURE SUMMARY

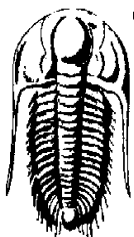
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	954.82	97.75	Initial Hydro-static
1	19.84	97.21	Open To Flow (1)
31	20.80	97.75	Shut-In(1)
60	124.87	97.81	End Shut-In(1)
61	24.72	97.78	Open To Flow (2)
91	26.72	97.80	Shut-In(2)
121	51.27	97.80	End Shut-In(2)
124	921.51	97.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Drilling mud 100% M	0.02
0.00	TS - OSM 1%O & 99%M	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkw ay
 Building 500
 Wichita, KS 67206-6619
 ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 63949

DST#: 1

Test Start: 2019.08.25 @ 18:07:00

GENERAL INFORMATION:

Formation: **Upper Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:46:50

Time Test Ended: 23:12:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 80

Interval: **2004.00 ft (KB) To 2020.00 ft (KB) (TVD)**

Reference Elevations: 1227.00 ft (KB)

Total Depth: 2020.00 ft (KB) (TVD)

1218.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8846 Inside

Press@RunDepth: psig @ 2005.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.08.25

End Date: 2019.08.25

Last Calib.: 1899.12.30

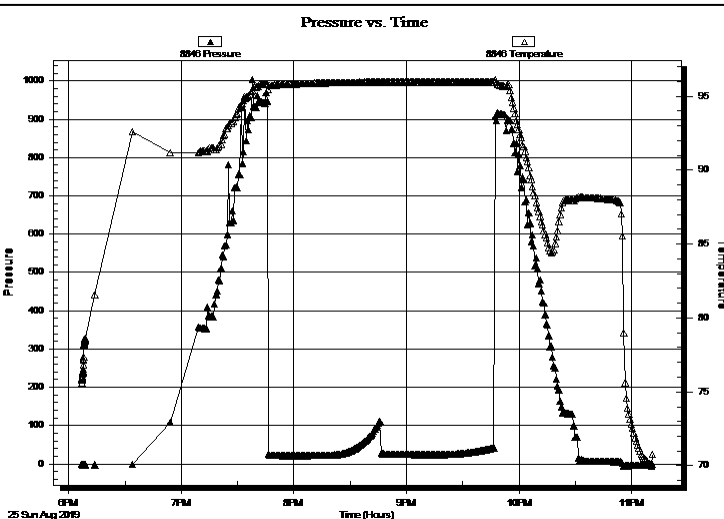
Start Time: 18:07:01

End Time: 23:11:10

Time On Btm:

Time Off Btm:

TEST COMMENT: IF - Very weak surface blow dying to no blow .
 FF - Very weak surface blow dying to no blow .



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Drilling mud 100% M	0.02
0.00	TS - OSM 1%O & 99%M	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 63949

DST#: 1

Test Start: 2019.08.25 @ 18:07:00

Tool Information

Drill Pipe:	Length: 1734.00 ft	Diameter: 3.80 inches	Volume: 24.32 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 25.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	3.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	2004.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	44.00 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			1977.00	
Shut In Tool	5.00			1982.00	
Hydraulic tool	5.00			1987.00	
Jars	5.00			1992.00	
Safety Joint	3.00			1995.00	
Packer	5.00			2000.00	28.00 Bottom Of Top Packer
Packer	4.00			2004.00	
Stubb	1.00			2005.00	
Recorder	0.00	8369	Outside	2005.00	
Recorder	0.00	8846	Inside	2005.00	
Perforations	10.00			2015.00	
Bullnose	5.00			2020.00	16.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 63949

DST#: 1

Test Start: 2019.08.25 @ 18:07:00

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: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 12.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	Drilling mud 100% M	0.025
0.00	TS - OSM 1%O & 99%M	0.000

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

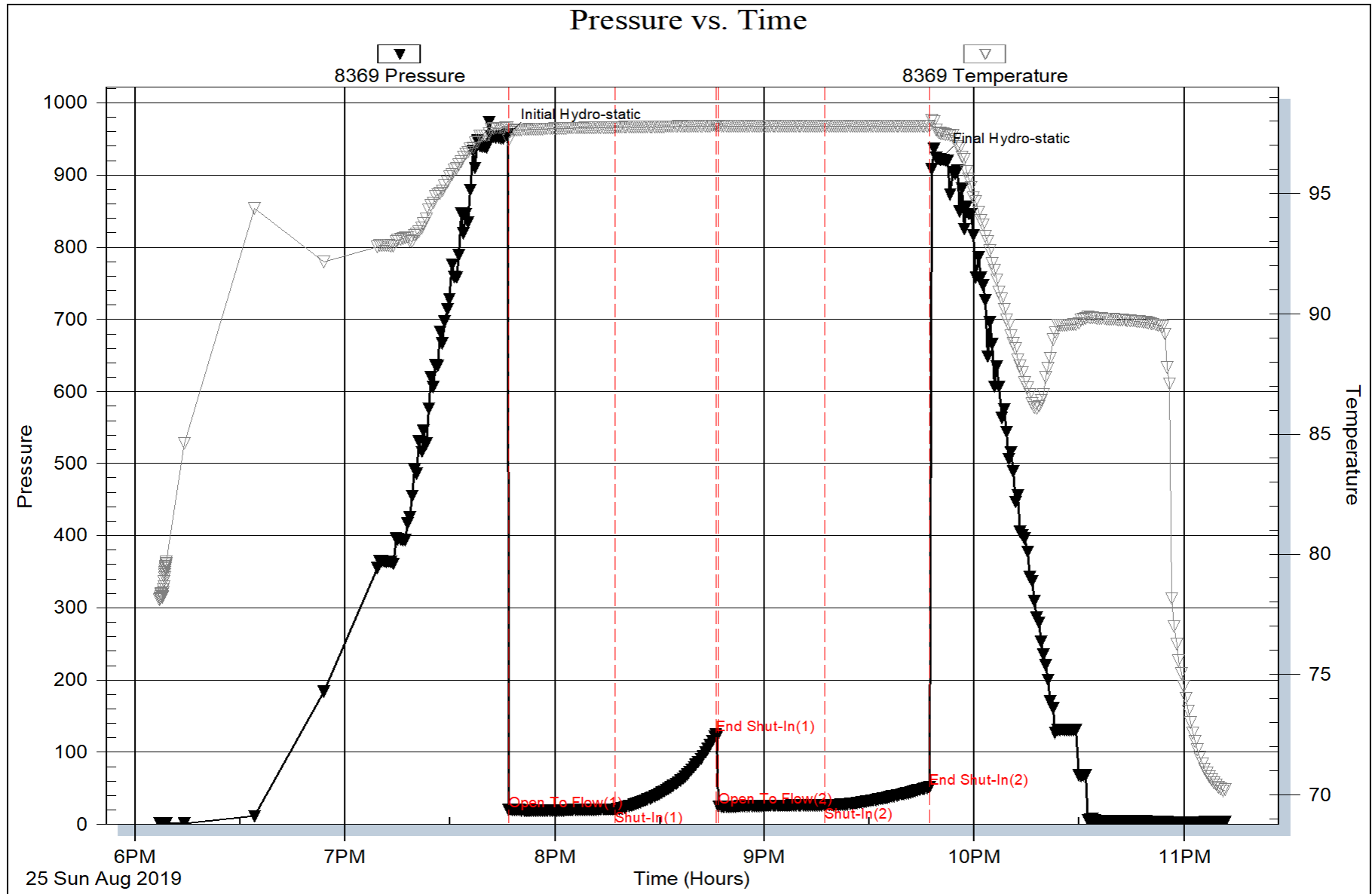
Num Gas Bombs: 0

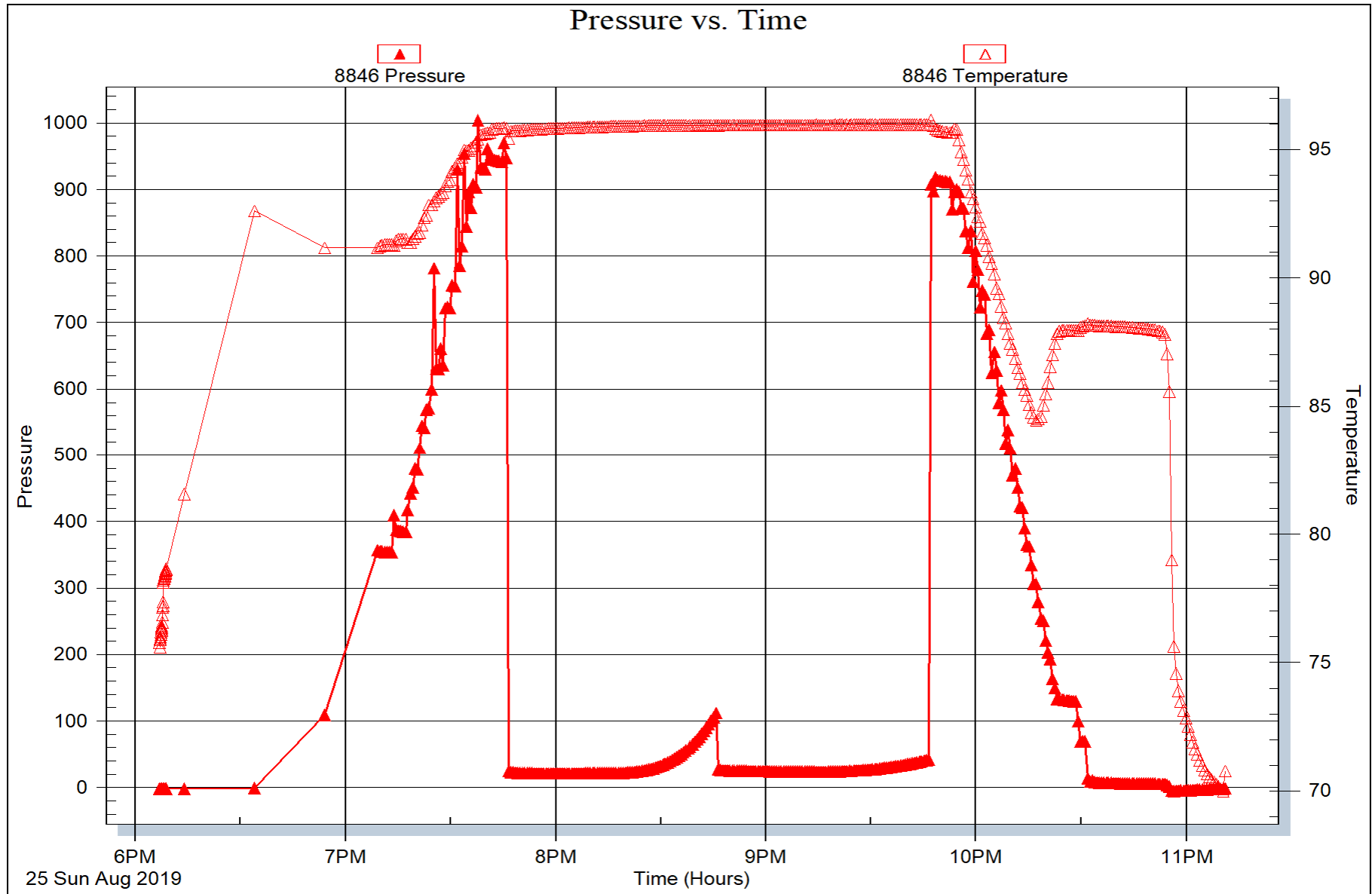
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Vess Oil Corporation**

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619

ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

16-28S-4E Butler, KS

Start Date: 2019.08.27 @ 04:46:00

End Date: 2019.08.27 @ 11:29:39

Job Ticket #: 63950 DST #: 2

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

Printed: 2019.08.30 @ 09:47:32



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vess Oil Corporation
 1700 N. Waterfront Parkway
 Building 500
 Wichita, KS 67206-6619
 ATTN: Dylan Klaus/Roger Ma

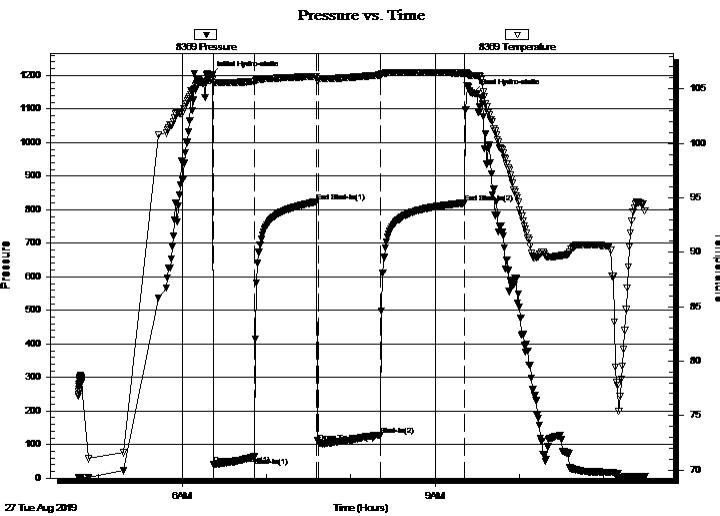
16-28S-4E Butler, KS
Braun Scully A #2
 Job Ticket: 63950 **DST#: 2**
 Test Start: 2019.08.27 @ 04:46:00

GENERAL INFORMATION:

Formation: **Simpson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:22:10
 Time Test Ended: 11:29:39
 Interval: **2441.00 ft (KB) To 2470.00 ft (KB) (TVD)**
 Total Depth: 2470.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Jimmy Ricketts
 Unit No: 80
 Reference Elevations: 1227.00 ft (KB)
 1218.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8369 Outside
 Press@RunDepth: 128.92 psig @ 2442.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.08.27 End Date: 2019.08.27 Last Calib.: 2019.09.03
 Start Time: 04:46:01 End Time: 11:29:40 Time On Btm: 2019.08.27 @ 06:20:10
 Time Off Btm: 2019.08.27 @ 09:27:00

TEST COMMENT: IF - Weak blow building to 7"
 FF - Weak blow building to 6"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1198.68	105.79	Initial Hydro-static
2	41.51	105.57	Open To Flow (1)
32	63.51	105.67	Shut-In(1)
76	823.71	106.12	End Shut-In(1)
77	106.68	105.96	Open To Flow (2)
122	128.92	106.27	Shut-In(2)
182	820.11	106.44	End Shut-In(2)
187	1146.88	106.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
110.00	OSHM CW 1%O 52%W & 47%M	0.54
150.00	OSM 2%O & 98%M	0.87
5.00	Clean Oil 100%O	0.07
0.00	TS O&WCM 13%O 10%W & 77%M	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vess Oil Corporation
 1700 N. Waterfront Parkway
 Building 500
 Wichita, KS 67206-6619
 ATTN: Dylan Klaus/Roger Ma

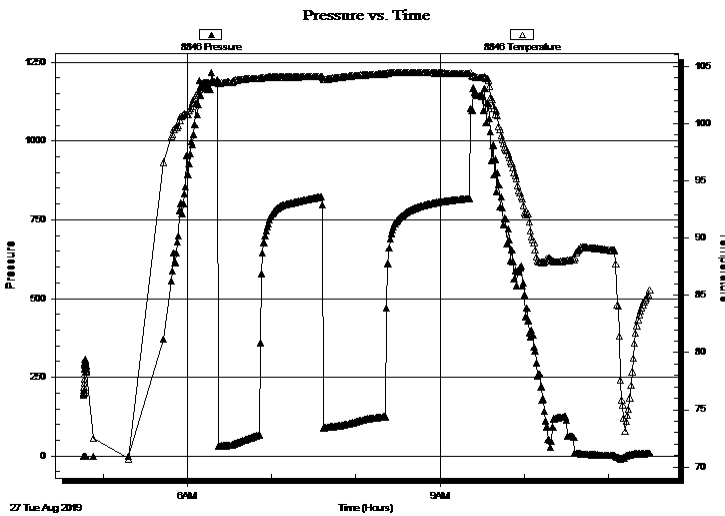
16-28S-4E Butler, KS
Braun Scully A #2
 Job Ticket: 63950 **DST#: 2**
 Test Start: 2019.08.27 @ 04:46:00

GENERAL INFORMATION:

Formation: **Simpson**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 06:22:10 Tester: Jimmy Ricketts
 Time Test Ended: 11:29:39 Unit No: 80
 Interval: **2441.00 ft (KB) To 2470.00 ft (KB) (TVD)** Reference Elevations: 1227.00 ft (KB)
 Total Depth: 2470.00 ft (KB) (TVD) 1218.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

Serial #: 8846 Inside
 Press@RunDepth: psig @ 2442.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.08.27 End Date: 2019.08.27 Last Calib.: 1899.12.30
 Start Time: 04:46:01 End Time: 11:29:50 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF - Weak blow building to 7"
 FF - Weak blow building to 6"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
110.00	OSHCW 1%O 52%W & 47%M	0.54
150.00	OSM 2%O & 98%M	0.87
5.00	Clean Oil 100%O	0.07
0.00	TS O&WCM 13%O 10%W & 77%M	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 63950

DST#: 2

Test Start: 2019.08.27 @ 04:46:00

Tool Information

Drill Pipe:	Length: 2175.00 ft	Diameter: 3.80 inches	Volume: 30.51 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 21000.00 lb
Drill Collar:	Length: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 61000.00 lb
			<u>Total Volume: 31.71 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	2441.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	29.00 ft			
Tool Length:	57.00 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			2414.00	
Shut In Tool	5.00			2419.00	
Hydraulic tool	5.00			2424.00	
Jars	5.00			2429.00	
Safety Joint	3.00			2432.00	
Packer	5.00			2437.00	28.00 Bottom Of Top Packer
Packer	4.00			2441.00	
Stubb	1.00			2442.00	
Recorder	0.00	8369	Outside	2442.00	
Recorder	0.00	8846	Inside	2442.00	
Perforations	23.00			2465.00	
Bullnose	5.00			2470.00	29.00 Bottom Packers & Anchor

Total Tool Length: 57.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Vess Oil Corporation
1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

16-28S-4E Butler, KS
Braun Scully A #2
Job Ticket: 63950 **DST#: 2**
Test Start: 2019.08.27 @ 04:46:00

Mud and Cushion Information

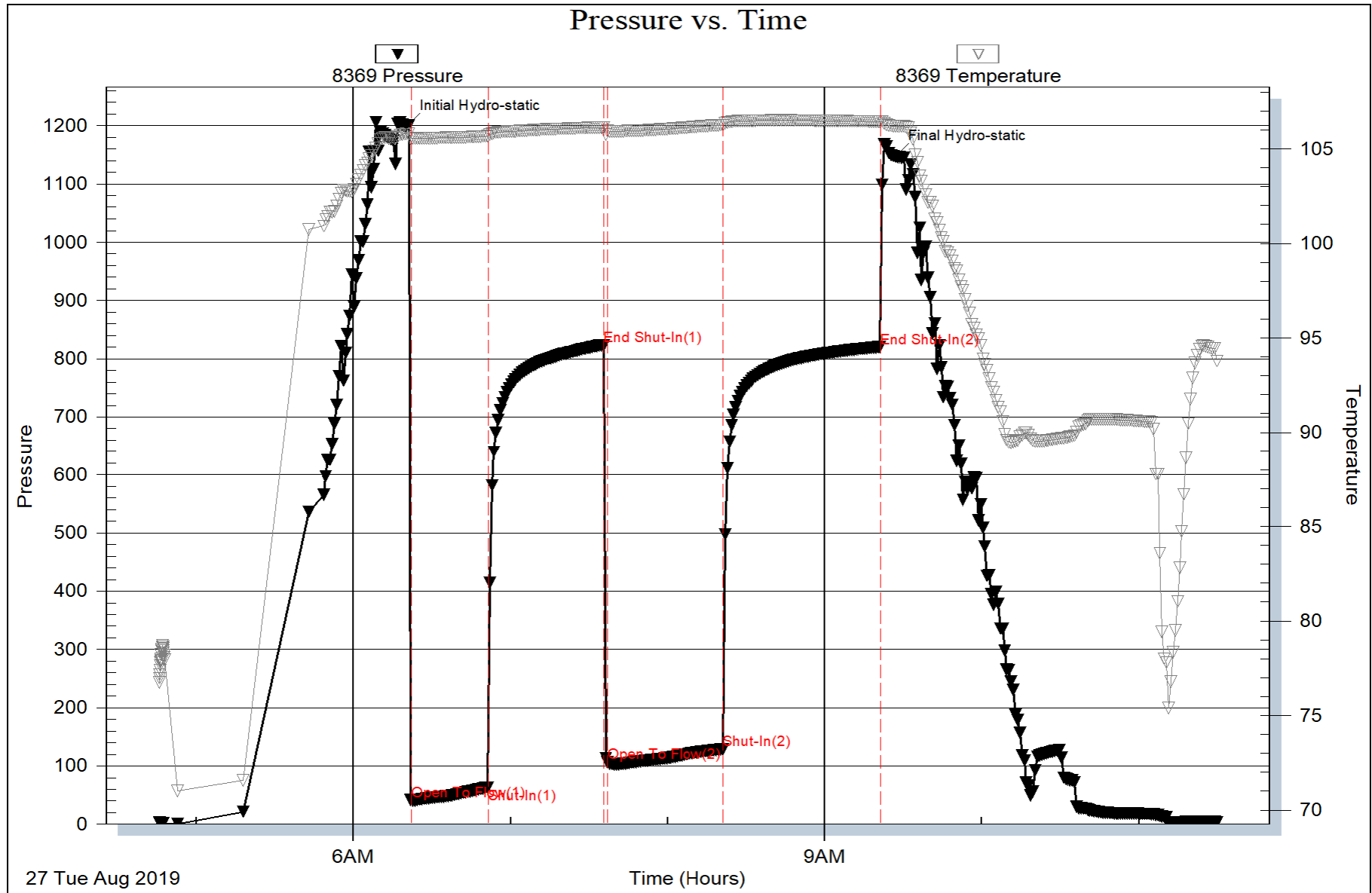
Mud Type: Gel Chem	Cushion Type:	Oil API: 35.5 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 20000 ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl	
Water Loss: 10.38 in ³	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 1200.00 ppm		
Filter Cake: inches		

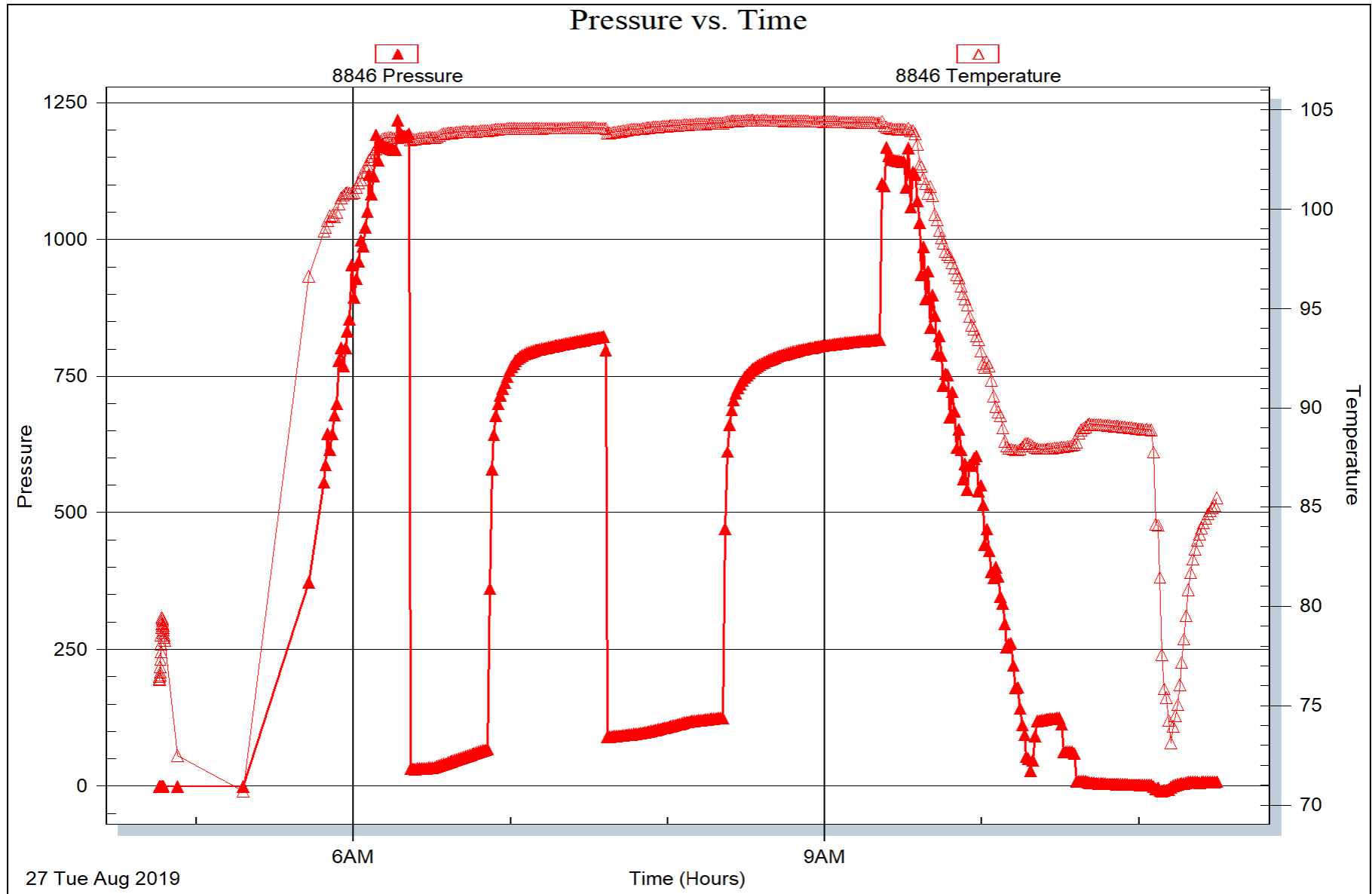
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
110.00	OSHMCW 1%O 52%W & 47%M	0.541
150.00	OSM 2%O & 98%M	0.874
5.00	Clean Oil 100%O	0.070
0.00	TS O&WCM 13%O 10%W & 77%M	0.000

Total Length: 265.00 ft Total Volume: 1.485 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Vess Oil Corporation**

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619

ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

16-28S-4E Butler, KS

Start Date: 2019.08.27 @ 19:59:00

End Date: 2019.08.28 @ 05:10:00

Job Ticket #: 34341 DST #: 3

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

Printed: 2019.08.30 @ 09:33:05



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vess Oil Corporation
 1700 N. Waterfront Parkway
 Building 500
 Wichita, KS 67206-6619
 ATTN: Dylan Klaus/Roger Ma

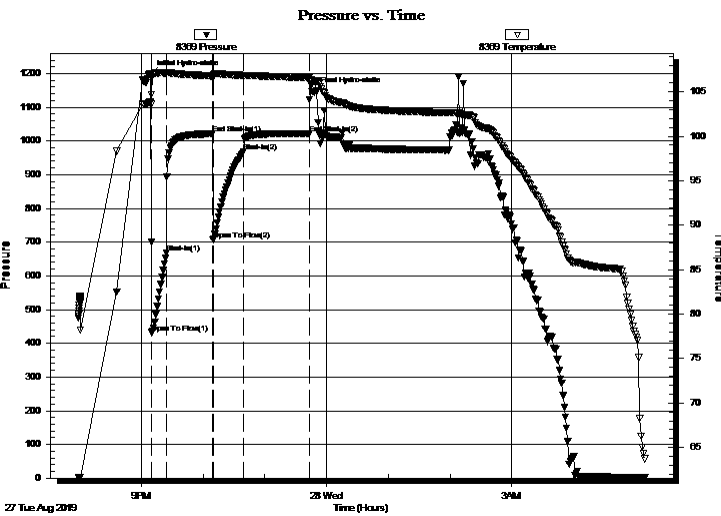
16-28S-4E Butler, KS
Braun Scully A #2
 Job Ticket: 34341 **DST#: 3**
 Test Start: 2019.08.27 @ 19:59:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 21:09:50 Tester: Jimmy Ricketts
 Time Test Ended: 05:10:00 Unit No: 80
 Interval: **2470.00 ft (KB) To 2478.00 ft (KB) (TVD)** Reference Elevations: 1227.00 ft (KB)
 Total Depth: 2478.00 ft (KB) (TVD) 1218.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

Serial #: 8369 Outside
 Press@RunDepth: 968.53 psig @ 2471.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.08.27 End Date: 2019.08.28 Last Calib.: 2019.08.28
 Start Time: 19:59:01 End Time: 05:10:00 Time On Btm: 2019.08.27 @ 21:08:50
 Time Off Btm: 2019.08.27 @ 23:47:10

TEST COMMENT: IF - Strong blow throughout initial flow period.
 FF - Strong blow throughout final flow period.



PRESSURE SUMMARY

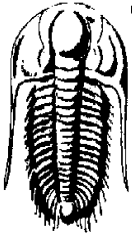
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1195.87	103.84	Initial Hydro-static
1	431.69	104.67	Open To Flow (1)
16	667.16	107.08	Shut-In(1)
61	1020.97	106.76	End Shut-In(1)
61	706.79	106.67	Open To Flow (2)
91	968.53	106.84	Shut-In(2)
155	1022.63	106.61	End Shut-In(2)
159	1145.74	106.26	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1540.00	OS&VSMCW 1%O 95%W & 4%M	19.37
690.00	Clean Oil 100%O	9.68
0.00	TS SO&MCW 6%O 89%W 5%M	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vess Oil Corporation

1700 N. Waterfront Parkway
 Building 500
 Wichita, KS 67206-6619
 ATTN: Dylan Klaus/Roger Ma

16-28S-4E Butler, KS

Braun Scully A #2

Job Ticket: 34341

DST#: 3

Test Start: 2019.08.27 @ 19:59:00

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:09:50

Time Test Ended: 05:10:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 80

Interval: 2470.00 ft (KB) To 2478.00 ft (KB) (TVD)

Reference Elevations: 1227.00 ft (KB)

Total Depth: 2478.00 ft (KB) (TVD)

1218.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8846

Inside

Press@RunDepth: psig @ 2471.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.08.27

End Date: 2019.08.28

Last Calib.: 1899.12.30

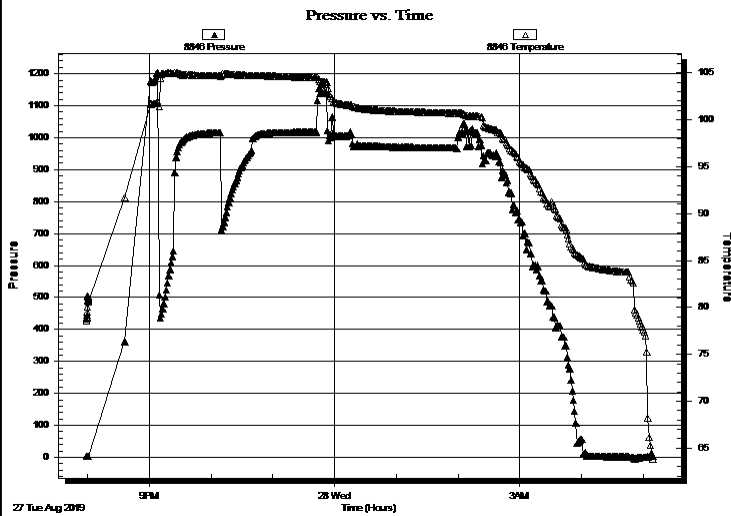
Start Time: 19:59:01

End Time: 05:09:40

Time On Btm:

Time Off Btm:

TEST COMMENT: IF - Strong blow throughout initial flow period.
 FF - Strong blow throughout final flow period.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1540.00	OS&VSMCW 1%O 95%W & 4%M	19.37
690.00	Clean Oil 100%O	9.68
0.00	TS SO&MCW 6%O 89%W 5%M	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 34341

DST#: 3

Test Start: 2019.08.27 @ 19:59:00

Tool Information

Drill Pipe:	Length: 2207.00 ft	Diameter: 3.80 inches	Volume: 30.96 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 32.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 59000.00 lb
Depth to Top Packer:	2470.00 ft			Final 67000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			2443.00	
Shut In Tool	5.00			2448.00	
Hydraulic tool	5.00			2453.00	
Jars	5.00			2458.00	
Safety Joint	3.00			2461.00	
Packer	5.00			2466.00	28.00 Bottom Of Top Packer
Packer	4.00			2470.00	
Stubb	1.00			2471.00	
Recorder	0.00	8369	Outside	2471.00	
Recorder	0.00	8846	Inside	2471.00	
Perforations	5.00			2476.00	
Bullnose	2.00			2478.00	8.00 Bottom Packers & Anchor

Total Tool Length: 36.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 34341

DST#: 3

Test Start: 2019.08.27 @ 19:59:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 66.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 900.00 ppm
Filter Cake: inches

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

Oil API: 33.6 deg API
Water Salinity: 15000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1540.00	OS&VSMCW 1%O 95%W & 4%M	19.370
690.00	Clean Oil 100%O	9.679
0.00	TS SO&MCW 6%O 89%W 5%M	0.000

Total Length: 2230.00 ft Total Volume: 29.049 bbl

Num Fluid Samples: 0

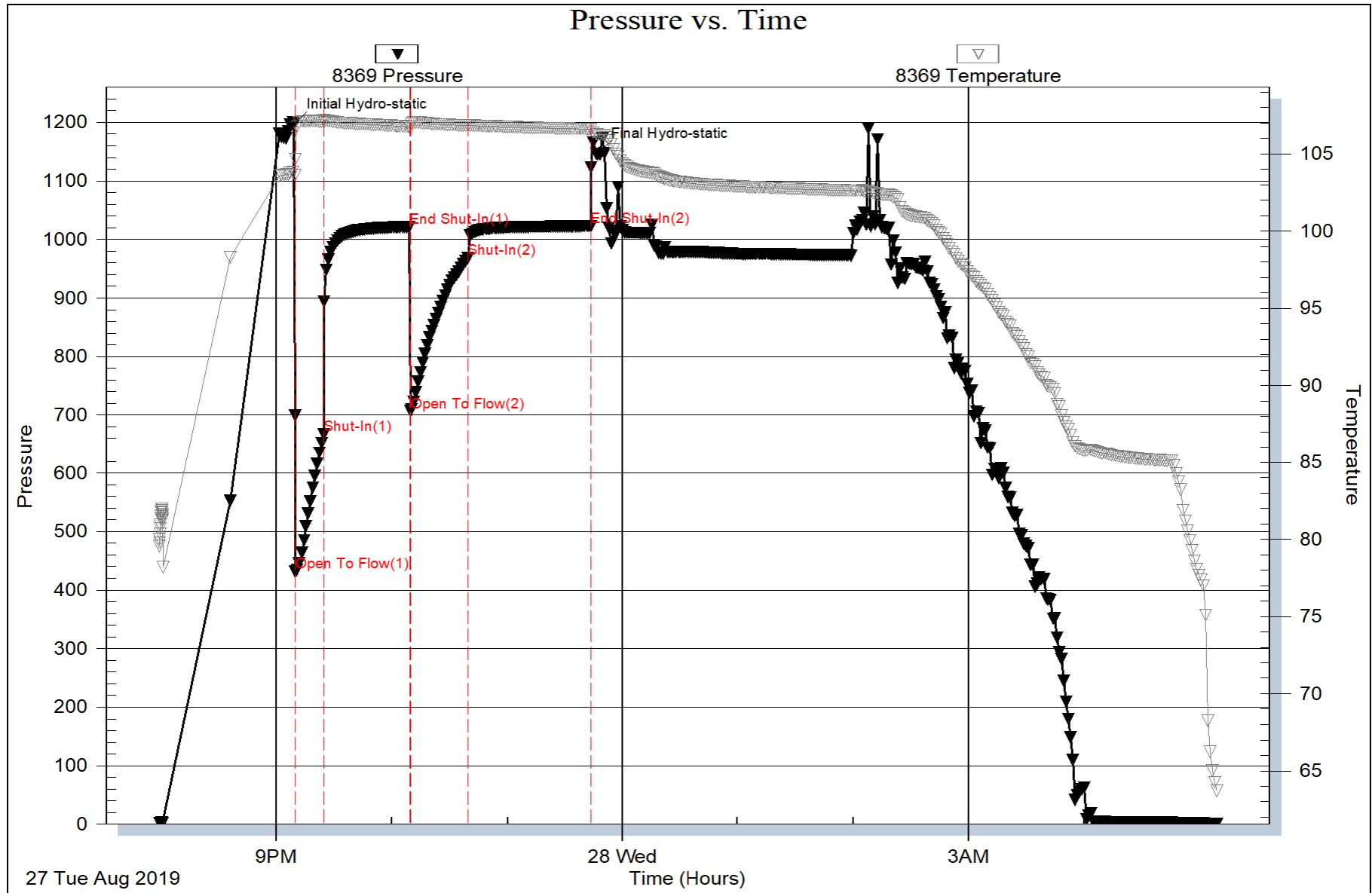
Num Gas Bombs: 0

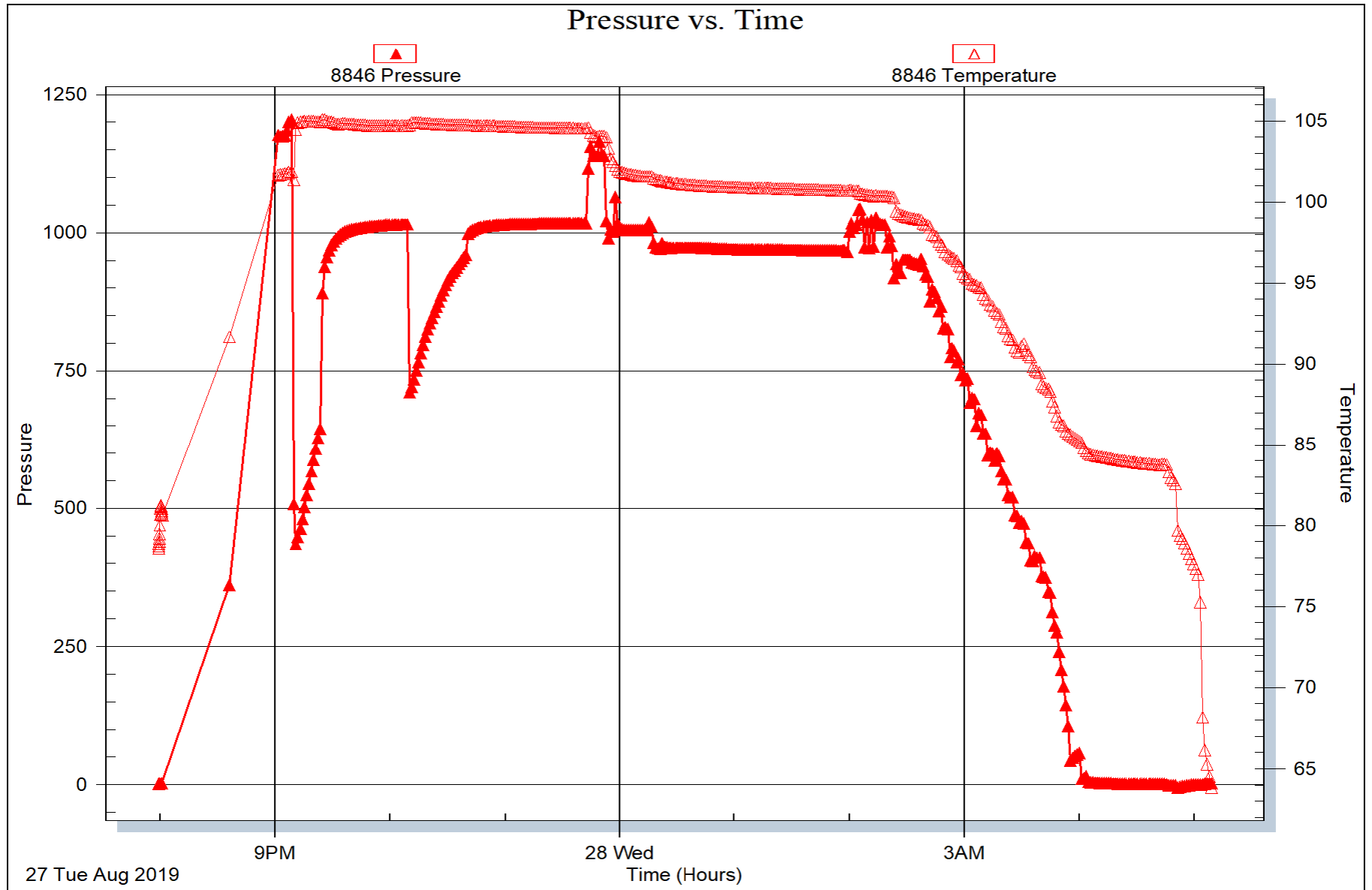
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Vess Oil Corporation**

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619

ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

16-28S-4E Butler, KS

Start Date: 2019.08.28 @ 16:32:00

End Date: 2019.08.28 @ 23:59:00

Job Ticket #: 34342 DST #: 4

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

Printed: 2019.08.30 @ 09:32:40

Vess Oil Corporation
16-28S-4E Butler, KS
Braun Scully A #2
DST # 4
Arbuckle
2019.08.28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Vess Oil Corporation
 1700 N. Waterfront Parkway
 Building 500
 Wichita, KS 67206-6619
 ATTN: Dylan Klaus/Roger Ma

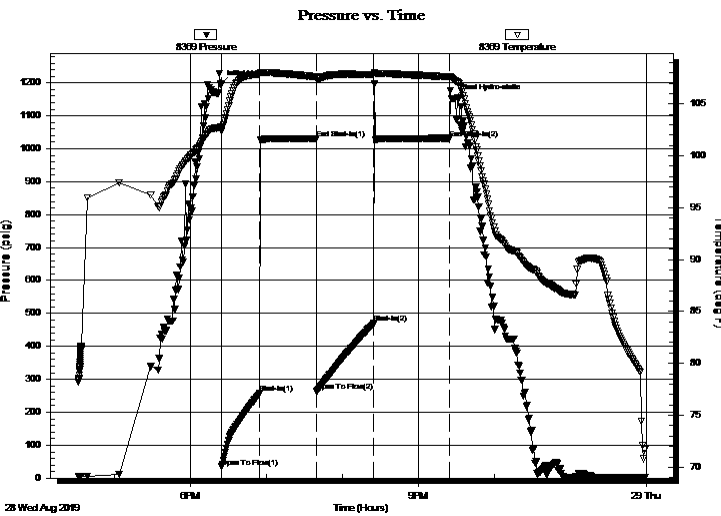
16-28S-4E Butler, KS
Braun Scully A #2
 Job Ticket: 34342 **DST#: 4**
 Test Start: 2019.08.28 @ 16:32:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 18:25:00
 Tester: Jimmy Ricketts
 Time Test Ended: 23:59:00
 Unit No: 80
 Interval: **2488.00 ft (KB) To 2496.00 ft (KB) (TVD)**
 Reference Elevations: 1227.00 ft (KB)
 Total Depth: 2496.00 ft (KB) (TVD)
 1218.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 9.00 ft

Serial #: 8369 Outside
 Press@RunDepth: 469.48 psig @ 2489.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.08.28 End Date: 2019.08.28 Last Calib.: 1899.12.30
 Start Time: 16:32:01 End Time: 23:59:00 Time On Btm: 2019.08.28 @ 18:24:10
 Time Off Btm: 2019.08.28 @ 21:27:50

TEST COMMENT: IF - Weak blow building to strong blow 5 minutes. Built to 75"
 FF - Weak blow building to strong blow 6 minutes. Built to 115"



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1193.80	102.75	Initial Hydro-static
1	34.03	102.36	Open To Flow (1)
31	257.48	107.86	Shut-In(1)
76	1031.11	107.60	End Shut-In(1)
76	264.16	107.37	Open To Flow (2)
121	469.48	107.79	Shut-In(2)
181	1031.66	107.61	End Shut-In(2)
184	1151.65	107.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1009.00	O&MSW 1%O 2%M & 97%W	11.92
1.00	Clean Oil 100% O	0.01
0.00	TS Trace OVS/CW Tr O 3%M & 97%W	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 34342

DST#: 4

Test Start: 2019.08.28 @ 16:32:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:25:00
Time Test Ended: 23:59:00

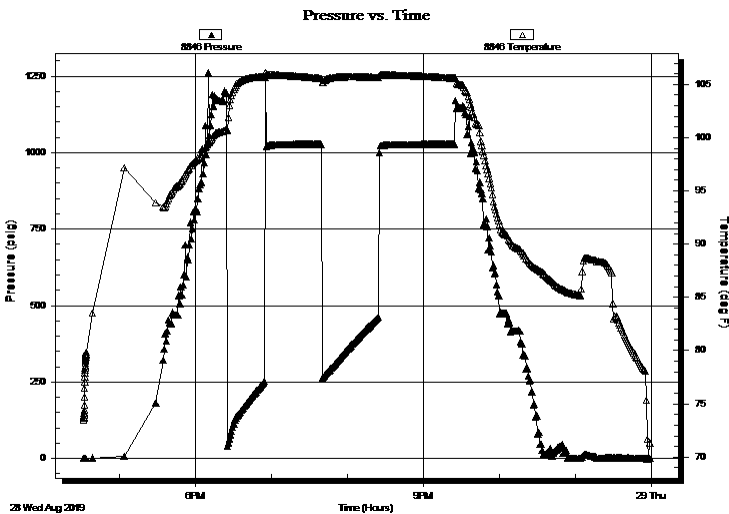
Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Interval: **2488.00 ft (KB) To 2496.00 ft (KB) (TVD)**
Reference Elevations: 1227.00 ft (KB)
Total Depth: 2496.00 ft (KB) (TVD) 1218.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 9.00 ft

Serial #: 8846 Inside

Press@RunDepth: psig @ 2489.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2019.08.28 End Date: 2019.08.28 Last Calib.: 1899.12.30
Start Time: 16:32:01 End Time: 23:59:10 Time On Btm:
Time Off Btm:

TEST COMMENT: IF - Weak blow building to strong blow 5 minutes. Built to 75"
FF - Weak blow building to strong blow 6 minutes. Built to 115"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
1009.00	O&MSW 1%O 2%M & 97%W	11.92
1.00	Clean Oil 100% O	0.01
0.00	TS Trace OVSMCW Tr O 3%M & 97%W	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkway
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 34342

DST#: 4

Test Start: 2019.08.28 @ 16:32:00

Tool Information

Drill Pipe:	Length: 2238.00 ft	Diameter: 3.80 inches	Volume: 31.39 bbl	Tool Weight: 2300.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 245.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: 32.59 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 59000.00 lb
Depth to Top Packer:	2488.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			2461.00	
Shut In Tool	5.00			2466.00	
Hydraulic tool	5.00			2471.00	
Jars	5.00			2476.00	
Safety Joint	3.00			2479.00	
Packer	5.00			2484.00	28.00 Bottom Of Top Packer
Packer	4.00			2488.00	
Stubb	1.00			2489.00	
Recorder	0.00	8369	Outside	2489.00	
Recorder	0.00	8846	Inside	2489.00	
Perforations	5.00			2494.00	
Bullnose	2.00			2496.00	8.00 Bottom Packers & Anchor

Total Tool Length: 36.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Vess Oil Corporation

16-28S-4E Butler, KS

1700 N. Waterfront Parkw ay
Building 500
Wichita, KS 67206-6619
ATTN: Dylan Klaus/Roger Ma

Braun Scully A #2

Job Ticket: 34342

DST#: 4

Test Start: 2019.08.28 @ 16:32:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 48.00 sec/qt

Water Loss: 9.59 in³

Resistivity: ohm.m

Salinity: 2500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: 18000 ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1009.00	O&MSW 1%O 2%M & 97%W	11.922
1.00	Clean Oil 100% O	0.014
0.00	TS Trace OVS MCW Tr O 3%M & 97%W	0.000

Total Length: 1010.00 ft Total Volume: 11.936 bbl

Num Fluid Samples: 0

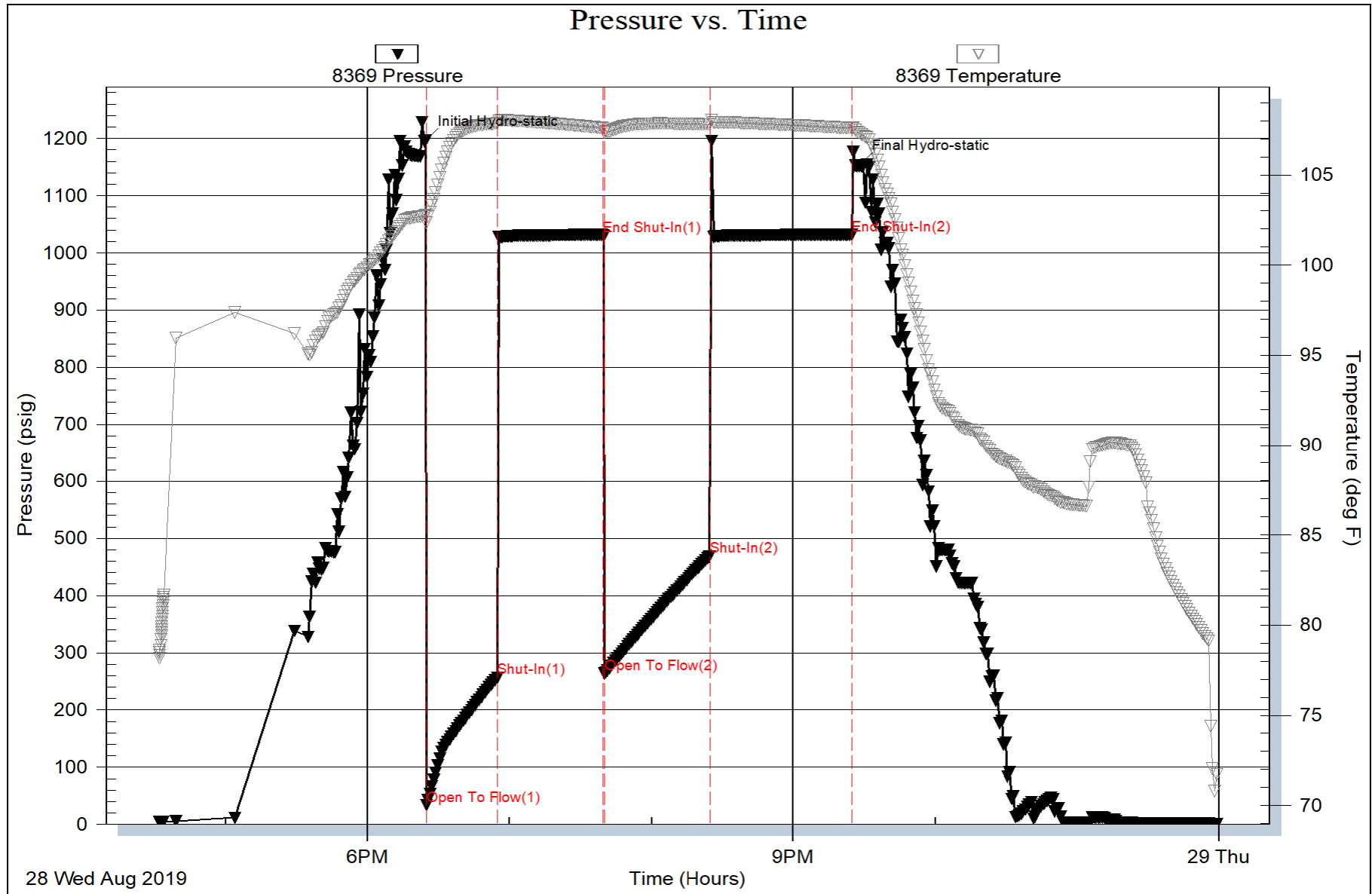
Num Gas Bombs: 0

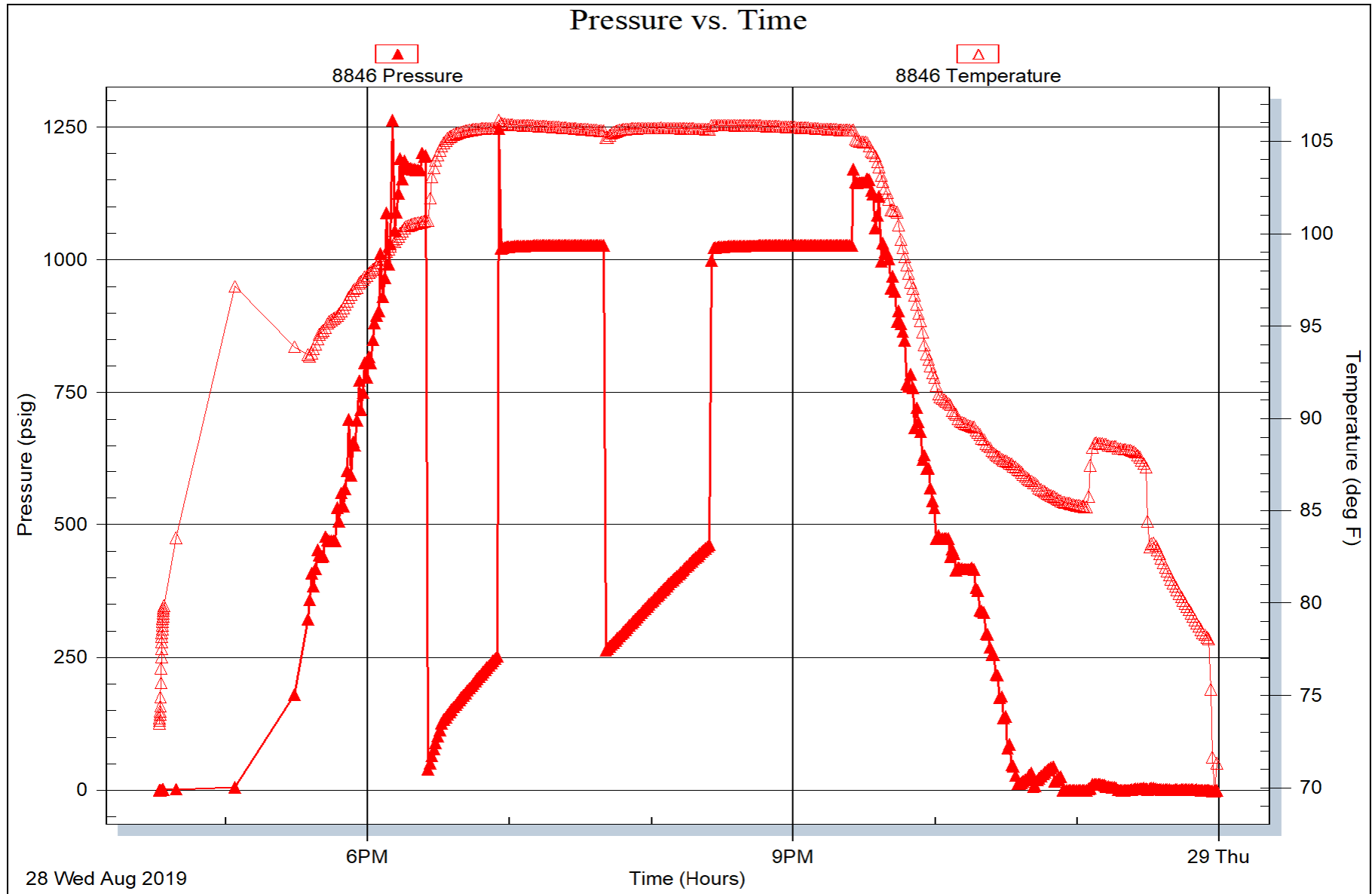
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







TRIOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63949

Well Name & No. Braun Scully A #2 Test No. 1 Date 8-25-19
 Company VSS Oil Corporation Elevation 1227 KB 1218 GL
 Address 1700 N. Waterfront Parkway Building 500 Wichita, KS 67206-6619
 Co. Rep / Geo. Dylan Klaus / Roger Martin Rig C + G Drilling #2
 Location: Sec. 16 Twp 28 S Rge. 4 E Co. Butler State KS

Interval Tested 2004-2020 Zone Tested Upper Kansas City
 Anchor Length 16' Drill Pipe Run 1734 Mud Wt. 9.3
 Top Packer Depth 1999 Drill Collars Run 245 Vis 45
 Bottom Packer Depth 2004 Wt. Pipe Run 0 WL 12.4
 Total Depth 2020 Chlorides 1100 ppm System LCM
 Blow Description IF - Very weak surface blow dying to no blow IFP
FF - Very weak surface blow dying to no blow IFP

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>OSM Drilling Mud</u>	<u>0</u>	<u>0</u>	<u>100</u>	<u>0</u>
<u>TS</u>	<u>OSM</u>	<u>1</u>	<u>1</u>	<u>99</u>	<u>0</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 98 Gravity 1200 API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 955 Test 1200 T-On Location 1550
 (B) First Initial Flow 20 Jars 250 T-Started 1807
 (C) First Final Flow 21 Safety Joint 75 T-Open 1947
 (D) Initial Shut-In 125 Circ Sub _____ T-Pulled 2147
 (E) Second Initial Flow 25 Hourly Standby _____ T-Out 2300
 (F) Second Final Flow 27 Mileage 56 RT 56 Comments _____
 (G) Final Shut-In 51 Sampler _____
 (H) Final Hydrostatic 922 Straddle _____
 Initial Open 30 Shale Packer _____
 Initial Shut-In 30 Shale Packer _____
 Final Flow 30 Extra Packer _____
 Final Shut-In 30 Extra Recorder _____
 Day Standby _____ Sub Total 0
 Accessibility _____ Total 1581
 Sub Total 1581 MP/DST Disc't _____

Approved By Roger Martin Our Representative Quinn Ricketts
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63950

Well Name & No. Braun Scully A #2 Test No. 2 Date 8-27-19
 Company Vess Oil Corporation Elevation 1227 KB 1218 GL
 Address 1700 N. waterfront Parkway Building 500 Wichita, KS. 67206-6619
 Co. Rep / Geo. Pylan Klaus / Roger Martin Rig C+G Drilling #2
 Location: Sec. 16 Twp 28 S Rge. 4 E Co. Butler State KS

Interval Tested 2441-2470 Zone Tested Simpson Sand + Arbuckle
 Anchor Length 29' Drill Pipe Run 2175 Mud Wt. 9.4
 Top Packer Depth 2439 Drill Collars Run 245 Vis 46
 Bottom Packer Depth 2441 Wt. Pipe Run 0 WL 10.4
 Total Depth 2470 Chlorides 1200 ppm System LCM
 Blow Description IF-Weak blow building to 7 inches IFP
FF-Weak blow building to 6 inches FFP

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Clean Oil</u>		<u>100</u>		
<u>150</u>	<u>OSM</u>		<u>2</u>		<u>98</u>
<u>110</u>	<u>OSHA CW</u>		<u>1</u>	<u>52</u>	<u>47</u>
<u>TS</u>	<u>OSWCM</u>		<u>13</u>	<u>10</u>	<u>77</u>

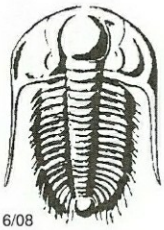
Rec Total 265 BHT 106 Gravity 35.5 API RW 0.309 @ 77.1 °F Chlorides 20000 ppm

(A) Initial Hydrostatic 1199 Test 1200 T-On Location 0300
 (B) First Initial Flow 42 Jars 250 T-Started 0446
 (C) First Final Flow 64 Safety Joint 75 T-Open 0621
 (D) Initial Shut-In 824 Circ Sub _____ T-Pulled 0921
 (E) Second Initial Flow 107 Hourly Standby _____ T-Out 1130
 (F) Second Final Flow 129 Mileage 56 RT 56 Comments _____
 (G) Final Shut-In 820 Sampler _____
 (H) Final Hydrostatic 1147 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____

Initial Open 30
 Initial Shut-In 45
 Final Flow 45
 Final Shut-In 60
 Sub Total 0
 Total 1581
 MP/DST Disc't _____
 Sub Total 1581

Approved By Roger Our Representative Jimmy Dickel

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.

34341

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

Well Name & No. Braun Scally A #2 Test No. 3 Date 8-27-19
 Company Vess Oil Corp. Zone Tested Arbuckle
 Address 1700 N. Waterfront Parkway Building Elevation 1227 KB 1218 GL
 Co. Rep / Geo. 500 Pylan Klaus / Roger Martin Wichita, KS 67206-6619 Rig C+G Drilling #2
 Location: Sec. 16 Twp. 28 S Rge. 4 E Co. Butler State KS
 Comment: Times - 15-45-30-64

Interval Tested 2470-2478 Drill Pipe Size 2207 9.3
 Anchor Length 8' Wt. Pipe Run 0 66
 Top Packer Depth 2465 Drill Collar Run 245 8.8
 Bottom Packer Depth 2470 Ft. Run 900
 Total Depth 2478 Recorder #(s) _____
 Blow Description IF - Strong blow throughout IFP
FF - Strong blow throughout FFP
IH - 1196 Reversed out into Vac. Truck
FH - 1146

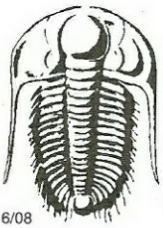
Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>690</u>	Feet of <u>clean oil</u>	%gas <u>100%</u> oil	%water _____ %mud _____
Rec. <u>1540</u>	Feet of <u>OST+VS MCW</u>	%gas <u>1</u> %oil	<u>95%</u> water <u>4</u> %mud
Rec. <u>TS</u>	Feet of <u>SO+MCW</u>	%gas <u>6</u> %oil	<u>89</u> %water <u>5</u> %mud
Rec. _____	Feet of _____	%gas _____ %oil	%water _____ %mud _____
Rec. _____	Feet of _____	%gas _____ %oil	%water _____ %mud _____

BHT 107 °F Gravity _____ °API D @ _____ °F Corrected Gravity 33.6 °API
 RW 0.435 @ 55.8 °F Chlorides 15,000 ppm Recovery _____ Chlorides _____ ppm System

IF <u>432-667</u>	<input checked="" type="checkbox"/> Test 1200	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Day Standby _____
ISI <u>1021</u>	<input checked="" type="checkbox"/> Jars 250	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Accessibility _____
FF <u>707-969</u>	<input checked="" type="checkbox"/> Safety Joint 75	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
FSI <u>1023</u>	<input checked="" type="checkbox"/> Circ Sub 50	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
T-on Loc <u>1915</u>	<input type="checkbox"/> Hourly Standby _____	<input type="checkbox"/> Extra Recorder _____	<input type="checkbox"/> Extra Copies _____
T-started <u>1959</u>	<input checked="" type="checkbox"/> Mileage 56 <u>RT 56</u>	<input type="checkbox"/> Other _____	
T-open <u>2110</u>			
T-pulled <u>2344</u>	Sub Total <u>1581</u>	Sub Total _____	Sub Total _____
T-out <u>0450</u>			Total <u>1581</u>

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Approved By Roger Martin Our Representative Jimmy Albert



TRILOBITE TESTING INC.

34342

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

Well Name & No. Braun Sully A #2 Test No. 4 Date 8-28-19
 Company Vess Oil Corp. 1700 N Waterfront Zone Tested Ar buckle
 Address Parkway Building 500 Wichita, KS 67206-6619 Elevation 1227 KB 1218 GL
 Co. Rep / Geo. Dylan Klaus / Roger Martin Rig C+G #2
 Location: Sec. 16 Twp. 28 S Rge. 4 E Co. Butler State KS
 Comment: Times: 30-45-45-60 IH-1194 FH-1152 Mud

Interval Tested 2488-2496 Drill Pipe Size 2238 9.4
 Anchor Length 8 Wt. Pipe Run 0 48
 Top Packer Depth 2483 Drill Collar Run 245 9.6
 Bottom Packer Depth 2488 Ft. Run 2506
 Total Depth 2496 Recorder #(s) _____

Blow Description IF-weak blow building to strong blow 5 mins. into FFP
Continuing to build to 75 inches
FF-weak blow building to strong blow 6 mins. into FFP
Continuing to build to 115 inches

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>1</u>	Feet of <u>Clean Oil</u>	%gas <u>100%</u> oil	%water _____ %mud _____
Rec. <u>1009</u>	Feet of <u>OTMSW</u>	%gas <u>1</u> %oil <u>97</u>	%water <u>97</u> %mud <u>2</u>
Rec. <u>TS</u>	Feet of <u>Trace O VS MEW</u>	%gas <u>TR</u> %oil <u>97</u>	%water <u>97</u> %mud <u>3</u>
Rec. _____	Feet of _____	%gas _____ %oil _____	%water _____ %mud _____
Rec. _____	Feet of _____	%gas _____ %oil _____	%water _____ %mud _____

BHT _____ °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
 RW 0.380 @ 71.0 °F Chlorides 18000 ppm Recovery _____ Chlorides _____ ppm System

IF <u>34-257</u>	<input checked="" type="checkbox"/> Test 1200	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Day Standby _____
ISI <u>1031</u>	<input checked="" type="checkbox"/> Jars 250	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Accessibility _____
FF <u>264-469</u>	<input type="checkbox"/> Safety Joint _____	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
FSI <u>1032</u>	<input type="checkbox"/> Circ Sub _____	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
T-on Loc <u>1630</u>	<input type="checkbox"/> Hourly Standby _____	<input type="checkbox"/> Extra Recorder _____	<input type="checkbox"/> Ruined Packer _____
T-started <u>1632</u>	<input checked="" type="checkbox"/> Mileage <u>56</u> <u>RTS6</u>	<input type="checkbox"/> Other _____	<input type="checkbox"/> Extra Copies _____
T-open <u>1825</u>			
T-pulled <u>2125</u>	Sub Total <u>1506</u>	Sub Total _____	Sub Total _____
T-out <u>2330</u>			Total <u>1506</u>

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Approved By Roger Martin Our Representative Jimmy [Signature]