



DRILL STEM TEST REPORT

Prepared For: **Canyon Operating LLC.**

PO Box 7117
Loveland CO 80537

ATTN: Clayton Erickson

B Bar B #25-2

25-8S-23W Graham,KS

Start Date: 2019.07.19 @ 16:58:00

End Date: 2019.07.20 @ 00:08:30

Job Ticket #: 65948 DST #: 1

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

Printed: 2019.07.23 @ 10:45:38



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65948

DST#: 1

ATTN: Clayton Erickson

Test Start: 2019.07.19 @ 16:58:00

GENERAL INFORMATION:

Formation: **LKC C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:26:45

Time Test Ended: 00:08:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: 77

Interval: 3592.00 ft (KB) To 3636.00 ft (KB) (TVD)

Reference Elevations: 2288.00 ft (KB)

Total Depth: 3636.00 ft (KB) (TVD)

2281.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8671

Outside

Press@RunDepth: 90.38 psig @ 3593.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.07.19

End Date:

2019.07.20

Last Calib.:

2019.07.20

Start Time: 16:58:05

End Time:

00:08:29

Time On Btm:

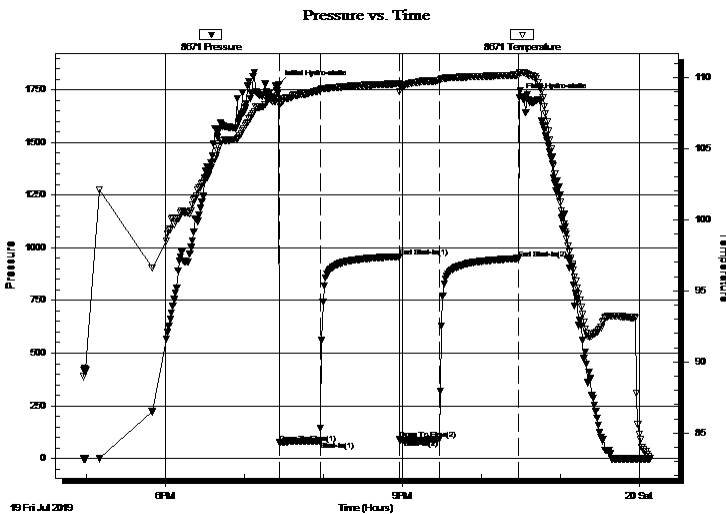
2019.07.19 @ 19:26:15

Time Off Btm:

2019.07.19 @ 22:28:45

TEST COMMENT: 30 - IFP - Surface blow built up to 1 1/2"
60 - ISI - No Return
30 - FFP - Surface blow slowly built up to 1"
60 - FSI - No Return

PRESSURE SUMMARY



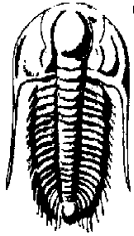
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.79	108.49	Initial Hydro-static
1	74.21	108.09	Open To Flow (1)
32	83.66	109.07	Shut-In(1)
92	955.82	109.55	End Shut-In(1)
92	91.65	109.00	Open To Flow (2)
122	90.38	109.76	Shut-In(2)
182	949.15	110.16	End Shut-In(2)
183	1714.30	110.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
154.00	MW - 40%w - 60%w	0.93

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65948

DST#: 1

ATTN: Clayton Erickson

Test Start: 2019.07.19 @ 16:58:00

Tool Information

Drill Pipe:	Length: 3475.34 ft	Diameter: 3.25 inches	Volume: 35.66 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 121.54 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: 36.26 bbl</u>	Tool Chased 15.00 ft
Drill Pipe Above KB:	32.88 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3592.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	72.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Chased tool 15' to Bottom

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3569.00	
Hydraulic tool	5.00			3574.00	
Jars	5.00			3579.00	
Safety Joint	3.00			3582.00	
Packer	5.00			3587.00	28.00 Bottom Of Top Packer
Packer	5.00			3592.00	
Stubb	1.00			3593.00	
Recorder	0.00	8360	Inside	3593.00	
Recorder	0.00	8671	Outside	3593.00	
Perforations	7.00			3600.00	
Change Over Sub	1.00			3601.00	
Drill Pipe	31.00			3632.00	
Change Over Sub	1.00			3633.00	
Bullnose	3.00			3636.00	44.00 Bottom Packers & Anchor

Total Tool Length: 72.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65948

DST#: 1

ATTN: Clayton Erickson

Test Start: 2019.07.19 @ 16:58:00

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
154.00	MW - 40%m - 60%w	0.931

Total Length: 154.00 ft Total Volume: 0.931 bbl

Num Fluid Samples: 0

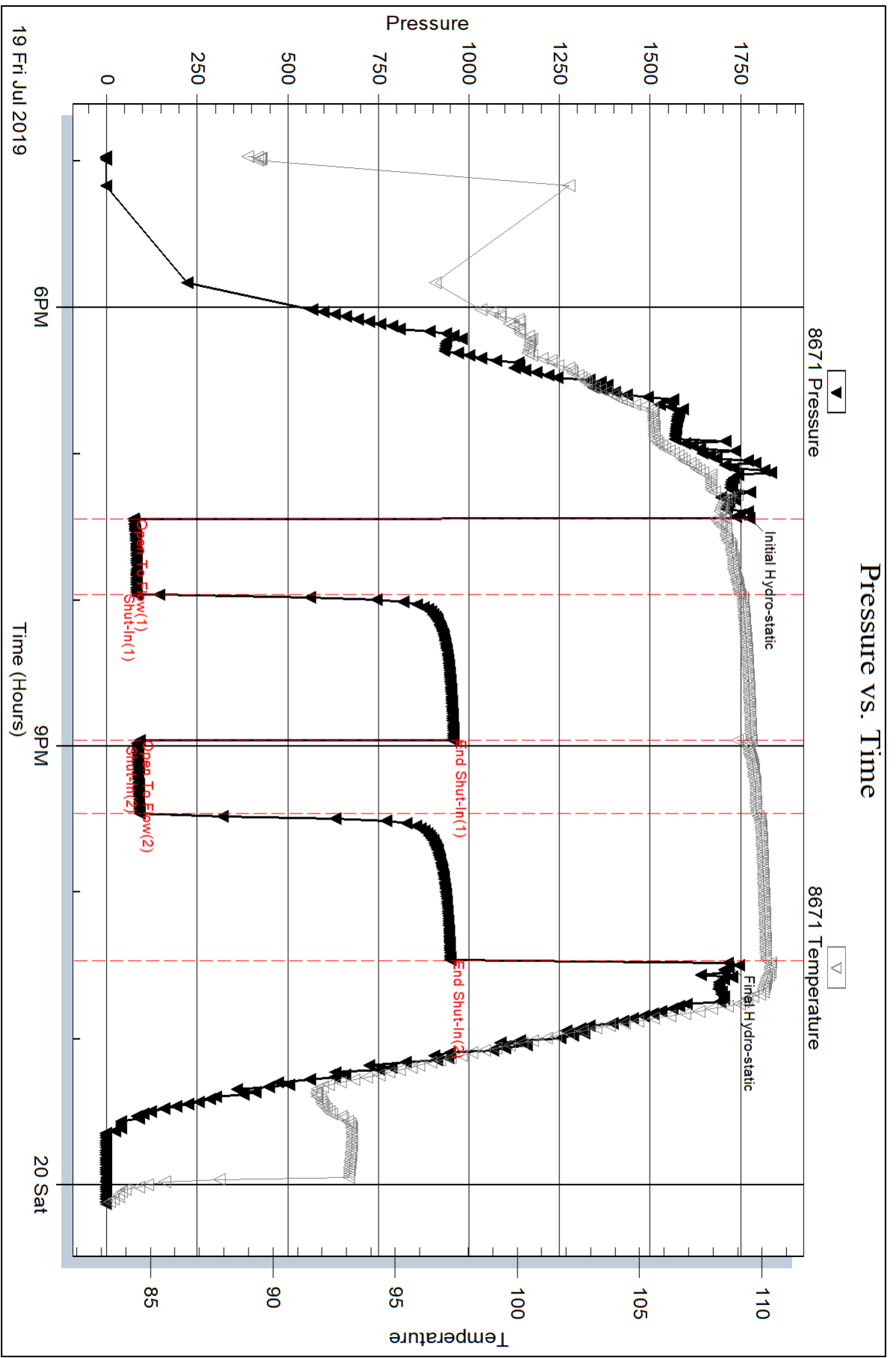
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .520@83 deg.



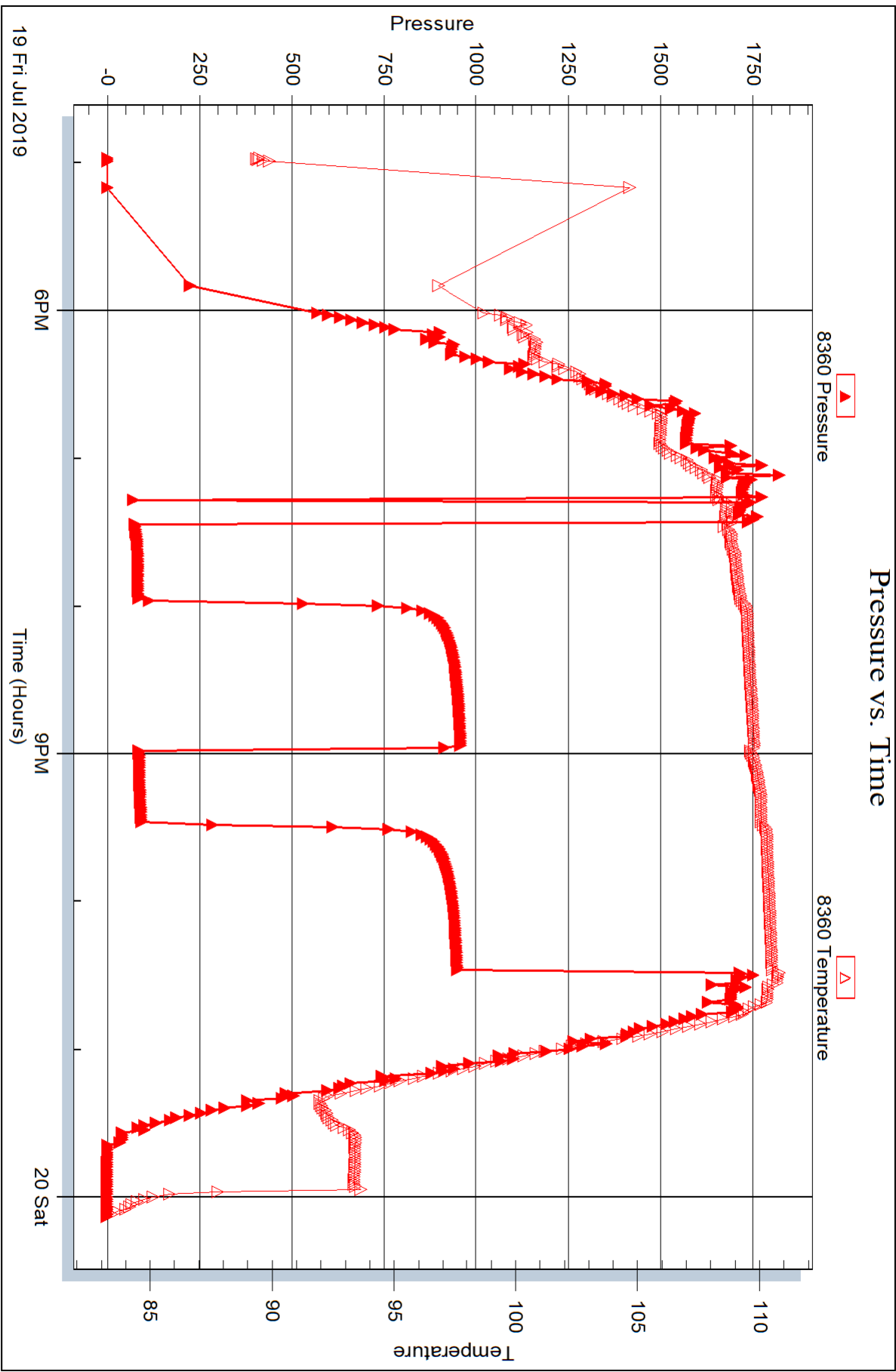
Serial #: 8360

Inside

Canyon Operating LLC.

B Bar B#25-2

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 65948

Printed: 2019.07.23 @ 10:45:40



DRILL STEM TEST REPORT

Prepared For: **Canyon Operating LLC.**

PO Box 7117
Loveland CO 80537

ATTN: Clayton Erickson

B Bar B #25-2

25-8S-23W Graham,KS

Start Date: 2019.07.20 @ 07:20:00

End Date: 2019.07.20 @ 13:19:45

Job Ticket #: 65949 DST #: 2

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

Printed: 2019.07.23 @ 10:45:17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65949

DST#: 2

ATTN: Clayton Erickson

Test Start: 2019.07.20 @ 07:20:00

GENERAL INFORMATION:

Formation: **LKC E - F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:42:30

Time Test Ended: 13:19:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: 77

Interval: 3630.00 ft (KB) To 3658.00 ft (KB) (TVD)

Reference Elevations: 2288.00 ft (KB)

Total Depth: 3658.00 ft (KB) (TVD)

2281.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8671 Outside

Press@RunDepth: 42.08 psig @ 3631.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.07.20 End Date: 2019.07.20

Last Calib.: 2019.07.20

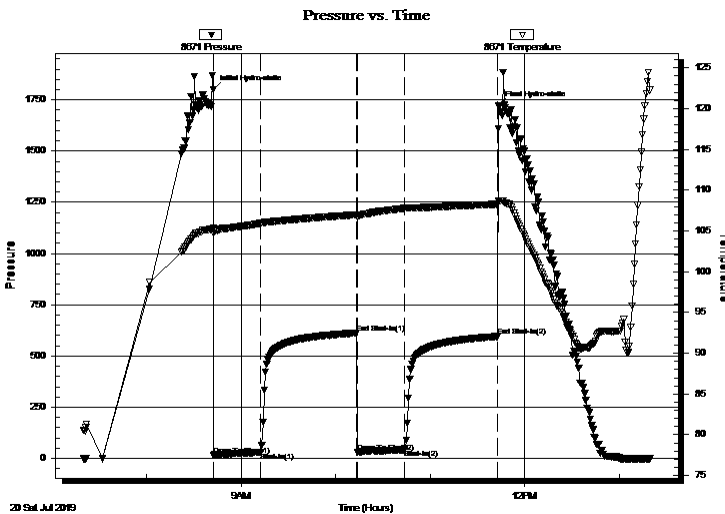
Start Time: 07:20:05 End Time: 13:19:44

Time On Btm: 2019.07.20 @ 08:42:15

Time Off Btm: 2019.07.20 @ 11:43:30

TEST COMMENT: 30 - IFP - Surface blow slowly built up to 1 1/4"
60 - ISI - No Return
30 - FFP - Surface blow built up to 1/2"
60 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1799.67	105.33	Initial Hydro-static
1	16.20	104.69	Open To Flow (1)
31	29.18	105.92	Shut-In(1)
91	611.75	106.98	End Shut-In(1)
92	31.00	106.67	Open To Flow (2)
122	42.08	107.79	Shut-In(2)
181	595.09	108.28	End Shut-In(2)
182	1720.84	108.65	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OSM - Oil Spots - 100%m	0.30

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65949

DST#: 2

ATTN: Clayton Erickson

Test Start: 2019.07.20 @ 07:20:00

Tool Information

Drill Pipe:	Length: 3497.33 ft	Diameter: 3.25 inches	Volume: 35.88 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 121.54 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 36.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.87 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3630.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	56.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3607.00	
Hydraulic tool	5.00			3612.00	
Jars	5.00			3617.00	
Safety Joint	3.00			3620.00	
Packer	5.00			3625.00	28.00 Bottom Of Top Packer
Packer	5.00			3630.00	
Stubb	1.00			3631.00	
Recorder	0.00	8360	Inside	3631.00	
Recorder	0.00	8671	Outside	3631.00	
Perforations	24.00			3655.00	
Bullnose	3.00			3658.00	28.00 Bottom Packers & Anchor

Total Tool Length: 56.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65949

DST#: 2

ATTN: Clayton Erickson

Test Start: 2019.07.20 @ 07:20:00

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OSM - Oil Spots - 100%m	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

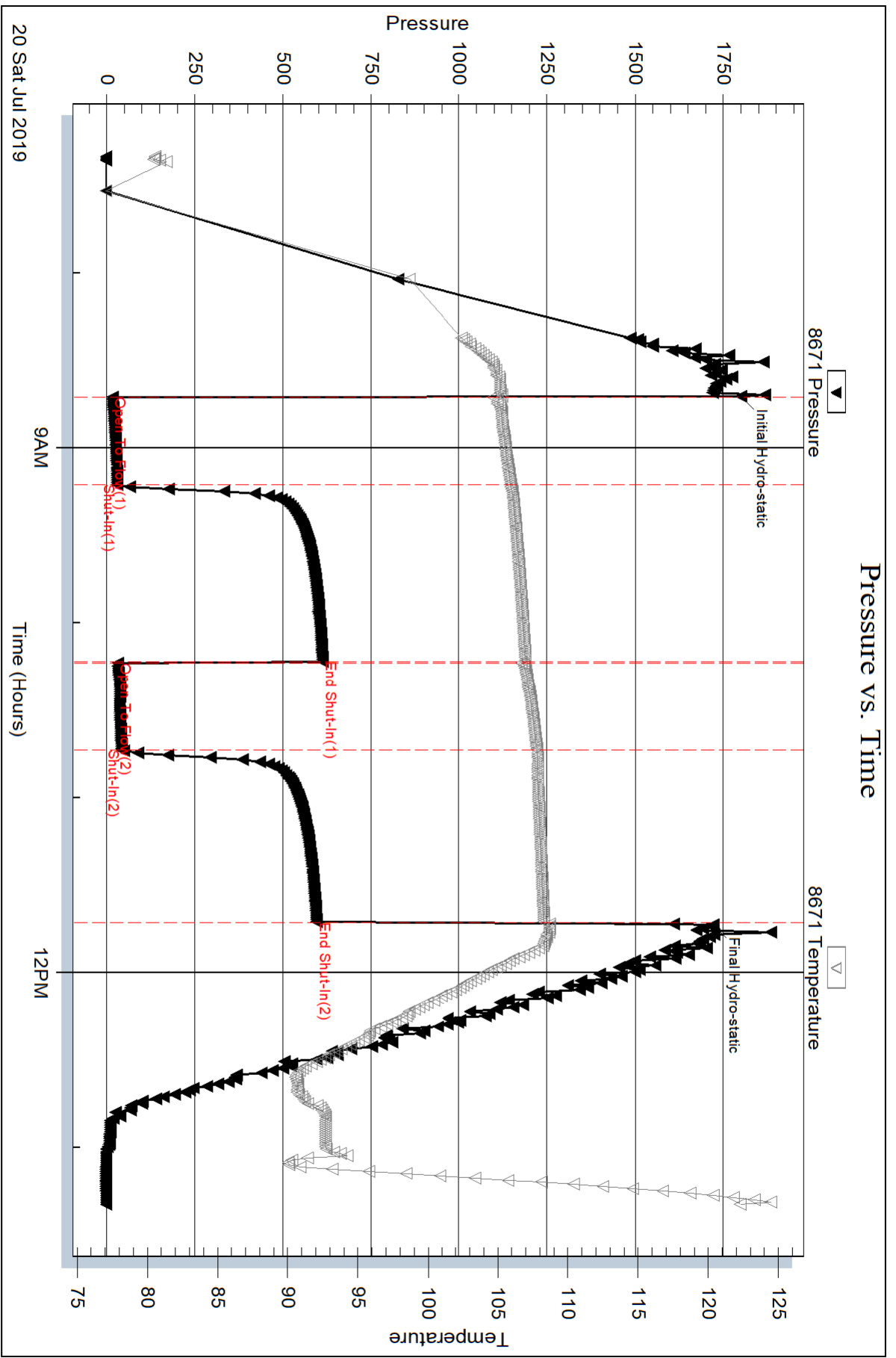
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



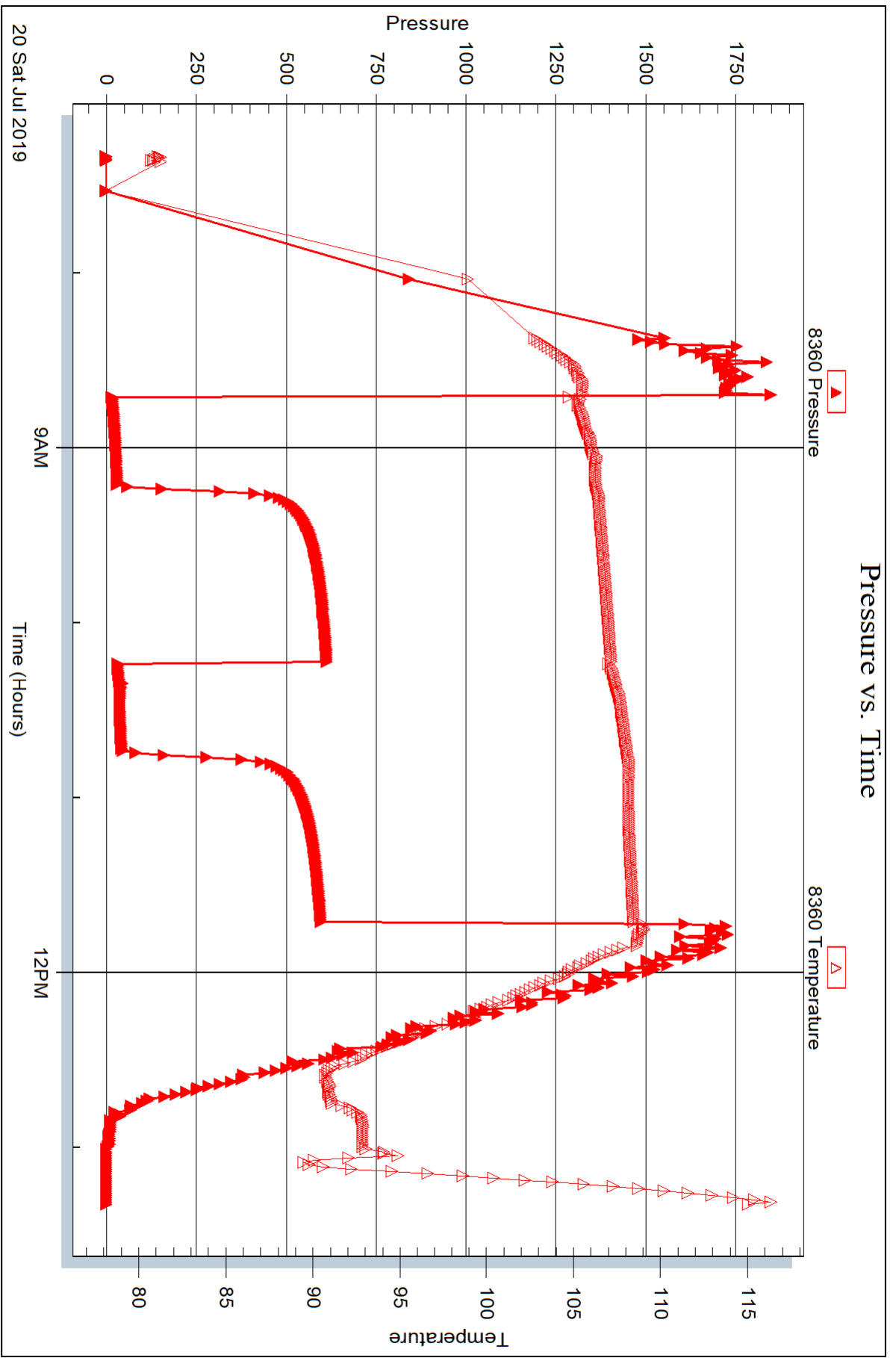
Serial #: 8360

Inside

Canyon Operating LLC.

B Bar B#25-2

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 65949

Printed: 2019.07.23 @ 10:45:19



DRILL STEM TEST REPORT

Prepared For: **Canyon Operating LLC.**

PO Box 7117
Loveland CO 80537

ATTN: Clayton Erickson

B Bar B #25-2

25-8S-23W Graham,KS

Start Date: 2019.07.21 @ 02:55:00

End Date: 2019.07.21 @ 09:57:15

Job Ticket #: 65950 DST #: 3

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

Printed: 2019.07.23 @ 10:44:54



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65950

DST#: 3

ATTN: Clayton Erickson

Test Start: 2019.07.21 @ 02:55:00

GENERAL INFORMATION:

Formation: **LKC H - J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:40:30

Time Test Ended: 09:57:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: 77

Interval: 3686.00 ft (KB) To 3750.00 ft (KB) (TVD)

Reference Elevations: 2288.00 ft (KB)

Total Depth: 3750.00 ft (KB) (TVD)

2281.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8671 Outside

Press@RunDepth: 158.82 psig @ 3687.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.07.21

End Date: 2019.07.21

Last Calib.: 2019.07.21

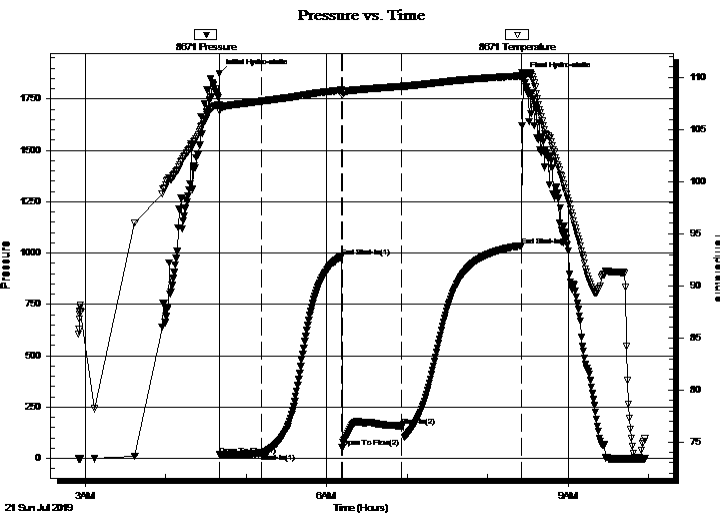
Start Time: 02:55:05

End Time: 09:57:14

Time On Btm: 2019.07.21 @ 04:40:15

Time Off Btm: 2019.07.21 @ 08:27:00

TEST COMMENT: 30 - IFP - Surface blow gradually built to 2"
60 - ISI - No Return
45 - FFP - Faint surface blow started 20 mins in and built up to 3/4"
90 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1873.24	107.41	Initial Hydro-static
1	17.34	106.80	Open To Flow (1)
32	23.18	107.73	Shut-In(1)
91	981.79	108.78	End Shut-In(1)
92	53.01	108.25	Open To Flow (2)
136	158.82	109.15	Shut-In(2)
225	1036.25	110.15	End Shut-In(2)
227	1860.57	110.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Free Oil - 100%o	0.05
45.00	OCM - 50%o - 50%m	0.22

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65950

DST#: 3

ATTN: Clayton Erickson

Test Start: 2019.07.21 @ 02:55:00

Tool Information

Drill Pipe:	Length: 3569.69 ft	Diameter: 3.25 inches	Volume: 36.63 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 121.54 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 37.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	33.23 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3686.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	92.00 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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Shut In Tool	5.00			3663.00	
Hydraulic tool	5.00			3668.00	
Jars	5.00			3673.00	
Safety Joint	3.00			3676.00	
Packer	5.00			3681.00	28.00 Bottom Of Top Packer
Packer	5.00			3686.00	
Stubb	1.00			3687.00	
Recorder	0.00	8360	Inside	3687.00	
Recorder	0.00	8671	Outside	3687.00	
Perforations	27.00			3714.00	
Change Over Sub	1.00			3715.00	
Drill Pipe	31.00			3746.00	
Change Over Sub	1.00			3747.00	
Bullnose	3.00			3750.00	64.00 Bottom Packers & Anchor

Total Tool Length: 92.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 65950

DST#: 3

ATTN: Clayton Erickson

Test Start: 2019.07.21 @ 02:55:00

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
10.00	Free Oil - 100%o	0.049
45.00	OCM - 50%o - 50%m	0.221

Total Length: 55.00 ft Total Volume: 0.270 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

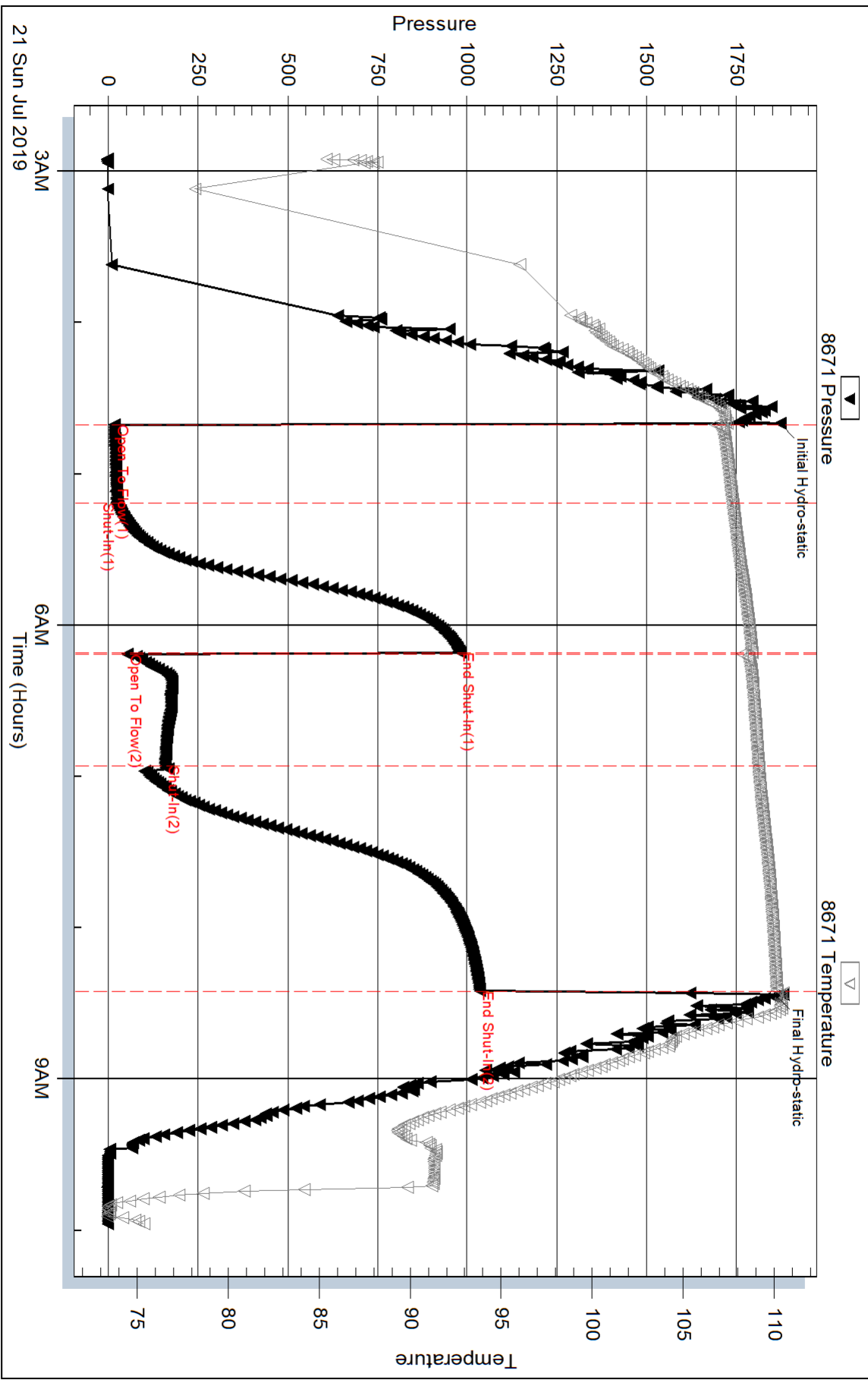
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



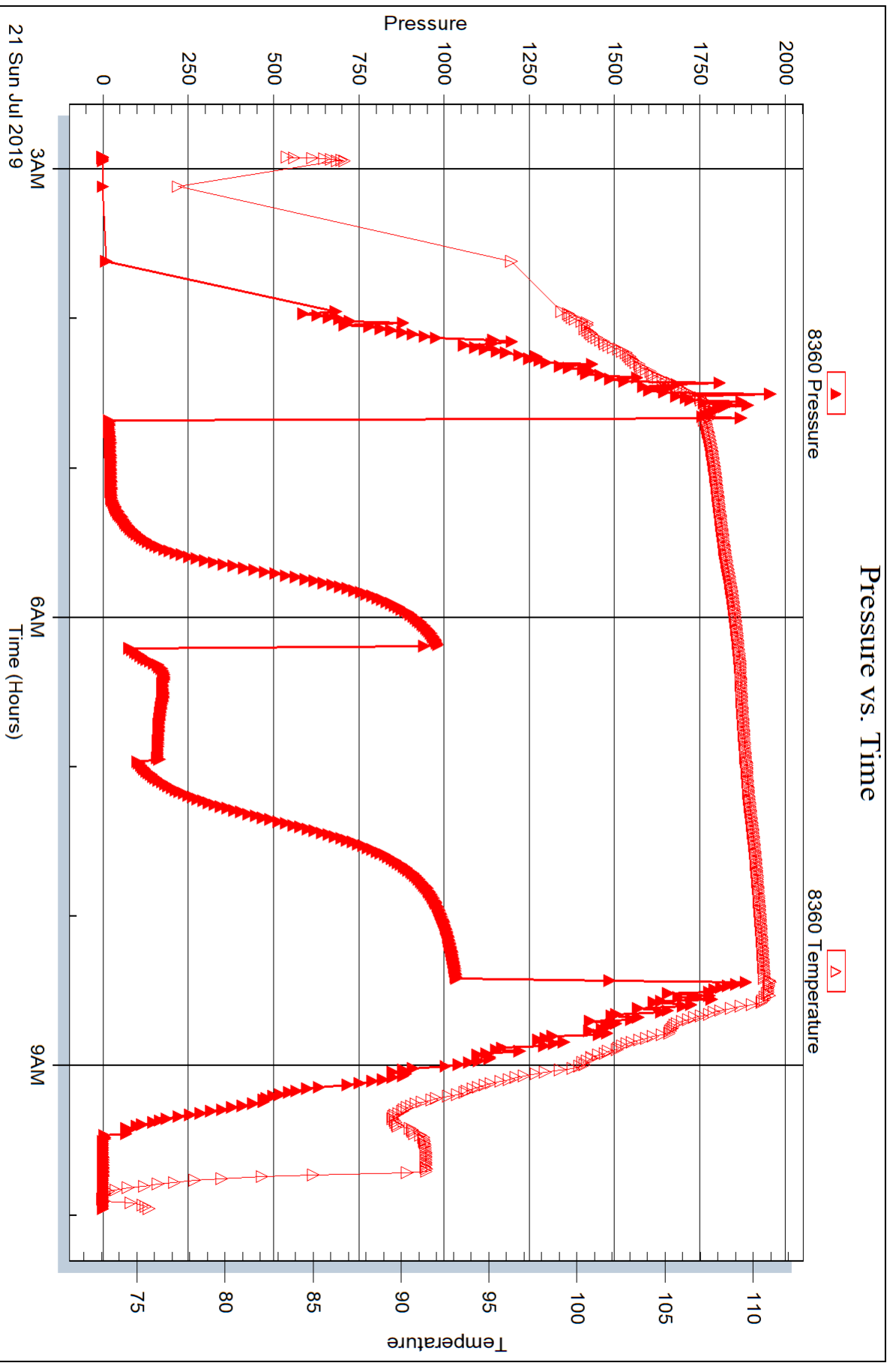
Serial #: 8360

Inside

Canyon Operating LLC.

B Bar B#25-2

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Canyon Operating LLC.**

PO Box 7117
Loveland CO 80537

ATTN: Clayton Erickson

B Bar B #25-2

25-8S-23W Graham,KS

Start Date: 2019.07.21 @ 19:03:00

End Date: 2019.07.22 @ 01:49:30

Job Ticket #: 63651 DST #: 4

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

Printed: 2019.07.23 @ 10:44:25

Canyon Operating LLC. 25-8S-23W Graham,KS B Bar B #25-2 DST # 4 LKC K - L 2019.07.21



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 63651

DST#: 4

ATTN: Clayton Erickson

Test Start: 2019.07.21 @ 19:03:00

GENERAL INFORMATION:

Formation: **LKC K - L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:15:15

Time Test Ended: 01:49:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Royal Fisher

Unit No: 77

Interval: 3746.00 ft (KB) To 3790.00 ft (KB) (TVD)

Reference Elevations: 2288.00 ft (KB)

Total Depth: 3790.00 ft (KB) (TVD)

2281.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

Serial #: 8671

Outside

Press@RunDepth: 27.92 psig @ 3747.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.07.21

End Date:

2019.07.22

Last Calib.:

2019.07.22

Start Time: 19:03:05

End Time:

01:49:29

Time On Btm:

2019.07.21 @ 21:15:00

Time Off Btm:

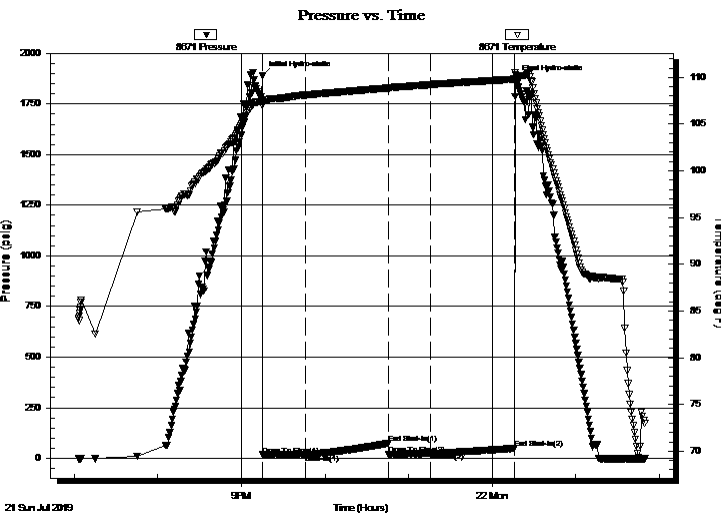
2019.07.22 @ 00:16:45

TEST COMMENT: 30 - IFF - Surface blow stayed at a weak blow

60 - ISI - No Return

30 - FFP - No Surface blow

60 - FSI - No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1887.72	107.52	Initial Hydro-static
1	17.79	106.97	Open To Flow (1)
31	19.29	108.11	Shut-In(1)
91	74.49	108.86	End Shut-In(1)
91	19.44	108.83	Open To Flow (2)
121	27.92	109.21	Shut-In(2)
181	49.88	109.80	End Shut-In(2)
182	1869.04	110.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	OSM - Oil Spots - 100%m	0.01

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 63651

DST#: 4

ATTN: Clayton Erickson

Test Start: 2019.07.21 @ 19:03:00

Tool Information

Drill Pipe:	Length: 3631.66 ft	Diameter: 3.25 inches	Volume: 37.26 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 121.54 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 37.86 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	35.20 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3746.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	72.00 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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Shut In Tool	5.00			3723.00	
Hydraulic tool	5.00			3728.00	
Jars	5.00			3733.00	
Safety Joint	3.00			3736.00	
Packer	5.00			3741.00	28.00 Bottom Of Top Packer
Packer	5.00			3746.00	
Stubb	1.00			3747.00	
Recorder	0.00	8360	Inside	3747.00	
Recorder	0.00	8671	Outside	3747.00	
Perforations	7.00			3754.00	
Change Over Sub	1.00			3755.00	
Drill Pipe	31.00			3786.00	
Change Over Sub	1.00			3787.00	
Bullnose	3.00			3790.00	44.00 Bottom Packers & Anchor

Total Tool Length: 72.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Canyon Operating LLC.

25-8S-23W Graham,KS

PO Box 7117
Loveland CO 80537

B Bar B #25-2

Job Ticket: 63651

DST#: 4

ATTN: Clayton Erickson

Test Start: 2019.07.21 @ 19:03:00

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
3.00	OSM - Oil Spots - 100%m	0.015

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

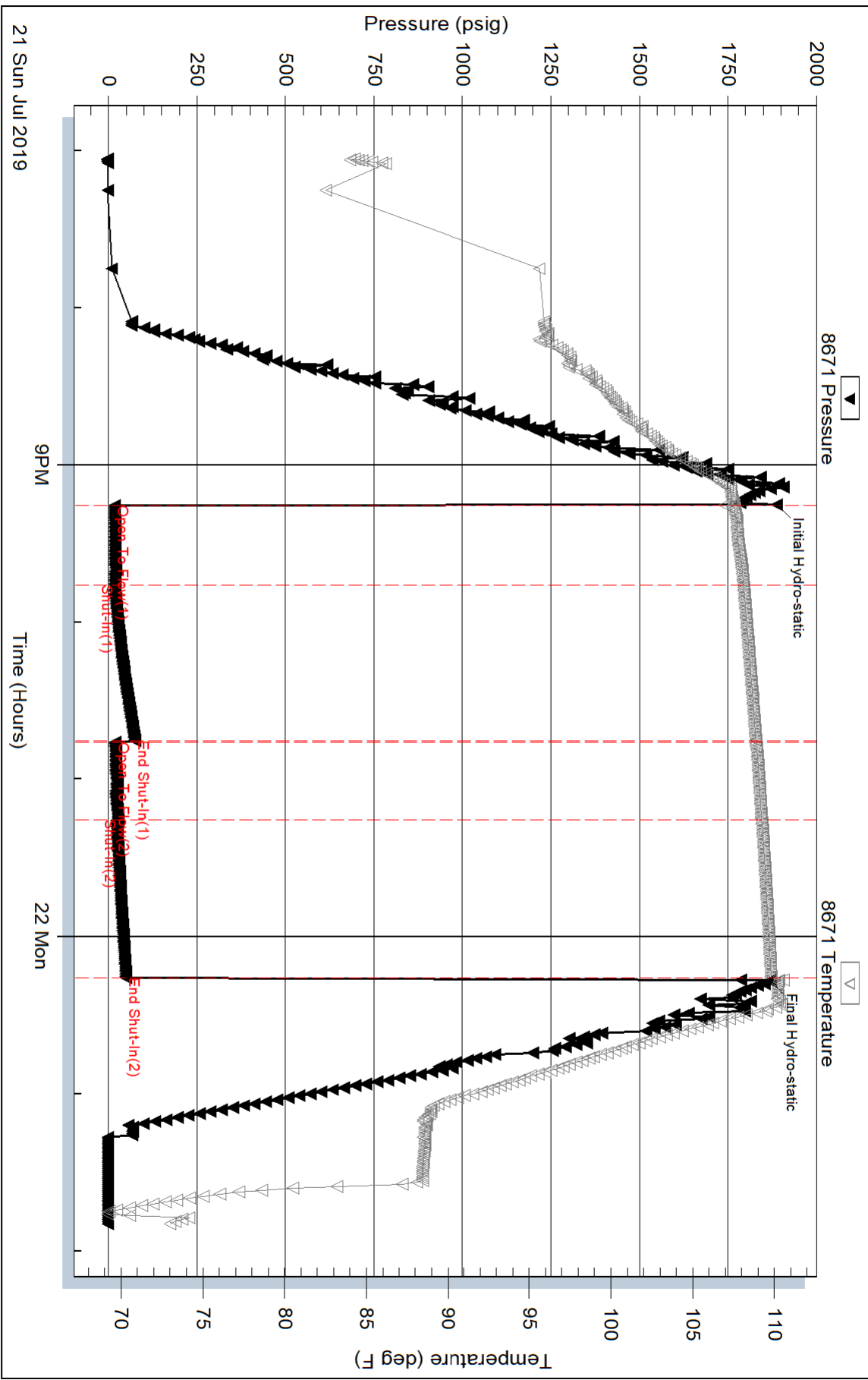
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



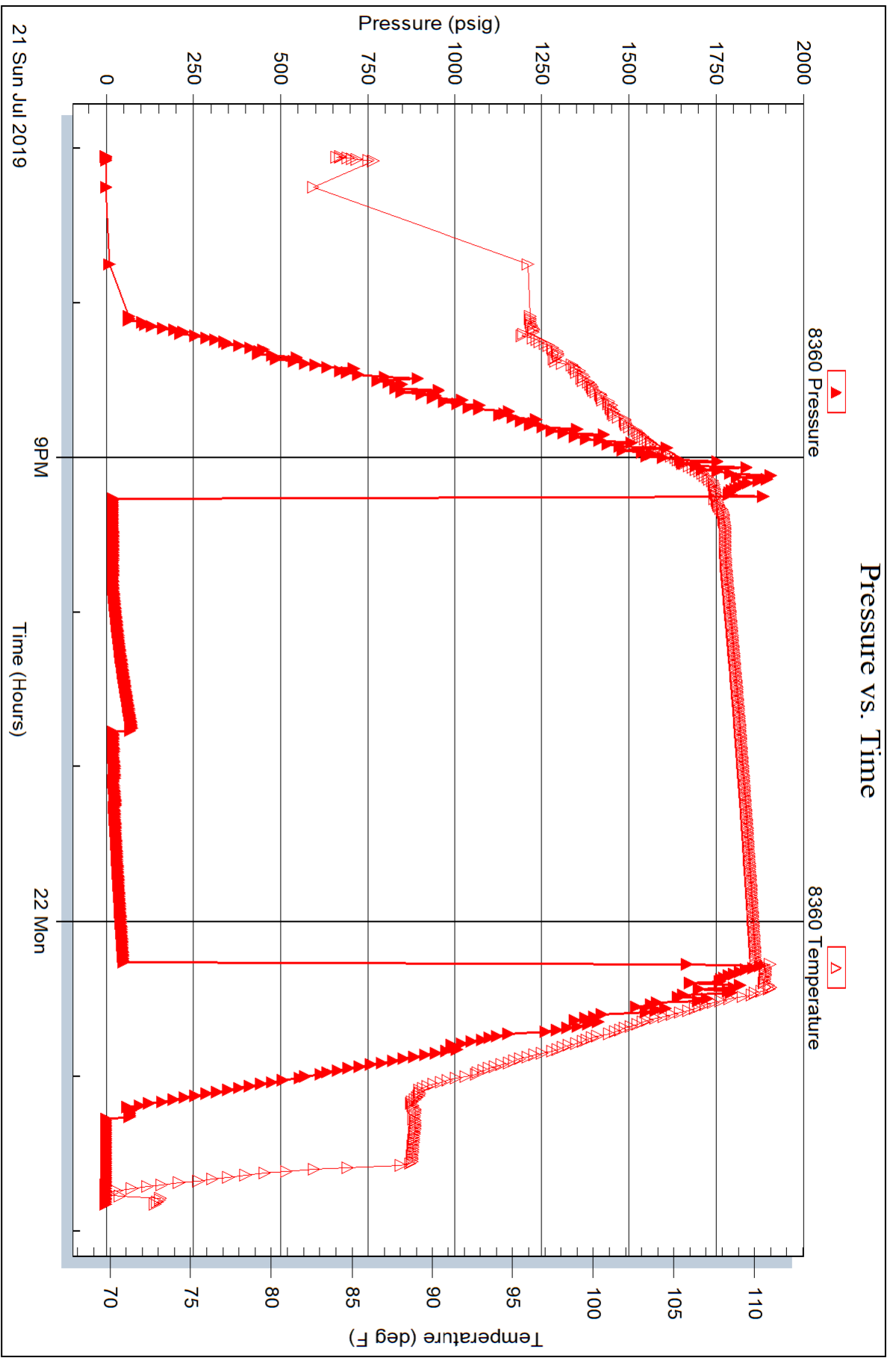
Serial #: 8360

Inside

Canyon Operating LLC.

B Bar B#25-2

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 63651

Printed: 2019.07.23 @ 10:44:27



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 65948

NO.

Well Name & No. B Bar B # 25-2 Test No. 1 Date 7-19-19
 Company Canyon Operating LLC Elevation 2288 KB 2281 GL
 Address PO Box 7117 Loveland Co 80537
 Co. Rep / Geo. Clayton Erickson Rig STP
 Location: Sec. 25 Twp 8S Rge. 23W Co. Graham State Ks

Interval Tested 3592' - 3636' Zone Tested LKC - C
 Anchor Length 44' Drill Pipe Run 3475.34' Mud Wt. 9.0
 Top Packer Depth 3587' Drill Collars Run 121.54' Vis 52
 Bottom Packer Depth 3592' Wt. Pipe Run 0 WL 6.0
 Total Depth 3636' Chlorides 1900 ppm System LCM 2#

Blow Description IFP - surface blow built up to 1 1/2"
ISI - No Return
FFP - Surface blow slowly built to 1"
FST - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>154</u>	<u>mw</u>		<u>60</u>	<u>40</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 154' BHT 110°F Gravity _____ API RW 520 @ 83 °F Chlorides 10,000 ppm

(A) Initial Hydrostatic <u>1774</u>	<input checked="" type="checkbox"/> Test <u>1200</u>	T-On Location <u>4:15pm</u>
(B) First Initial Flow <u>74</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>4:58pm</u>
(C) First Final Flow <u>84</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>7:27pm</u>
(D) Initial Shut-In <u>956</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>10:27pm</u>
(E) Second Initial Flow <u>92</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>12:08am</u>
(F) Second Final Flow <u>90</u>	<input checked="" type="checkbox"/> Mileage <u>116 R/T</u> 116	Comments <u>Chased tool</u>
(G) Final Shut-In <u>949</u>	<input type="checkbox"/> Sampler _____	<u>15'</u>
(H) Final Hydrostatic <u>1714</u>	<input type="checkbox"/> Straddle _____	

Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> EM Tool _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	<input type="checkbox"/> Ruined Packer _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	<input type="checkbox"/> Extra Copies _____
	<input type="checkbox"/> Accessibility _____	Sub Total <u>0</u>
	Sub Total <u>1641</u>	Total <u>1641</u>

Approved By _____ Our Representative Royal Fisher MP/DST Disc't _____

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 65949

NO.

Well Name & No. B Bar B # 25-2 Test No. 2 Date 7-20-19
 Company Canyon Operating LLC Elevation 2288 KB 2281 GL
 Address PO Box 7117 Loveland Co. 80537
 Co. Rep / Geo. Clayton Erickson Rig STP
 Location: Sec. 25 Twp 8S Rge. 23W Co. Graham State Ks

Interval Tested 3630' - 3658' Zone Tested E & F
 Anchor Length 28' Drill Pipe Run 3497.33' Mud Wt. 9.1
 Top Packer Depth 3625' Drill Collars Run 121.54' Vis 60
 Bottom Packer Depth 3630' Wt. Pipe Run 0 WL 6.0
 Total Depth 3658' Chlorides 2700 ppm System LCM 1#

Blow Description IFP - Surface blow slowly built to 1/4"
ISI - No Return
FFP - Surface blow built to 1/2"
FST - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60'</u>	<u>OSM</u>	<u>Spots</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 60' BHT 108°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

- (A) Initial Hydrostatic 1800
- (B) First Initial Flow 16
- (C) First Final Flow 29
- (D) Initial Shut-In 612
- (E) Second Initial Flow 31
- (F) Second Final Flow 42
- (G) Final Shut-In 595
- (H) Final Hydrostatic 1721

- Test 1200
- Jars 250
- Safety Joint 75
- Circ Sub _____
- Hourly Standby _____
- Mileage 116 R/T 116
- Sampler _____
- Straddle _____
- Shale Packer _____
- Extra Packer _____
- Extra Recorder _____
- Day Standby _____
- Accessibility _____
- Sub Total 1641

- T-On Location 7:05am
- T-Started 7:20am
- T-Open 8:42am
- T-Pulled 11:42am
- T-Out 11:20pm
- Comments _____
- EM Tool _____
- Ruined Shale Packer _____
- Ruined Packer _____
- Extra Copies _____
- Sub Total 0
- Total 1641
- MP/DST Disc't _____

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

Approved By _____

Our Representative Royal Justice

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 65950

NO.

Well Name & No. B Bar B # 25-2 Test No. 3 Date 7-21-19
 Company Canyon Operating LLC Elevation 2288 KB 2281 GL
 Address PO Box 7117 Loveland Co. 80537
 Co. Rep / Geo. Clayton Erickson Rig STP
 Location: Sec. 25 Twp 8S Rge. 23W Co. Graham State Ks

Interval Tested 31686' - 3750' Zone Tested LHC - H, I, & J
 Anchor Length 64' Drill Pipe Run 3569.69' Mud Wt. 9.1
 Top Packer Depth 31681' Drill Collars Run 121.54' Vis 60
 Bottom Packer Depth 31686' Wt. Pipe Run 0 WL 10.0
 Total Depth 3750' Chlorides 2700 ppm System LCM 1#

Blow Description FFP - Surface blow gradually built to 2"
ISI - No Return
FFP - Faint surface blow started 20 mins. in and built to 3/4"
FST - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>10'</u>	<u>Free Oil</u>	<u>100</u>			
<u>45'</u>	<u>OCM</u>	<u>50</u>		<u>50</u>	

Rec Total 55' BHT 1109F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1873</u>	<input checked="" type="checkbox"/> Test <u>1200</u>	T-On Location <u>2:30am</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2:55am</u>
(C) First Final Flow <u>23</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>4:40am</u>
(D) Initial Shut-In <u>982</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>8:25am</u>
(E) Second Initial Flow <u>53</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>9:57am</u>
(F) Second Final Flow <u>159</u>	<input checked="" type="checkbox"/> Mileage <u>116 R/T</u> 116	Comments _____
(G) Final Shut-In <u>1036</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1861</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> EM Tool _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 45
 Final Shut-In 90

Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

Sub Total 1641

MP/DST Disc't _____

Approved By _____ Our Representative [Signature]
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63651**

4/10

Well Name & No. B Bar B # 25-2 Test No. 4 Date 7-21-19
 Company Canyon Operating LLC Elevation 2288 KB 2281 GL
 Address PO Box 7117 Loveland Co. 80537
 Co. Rep / Geo. Clayton Erickson Rig STP
 Location: Sec. 25 Twp. 8S Rge. 23 W Co. Graham State Ks

Interval Tested 3746' - 3790' Zone Tested LKC-K44
 Anchor Length 44' Drill Pipe Run 31631, 100 Mud Wt. 9.2
 Top Packer Depth 3741' Drill Collars Run 121.54' Vis 60+
 Bottom Packer Depth 3746' Wt. Pipe Run 0 WL 6.8
 Total Depth 3790' Chlorides 2700 ppm System LCM 1#

Blow Description IFP - Surface blow stayed @ a weak blow
ISI - No Return
FFP - No Surface blow
FSI - No Return

Rec	Feet of	%gas	Spots	%oil	%water	%mud
3'	asm				100	

Rec Total 3' BHT 110°F Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1888
 (B) First Initial Flow 18
 (C) First Final Flow 19
 (D) Initial Shut-In 74
 (E) Second Initial Flow 19
 (F) Second Final Flow 28
 (G) Final Shut-In 50
 (H) Final Hydrostatic 1869

Test 1200
 Jars 250
 Safety Joint 75
 Circ Sub _____
 Hourly Standby _____
 Mileage 116 R/T 232
 Sampler _____
 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1757

T-On Location 6:30 pm
 T-Started 7:03 pm
 T-Open 9:15 pm
 T-Pulled 12:15 am
 T-Out 1:50 am
 Comments loaded tools at 9:10 am - 10 am
7-22-19
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1757
 MP/DST Disc't _____

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

Approved By _____

Our Representative [Signature]